SPEECH LANGUAGE PATHOLOGY SERVICES IN SCHOOLS:
Guidelines For Best Practice

Virginia Department of Education
September 2005

The forms included in this document can be found on the
Virginia Department of Education (VDOE) Web site (www.doe.virginia.gov)
in a Word file for local use.
In addition, VDOE has a video accompanying the
Articulation Severity Rating Scale

Table of Contents

THE ROLE OF SCHOOL-BASED SPEECH-LANGUAGE PATHOLOGISTS------------- 7

LITERACY DEVELOPMENT AND MASTERY OF THE GENERAL CURRICULUM ---------------------- 9

THE SPECIAL EDUCATION PROCESS ---11

SCREENING ---11
EVALUATION ---12
ELIGIBILITY ---15
IEP DEVELOPMENT ---18
ASSESSMENT AND EVALUATION ---26
SERVICE DELIVERY ---39
CASELOAD ESTABLISHMENT ---44

SPECIAL TOPICS ---47

STUDENTS WITH LIMITED ENGLISH PROFICIENCY (LEP) ---47
STUDENTS WITH AUDITORY PROCESSING DISORDERS---52
STUDENTS WITH DYSPHAGIA ---56
PRIVATE SCHOOL STUDENTS WITH DISABILITIES ---59
STUDENTS WITH DEAFNESS OR HEARING IMPAIRMENT ---60
STUDENTS ELIGIBLE UNDER SECTION 504 ---61
ASSISTIVE TECHNOLOGY ---63
MEDICAID/FAMIS REIMBURSEMENT---68
SPEECH-LANGUAGE PATHOLOGY PERSONNEL ---73
SPEECH LANGUAGE PATHOLOGY ASSISTANTS ---74
RECRUITING/RETAINING QUALIFIED SPEECH-LANGUAGE PATHOLOGISTS ---75

REFERENCES AND RESOURCES ---81

APPENDICES ---85

APPENDIX A GLOSSARY ---87
APPENDIX B ACRONYMS ---91
APPENDIX C WEB RESOURCES---93
APPENDIX D SPEECH-LANGUAGE SCREENING FORM ---94
APPENDIX E SPEECH-LANGUAGE SEVERITY RATING SCALES ---96
APPENDIX F FORMS AND CHECKLISTS --- 119
APPENDIX G ASSESSMENTS USED BY SPEECH-LANGUAGE PATHOLOGISTS--- 141
APPENDIX H FAIRFAX COUNTY PUBLIC SCHOOLS' APPROVED SPEECH-LANGUAGE ASSESSMENT MEASURES --- 143
APPENDIX I ASSISTIVE TECHNOLOGY --- 145
APPENDIX J SPEECH-LANGUAGE PATHOLOGY QUALIFICATION REQUIREMENTS -------- 149

Index of Tables and Figures

TABLE 1. ROLES/RESPONSIBILITIES OF SCHOOL-BASED SPEECH-LANGUAGE PATHOLOGISTS -------- 8
TABLE 2. SAMPLE SPEECH-LANGUAGE GOALS, BENCHMARKS AND OBJECTIVES ------------------- 21
TABLE 3. IEP CHECKLIST --- 23
TABLE 4. ADVANTAGES AND DISADVANTAGES OF COMMON ASSESSMENT METHODS --------------- 30
TABLE 5. SAMPLE ACTIVITIES TO OBTAIN ASSESSMENT INFORMATION ------------------------------ 32
TABLE 6. CHECKLIST FOR USE IN REVIEWING NORM-REFERENCED TESTS --------------------------- 36
FIGURE 1. NORMAL DISTRIBUTION CURVE -- 38
TABLE 7. TEACHING MODELS FOR INTEGRATED THERAPY IN THE CLASSROOM --------------------- 41
TABLE 8. POSSIBLE DELIVERY OPTIONS FOR 60 MINUTES OF SERVICES PER WEEK ----------------- 43
TABLE 9. EXAMPLES OF CASELOAD REDUCTION BASED ON SCHEDULE ------------------------------ 45
TABLE 10. SAMPLE SPEECH-LANGUAGE DOCUMENTATION LOG AND SCHEDULE ------------------- 46
TABLE 11. COMMON MYTHS ABOUT STUDENTS WITH LIMITED ENGLISH PROFICIENCY ------------ 49
TABLE 12. COMPARISON OF CHILDREN WITH LIMITED ENGLISH PROFICIENCY WITH AND WITHOUT DISABILITIES --- 50
FIGURE 2. AUDITORY PROCESSING SKILLS HIERARCHY --- 53
TABLE 13. DIFFERENTIAL DIAGNOSIS BETWEEN AUDITORY PROCESSING DISORDERS, ATTENTION DEFICIT DISORDERS, AND SPEECH-LANGUAGE IMPAIRMENTS ------------------------------------ 55
TABLE 14. DISABILITY IDENTIFICATION UNDER SECTION 504 -- 61
TABLE 15. A COMPARISON OF IDEA AND SECTION 504 --- 62

Acknowledgements

The Department of Education would like to express its appreciation to the following persons for their work on these guidelines:

Lissa Power-deFur,
Longwood University

Nicholas Bankson,
James Madison University

Lynn Blachman,
Henrico County Public Schools (retired)

Myra Flint,
Virginia Beach City Public Schools

Marie Ireland,
Virginia Department of Education

Laura Justice,
University of Virginia

Raymond Linville,
Radford University

Michelle Myers,
doctoral student at The College of William and Mary

Peggy Newsome,
Gloucester County Public Schools (retired)

Cathryn Radford,
Prince William County Public Schools

Charles Runyan,
James Madison University

Karen Sanford,
Norfolk City Public Schools

Diane Sarnes,
Fairfax County Public Schools (retired)

JoAnne Turner,
Southampton County Public Schools

Daisy Wood,
Virginia Beach City Public Schools

In addition, the following persons at the Virginia Department of Education provided valuable assistance in their review of the document:

Patricia Abrams,
Director, Special Education Instructional Services

Scottie Alley,
Complaints Specialist

Catherine Digilio-Grimes,
Director, School Nutrition

Diane Gillam,
Specialist, Special Education

Scott McMichael,
Administrative Services Coordinator

Amy Edwards,
Medicaid Specialist

Debbie Pfeiffer,
Specialist, Hearing Impairment and Deafness

Roberta Schlicher,
Director, Program Administration and Accountability

Harry Smith,
Senior Administrative Staff Specialist

THE ROLE OF SCHOOL-BASED SPEECH-LANGUAGE PATHOLOGISTS

The focus of school-based speech-language pathologists is the communication abilities of students. The school-based speech-language pathologist's goal is to remediate, ameliorate, or alleviate student communication and swallowing problems within the educational environment. To meet this goal, school-based speech-language pathologists:

(a) prevent, correct, ameliorate, or alleviate articulation, fluency, voice, language, and swallowing impairments

(b) reduce the functional consequences of the communication and swallowing disabilities by promoting the development, improvement, and use of functional communication skills; and

(c) provide support in the general educational environment to lessen the handicap (the social consequence of the impairment or disability) by facilitating successful participation, socialization, and learning. (ASHA, 1999).

> *Ultimately, the school-based speech-language pathologist's purpose in addressing communication and related disorders is to effect functional and measurable change(s) in a student's communication status so that the student may participate as fully as possible in all aspects of life - educational, social, and vocational."*
>
> *(ASHA, 1999, page 6)*

Regulations Governing Special Education Programs for Children with Disabilities in Virginia[1] *(Virginia Special Education Regulations)*, 8 VAC 20-80-10 *et al*. defines speech-language pathology services as: identification of children with speech-language impairments, appraisal and diagnosis of the impairment, referral for medical or other professional attention, provision of speech-language services for prevention or habilitation of communication impairments, and counseling and guidance for parents, children and teachers regarding speech and/or language impairments. Speech-language pathology services are both special education and a related service. Table 1 summarizes the roles and responsibilities of school-based speech and language pathologists.

The school-based speech-language pathologist is a member of a variety of teams that make decisions regarding evaluation, eligibility, and services. speech-language pathologist does not make decisions in isolation regarding the needed evaluation components, the child's eligibility for special education and related services, or the goals and objectives of intervention.

The needs of students with disabilities are best addressed in a transdisciplinary manner with a team of professionals providing services. For children with auditory processing disorders, the intervention team members may include a speech-language pathologist, an audiologist, a teacher endorsed in learning disabilities, and a school psychologist. The team for children with dysphagia (swallowing impairment) should include a speech-language pathologist, an occupational therapist, a nurse, and school nutrition director or dietitian.

---

[1] *Regulations Governing Special Education Programs for Children with Disabilities in Virginia* became effective March 27, 2002. These regulations can be found on the Virginia Department of Education Web site at www.doe.virginia.gov

Table 1. Roles/Responsibilities of School-Based Speech-Language Pathologists

Role	*Speech-Language Pathologist Responsibilities*	*Type of Team*	*Team Responsibilities*
Prevention and early intervention	Provides staff development and consultation Provides pre-referral consultations and interventions	Pre-referral team (e.g., instructional support teams, teacher assistance teams) Teams addressing literacy	Review information on referred students Observe students Provide pre-referral consultations, coaching and interventions
Identification	Conducts speech-language screenings (also may be conducted by classroom teachers) Conducts hearing screenings (also may be conducted by nurses or audiologists) Identifies if students failing screening should be referred for evaluation Informs parents of screening results for students who fail	Pre-referral team	Conduct screenings Identify if students failing screening should be referred for special education evaluation Inform parents of screening results for students who fail
Evaluation: determining needed evaluation	Serves as member of team for any students with suspected speech- language deficits	Team that determines needed evaluation components (may be child study team or IEP team)	Review existing evaluation data Identify additional, if any, evaluation data needed to determine eligibility Provide parent rights and responsibilities Secure parental consent for evaluation
Evaluation: assessment	Conducts standardized and authentic assessments of speech-language skills		Complete other assessment components
Evaluation: interpretation of assessment	Identifies child's communication strengths and weaknesses Prepares evaluation report Explain results to parents		Identify child's strengths and Weaknesses, prepare evaluation reports, and explain results to parents
Eligibility decision	Represents speech-language assessment results at team meeting	Eligibility committee (may be the IEP team)	Review evaluation reports and determines if the child is a "child with a disability" who needs "special education and related services"
Individualized Education Program development	Drafts parts of present level of performance, IEP goals and objectives/benchmarks related to speech-language impairment	IEP team	Develop IEP, integrating speech- language skills and needs with other strengths and needs (in present level of performance and goals and objectives or benchmarks) Complete all sections of IEP
Behavior intervention	May be a team member	IEP team	Conduct Functional Behavioral Assessment and develops and implements Behavioral Intervention Plan
Caseload management	Schedules students for evaluation and intervention		
Intervention	Provides direct, indirect, collaborative services to children, including transition services		
Supervision	Supervises support personnel, university practicum students, speech- language pathologists in clinical fellowship year (CF)		
Documentation	Completes progress reports (for special education and Medicaid) Completes performance appraisals for supervisee		
Professional Development	Remains current in all aspects of the profession Stays abreast of educational issues		

Adapted from American Speech-Language-Hearing Association. (1999).

Students using assistive technology will benefit from intervention by a team that includes a speech-language pathologist, an occupational therapist, a physical therapist, an assistive technology specialist, a general education teacher, and a special education teacher.

Speech-language pathologists may also provide support when students are not eligible for speech-language services by participating on various prevention/early intervention teams (e.g., Instructional Support Teams, teacher assistance teams, and child study committees). On these teams, the speech-language pathologist may conduct observations, complete assessments, plan with teachers, model interventions, coach teachers, and/or gather data, all in the context of general education.

Interpreters, transliterators, and translators will be team members for children who are deaf and use American Sign Language, a signed English system, or Cued Speech (also termed Cued Language), when the speech-language pathologist and other educators are not bilingual or fluent in the appropriate sign language system. Those students and their parents who are English language learners may need an interpreter to communicate with the speech-language pathologist during assessments, meetings, and service delivery. In these situations, the speech-language pathologist will work with the interpreter, transliterator, or translator to review the purpose of the interaction, test protocols, and confidentiality requirements.

LITERACY DEVELOPMENT AND MASTERY OF THE GENERAL CURRICULUM

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 (*Virginia Special Education Regulations,* 8 VAC 20-80-45).

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.

Special education law defines special education, or specially designed instruction, as adapting the content, methodology or delivery, to address the unique needs of the child that result from the child's disability and to ensure access to the general

curriculum, so that the child can meet the educational standards that apply to all children (*Virginia Special Education Regulations,* 8 VAC 20-80-10; 34 CFR 300.26). To ensure access to the general curriculum, speech-language pathologists must integrate their services with the general education curriculum. Instructional materials used by the student in the primary educational placement provide the best source of materials for school-based speech-language pathologists.

In Virginia, the general education curriculum is based on the Virginia Standards of Learning (SOL). Speech-language pathologists should be familiar with the language expectations of the SOL in all content areas. Proficiency in the five aspects of language (semantics, syntax, morphology, phonology, and pragmatics) is necessary in all areas and across all grade levels. The oral language component of the English Standards of Learning has an obvious relationship to speech-language pathology services. However, other content areas require language proficiency as well. For example, morphological skills are necessary to master fractions (e.g., one-tenth), pragmatic skills are necessary to debate a topic, syntactic skills are necessary to understand written directions in all content areas. Metalinguistic skills, the ability to reflect on language, are necessary for higher order thinking in all content areas.

The Virginia Department of Education (VDOE) Web page (http://www.doe.virginia.gov) has numerous resources that are useful in understanding the general curriculum. Teacher resource guides, scope and sequence guides, and links to instructional materials can be useful for speech-language pathologists as they develop an understanding of the language expectations of the curriculum. In addition, a review of the Standards of Learning assessments can assist in identifying those language skills a student must master. The VDOE Web page also provides a blueprint of those skills measured on each SOL assessment. A review of the blueprint will assist in focusing on those skills that must be acquired by a certain grade level. Further, the VDOE Web page provides test items from past years. These can provide direction in the written language skills and test formats with which the students will need to be familiar. Speech-language pathologists can use this information to ensure that the stimulus materials they use provide the students with the same format they will need to master in their classroom and on the general curriculum (SOL) assessments.

The field of speech-language pathology is dynamic. Research in the field provides new information on assessment and intervention approaches. All fully qualified speech-language pathologists possess the foundation to provide service for all clients. To develop specialized skills, speech-language pathologists and their employers must be willing to participate in educational retooling to maintain currency in aspects of the field such as assistive technology, dysphagia (swallowing), and auditory-oral/auditory-verbal skill development for children with cochlear implants.

In addition, the speech-language pathologist should be up-to-date in his/her knowledge of both general and special education, including education standards, curriculum, state and local assessments, parental rights and responsibilities, and special education requirements and procedures.

THE SPECIAL EDUCATION PROCESS

SCREENING

As part of the child find requirements of special education and public health policy, mass screenings are conducted in public schools to identify students who may need a special education evaluation or a referral to medical personnel. In Virginia, screening includes vision, hearing, gross and fine motor, and speech-language and voice for all new students through grade 3. (New students are considered those who are new to Virginia public schools, not new to each school or division.) As a result, students who have transferred from another Virginia division will not need to be screened if there is documentation of screening in the child's educational record. Hearing and vision screenings are also required at grades 3, 7, and 10 (*Virginia Special Education Regulations*, 8 VAC 20-80-50).

Parents must be given notice about the screening; this notice varies among school divisions, but is usually accomplished through a mass informational mailing, division Web site, etc. Parents also must be informed if their child does not pass the screening. Informing the parent of screening results is generally the responsibility of the person completing the screening; however, policies and practices regarding this responsibility may vary among school divisions. Parental consent to participate in mass screenings is not required.

The regulations specify that students "may be rescreened after 60 business days if the original results are not considered valid." The decision regarding whether the test results are valid are made on an individual basis and should be made by the speech-language pathologist for speech-language screenings and the audiologist, school nurse, or speech-language pathologist for hearing screenings.

If the rescreening results suggest that the student needs to be referred for an evaluation for special education and related services, the referral must be made to the special education administrator or designee within the appropriate timelines indicated in the division's procedures, but not later than five business days after the rescreening.

Failure on a screening will result in parental notification and one of the following: 1) no further action, 2) referral to a school team or other agency for follow up 3) referral for special education evaluation.

The *Virginia Special Education Regulations* do not specify the qualification requirements of personnel who provide screenings. The school division is responsible for assigning personnel who are appropriately qualified to ensure that the results are valid and reliable. The *School Health Guidelines*, jointly prepared by the Virginia Departments of Education and Health, includes detailed information about mass screenings, including recommended screening protocols. The guidelines can be found at the Virginia Department of Education Web site at http://www.doe.virginia.gov/VDOE/Instruction/Health/home.html.

Audiologists, speech-language pathologists, school nurses, or other personnel may conduct hearing screenings. It is recommended that audiologists meet periodically with the personnel conducting the screening to ensure that reliable and valid screening techniques are being used and that the audiometers are appropriately calibrated.

Hearing Screening

See the *School Health Guidelines* for recommended protocol. A rescreening after the 60-business-day timeline may be in order if test validity is compromised due to a student's significant congestion due to seasonal allergies or unanticipated noisy conditions. If a student fails the screening, the professional responsible determines whether the child should be referred for a special education evaluation and/or whether the parents should be encouraged to take the child for a medical evaluation.

Speech-Language Screening

Speech-language screenings should be conducted using a screening tool that meets the needs of the target population. Commercially available screening instruments should be reviewed to ensure their reliability and validity with a norming sample that represents the target screening population.

Screenings may be completed through collaboration with classroom teachers who are an excellent source of data regarding the status of their students' communication skills. An efficient and accurate method of screening is to capture the classroom teacher's information as the initial screening. For example, teachers can complete a 10-item screening questionnaire about each student's communication skills (see Appendix D). If no concerns are noted on the teacher's screening, the student passes the speech-language screening. Any student with one or more errors is re-screened by the speech-language pathologist. The speech-language pathologist makes the final decision regarding passing/failing the screening.

If a student fails the screening, the speech-language pathologist decides whether a referral for special education should be made or another course of action pursued (e.g., inform parents, refer to teacher assistance team).

EVALUATION

Referrals For Special Education

When parents, school staff, or outside sources, feel that a student is having difficulty in speech and/or language skill development, they may express his/her concerns to school personnel. The concerns do not need to be in writing. After the school is alerted to the concern, the special education administrator, or designee in the school building or division, records the date, reason for referral, and name of the person making the referral, provides the parent with a procedural safeguards notice, and ensures that confidentiality of information is maintained.

The special education administrator or designee will decide whether to proceed with an evaluation. For example, the parent may state that the student is not understood in the neighborhood and is frustrated in all speaking situations, and the team states that the disability seems to be interfering with progress in phonemic awareness activities at school. If the information suggests a more transitory concern with less noticeable or no impact on academic progress, the administrator would more likely refer the parent's concern to the committee in the school that reviews the needs of any student having difficulty in the school environment. This committee may be called the child study committee, teacher assistance team, or instructional consultation/support team. Each local educational agency will develop local procedures for handling referrals in

accordance with the federal and state requirements. The speech-language pathologists in the division will need to follow those procedures.

DETERMINATION OF NEEDED EVALUATION DATA

The first step is convening a team of individuals with the same composition as the IEP team. Whenever a child is being evaluated for speech-language concerns, one team member must be a speech-language pathologist. The speech-language pathologist assumes the role of the individual who interprets speech and language test results and suggests additional measures.

The parent is a required participant on the team. The team's role is to review existing data, identify what additional data, if any, are needed to determine whether the child has a disability, and if so, the nature and extent of the special education and related services the child needs. In some school divisions, the child study committee may assume this role; other divisions will have a separate team for this purpose.

The team reviews information the school already has, including classroom test scores and observations by school staff. The school may review any evaluations, observations, or other information already available in the division, provided by the parent or others (e.g., classroom assessment data, previous evaluation reports, teacher/therapist data regarding student performance and progress, speech-language assessments conducted by the early intervention program, or a private provider). The team has the authority to determine how recent this information should be (e.g., more recent for younger children than older children or more recent for children with recent medical complications, such as traumatic brain injury). Becaused school divisions may set criteria for determining how recent the information must be, local procedures should be followed.

The team decides whether the existing data is sufficient to make the decisions. If additional information is needed, the team will identify the needed information and get parental consent to conduct the evaluation. If the parent does not attend the meeting, refer to the school division procedures for special education within your school division.

The team may decide it has sufficient information to make the necessary decisions. If so, the team's review of data is considered the evaluation and no further testing is required prior to meeting to determine eligibility.

It is important to note that the evaluation must be completed and the child's eligibility determined within 65 business days of the date the referral is received (*Individuals with Disabilities Education Improvement Act of 2004*, P.L. 108-446 [IDEIA 04]).

Conducting The Evaluation

As the assessments are completed, school division procedures should be followed for forwarding evaluations to a central point of contact for review. If any member of the team suspects, while conducting an assessment, that additional assessments are needed, then the committee with the same composition as the IEP team must reconvene to determine if any additional assessments will be required. For example, if the speech-language pathologist, when testing a student referred for suspected speech-language impairment, suspects that the student may have a learning disability, a meeting will be held to consider whether additional testing should be conducted.

Local procedures for reconvening the meeting should be followed. If the committee determines that additional testing is necessary, parental consent must be secured and testing completed within the original 65-business day timeline. The parent also may initiate a request for further assessment prior to the determination of eligibility.

Another example for which additional testing may be requested is when the speech-language pathologists suspects difficulty with auditory processing. In such a case, an audiological assessment may be warranted prior to the eligibility determination. Again, the next step in the process would be another meeting as noted in the example above.

See the section "Assessments and Evaluations" for further information speech-language evaluations and instruments.

Hearing Screening And Evaluation

Virginia law requires that all children have their hearing screened during their first evaluation for special education. An audiological evaluation must be conducted for any child who fails two hearing screenings, is deaf, or has a hearing impairment.

The Evaluation Report

A written copy of all evaluations, including the speech-language evaluation, must be provided to the parent. The report must be available to the parent at least two business days prior to the meeting to determine eligibility (*Virginia Special Education Regulations*, 8 VAC 20-80-65.E.16). Local procedures should be followed for providing reports to parents.

The report should identify the child's preferred mode of communication (oral, sign, augmentative communication). It should include an analysis of the child's strengths and weaknesses in the areas assessed. Assessment results should be fully explained. The report should indicate the existing and predicted impact of any speech-language impairment on the child's ability to access and progress in the general educational curriculum. The child's emerging abilities may serve as prognostic indicators in determining his/her potential for improvement.

The evaluation report should reflect the interrelationship of a variety of factors that could affect the child's communication. These include the child's age, attention skills, auditory processing skills, cultural/linguistic background, sensory deficits (hearing/vision), and other health factors.

All speech-language assessment reports must be written in easily understood language without extensive use of professional jargon. The goal of the assessment report is to communicate valuable findings to enable all team members, including the parents, to meaningfully participate in the eligibility discussions. When professional terminology is used, it must be clearly defined (e.g., "phoneme" versus the layperson's use of the word "speech sound").

Speech-Language Severity Rating Scales

This document includes Speech-Language Severity Rating Scales (SRS) in articulation, language, fluency, and voice. These scales are designed to describe the severity of a child's speech-language impairment, based on assessment using multiple measures, considering multiple

aspects of communication. SRS are valuable tools for describing the severity of a child's speech-language impairment, communicating with eligibility and IEP team members, and providing consistency among speech-language pathologists. There is no requirement to use the SRS; each division will set its own policy regarding its use. Appendix E includes severity rating scales for articulation, language, voice and fluency.

Attainment of a certain point value on a severity rating does not guarantee eligibility for special education; rather, it describes the results of the speech-language assessment in consistent terms. The eligibility committee considers the severity rating in conjunction with other information as the team determines eligibility.

A particular severity rating does not specify or predict a certain level of service. The level of service is determined by the goals and any objectives or benchmarks specified by the IEP team.

ELIGIBILITY

Eligibility for services is based on the presence of a disability that results in the child's need for special education and related services, not on the possible benefit from speech-language services. The speech-language pathologist and team members must be able to document the adverse educational impact of a student's speech and language skills on performance. A student can demonstrate communication differences, delays, or even impairments, without demonstrating an adverse affect on educational performance.

Educational Impact Of A Speech-Language Impairment

IDEA requires that determination of a speech-language disability consider how the disability affects the progress and involvement of the student in the general curriculum or for preschoolers, the effect on their ability to participate in appropriate activities. Consideration should be given to the academic, vocational, and social-emotional aspects of the speech-language disability. Academic areas would include reading, math, and language arts with the impact determined by grades, difficulty with language-based activities, difficulty comprehending orally presented information, and/or difficulty conveying information orally. Social areas impacted by a speech-language disability could include the communication problem interfering with the ability of others to understand the student, peers teasing the student about his/her speech-language disability, the student having difficulty maintaining and terminating verbal interactions, and/or the student demonstrating embarrassment and/or frustration regarding his speech-language skills. Vocational areas would include job-related skills that the student cannot demonstrate due to the speech-language disability. These could include the inability to understand/follow oral directions, inappropriate responses to coworkers' or supervisors' comments, and/or the inability to answer and ask questions in a coherent and concise manner.

Educational impact may also be determined using teacher checklists that are a supplement to some standardized tests; other standardized instruments have an observation scale that can be used for a classroom observation. It is also possible to assess the educational impact of a speech-language disability through the use of teacher/parent/student interview checklists.

These would enable a comparison of the student's speech-language skills and needs in his/her two most natural environments: home and school (see Appendix F for sample checklists). Statements made by the classroom teacher on the teacher checklist may also be used. The teacher's comments provide contextually based information on the student's speech-language skills and needs in the general curriculum program.

Another criterion that may be used to determine the educational impact of a speech-language disability is functional outcome measures. The measures used as part of the American Speech-Language-Hearing Association's National Outcome Measurement System (NOMS) are standardized functional outcome measures that have been found useful for many school-based speech-language pathologists (see www.asha.org for further information).

Cognitive Referencing

Cognitive referencing refers to the practice of finding children not eligible for special education or for related services when their language skills are deemed to be commensurate with their cognitive or intellectual abilities. IDEA does not require a significant discrepancy between intellectual ability and achievement for a student to be found eligible for speech-language services. The use of cognitive referencing within an organization to determine eligibility for speech-language services is inconsistent with IDEA's requirement to determine services based on individual needs (ASHA, 2000).

The practice of cognitive referencing assumes that the psychometric properties of each of the standardized assessment instruments used to assess language and cognitive abilities are similar. This is not true since each measure has different theoretical bases and different standardization samples. Additionally, intelligence measures cannot be assumed to be a meaningful predictor of a student's response to intervention. Children with significant impairments of intellect may respond well to speech-language interventions, therefore improving their ability to succeed academically and in the community. Cognitive referencing uses the question "Who has language skills significantly lower than their nonverbal cognitive skills?" when identifying candidates for intervention. Rather, we should be asking "Who has language and communication skills that are insufficient to support them in the important context of school?" (Nelson, 1995) When evaluating students in school, the important context is the school (or community-based) setting.

The Severity Rating Scale for Language (SRS) emphasizes the use of communication measures to establish the severity of a communication disorder. Accordingly, no reference is made in the SRS to cognitive or intellectual functioning. Decisions to provide services and decisions concerning severity are made solely on observations concerning children's performance on standardized tests of language in conjunction with observations concerning children's performance on functional language tasks. See Appendix E for the Severity Rating Scales.

Eligibility Meeting

Local policies and procedures should be followed for convening the meeting to determine eligibility. A team shall include the parent, the special education administrator or designee and school personnel representing the disciplines providing the assessments. A speech-language pathologist shall be included when

speech-language evaluations have been conducted. It is not necessary that it be the same speech-language pathologist who conducted the assessments.

The eligibility committee must find the child eligible, or not eligible, for special education services as a "child with a disability." In making its determination, the team should ensure that the child's difficulties are not due to lack of instruction or limited English proficiency. If the eligibility committee determines that the child is not eligible, information relevant to instruction for the child shall be provided to the child's teachers or appropriate committee. The following options should be considered.

- Continue existing program, with or without accommodations or modifications to the general curriculum. Additional services, not previously considered, within the general education program may include collaborative services between the speech-language pathologist and the classroom teacher, written suggestions for home or the classroom, or any other appropriate materials.

- Refer to 504 Committee or other committee. The student may be referred to the 504 Committee or another school-based committee if the eligibility committee believes that the student may have a speech-language difficulty that causes the student to be excluded from participation in, or be denied the benefits of, the school division's educational program, but does not have a disability that requires special education.

If the eligibility committee determines that the student meets the eligibility criteria and requires speech-language intervention, then division procedures shall be followed for record keeping and forwarding to an IEP Committee.

The decision that a child is eligible for special education and related services, including speech-language impairment, must be redetermined periodically. Minimally, this occurs every three years, unless a reevaluation appears warranted prior to that time (as required by the *Virginia Special Education Regulations*). The evaluation begins with a review of existing data to establish if additional data is needed to determine eligibility. This review of data may comprise the evaluation. This is especially true if extensive data is gathered by the speech-language pathologist and provided by the classroom teacher.

Related Services

A child must be found eligible for special education to receive related services. Since speech-language pathology services are considered both special education and related services, a child with a speech-language impairment does not need to be found eligible for another special education disability.

When a child is eligible for special education, the IEP team may make decisions regarding the need for related services. It is not necessary to re-convene the eligibility committee, unless required by local procedures.

When determining the need for a related service, it is important to remember that the federal definition of related service *means a service required to assist a child with a disability to benefit from special education* (34 CFR 300.24). As a result, the need for a related service must be directly related to a benefit needed in the child's special education services. For example, it is not

likely that a child with a speech-language impairment will need occupational therapy as a related service to work on handwriting when the child is receiving articulation therapy.

Children Not Eligible For Special Education

Whenever a child is referred for special education, the referral is made because someone, generally a parent or teacher, is concerned about the child's performance. As a result, the parents and teachers may feel discouraged when the child is not found eligible, since this decision does not appear to reflect the noted concerns. The *Virginia Special Education Regulations* require whenever a child is found ineligible for services, the eligibility committee should prepare useful information for the classroom teacher and the parent about steps they can take to facilitate the child's development. This applies to children referred for possible speech-language impairment as well as for all other children.

IEP DEVELOPMENT

When the eligibility committee determines that a child has a speech-language impairment (SLI) that requires intervention as a primary special education or related service, an individualized education program (IEP) must be developed within 30 calendar days of the date of the student's eligibility. The purpose of an IEP is to describe the special education and related services that are necessary to meet the unique educational needs of the child, as identified by the assessment. The IEP team is a multidisciplinary team, which includes the parents. They consider the following factors: the strengths of the child; the concerns of the parents for enhancing their child's education; the results of the most recent evaluations; and the child's performance on any state or division-wide assessments. The speech-language pathologist must be a member of the team for any child with a speech-language impairment.

The IEP should address three questions:

Where are we now?
Where are we going?
How will we get there?

The IEP team must also consider:

- the student's communication needs and assistive technology device(s) and service(s) needs;
- for a student whose behavior impedes his or her learning or that of others, when appropriate, strategies including positive behavioral interventions, strategies, and support to address that behavior;
- for a student with limited English proficiency, the language needs of the student as they relate to the child's IEP;
- for a student who is blind or has a visual impairment, instruction in Braille and the use of Braille;
- for a student who is deaf or hard of hearing, the language and communication needs, including opportunities for direct communication with peers and professional personnel in the student's language and communication mode and the need for direct instruction in the student's language or communication mode.

The present level of performance (PLOP) serves to identify "where we are now," and discusses the child's strengths and weaknesses. This section of the IEP describes how the student's disability affects his/her involvement and progress in the general curriculum and in the area(s) of need. This will include the student's performance in academic areas (reading, math, science, social studies etc.) and functional areas (communication, behavior, social skills, self determination, etc.). The present level of performance should be written in language understandable to all participants (avoid or explain professional jargon) and in objective terms. Test scores, if appropriate, should be self-explanatory or an explanation should be included. For preschool students, the present level of performance should include how the child's disability affects his/her participation in activities appropriate for preschoolers.

Present Level of Performance (PLOP):

What would I want to know about this student if he or she were going to be in my classroom next year?

(Virginia Institute for Developmental Disabilities, 2001)

Sources of information include: formal tests, informal tests, observations, anecdotal reports, curriculum-based assessments, interviews, and checklists. It is also helpful to consider the future, specifically, the student's aspirations in one year, three years, or a longer period of time. The use of teacher/parent/student checklists is recommended to ensure that all perspectives are included. Sample forms can be found in Appendix F.

The present level of performance (PLOP) serves as the foundation for the rest of the IEP. There should be a direct relationship between the information in this section and the goals, any objectives or benchmarks, and the accommodations or modifications in the rest of the IEP.

Annual measurable goals to be addressed for the duration of the IEP must be developed from the PLOP. Goals are designed to meet each of the child's disability-related needs and to enable the child to progress in the general curriculum (or in age appropriate activities for preschool children). The goal should be written to answer the question:

What do we want the child to be able to do in a year?

The goal should reflect the PLOP, be realistic and prioritized. The goal should be written in measurable terms that answer the following questions:

- Who will achieve?
- What is the skill or behavior to be achieved?
- How will the skill or behavior be measured?
- Where will the student use the behavior? Under what circumstances?
- When will the skill be used or goal be accomplished?

Benchmarks are considered milestones to the annual goals. They are set at regular increments of time during the year, providing a marker to gauge student progress. Short-term objectives are intermediate steps to achieving the annual goals. They are sequentially arranged along a continuum of difficulty in a sequence designed to move the child toward the annual goal. Benchmarks or objectives are required for students who will be assessed

using alternate achievement standards (The Virginia Alternate Assessment Program (VAAP)). Benchmarks or objectives are not required for students not participating in the VAAP but may be required by divisions. Sample IEP goals and objectives/benchmarks are presented in Table 2.

The section of the IEP addressing state and division-wide assessments shall be completed for all children enrolled in a grade level requiring an assessment. Any accommodations used on state and division-level assessments must be the same as those used in instruction and assessment during the year. These accommodations should reflect the child's disabilities and needs to access the general curriculum. See the Virginia Department of Education document, *Guidelines for Participation of Students with Disabilities in the Assessment Component of the State's Accountability System*, (available on the Web page at http://www.doe.virginia.gov/VDOE/Assessment/SWDsol.html) for more information about the state assessment system and the standard and nonstandard accommodations that can be used.

Transition shall be considered for all students of the appropriate age, including students who have only a speech-language impairment. Beginning no later than the IEP in effect for the student at age 16, the IEP team shall discuss the child's goals and how he/she will prepare for adult life. The IEP must include a statement regarding transition service needs that focus on the child's high school courses of study. The IEP must include a statement of the needed transition services for the student to achieve his/her employment, postsecondary training/ education or independent living goals. Transition services may include vocational training, supported employment, continuing education, independent living, and community participation. See the Virginia Department of Education Web page http://www.doe.virginia.gov/VDOE/sped/transition/ for more information on secondary transition.

The section on services should be completed after the goals are written. The services are selected based on the needs of the child to meet annual goals, to be involved in and progress in the general curriculum, to participate in extra curricular and nonacademic activities, and to be educated and participate with children without disabilities. The services section may include related services; supplementary aids and services for the student, or those provided to school personnel on behalf of the student; program modifications; and accommodations and modifications in instruction and assessment. The services section shall include beginning and ending dates for all services; the frequency, location, and duration of services; and the extent of participation with children without disabilities in general education class(es) and in extracurricular and nonacademic activities.

The speech-language pathologist and other staff may develop a draft IEP. For specific details on this process, the speech-language pathologist must consult the local procedures for developing IEPs, convening IEP meetings, and implementing IEPs. When the IEP has been written and parental consent is obtained for implementation, the speech-language pathologist must initiate services by the beginning date noted in the IEP.

Table 2. Sample Speech-Language Goals, Benchmarks and Objectives

GOAL:
Judy will use her communication board to respond to questions and comments 80% of the time and initiate questions and comments in the classroom or social settings at least 5 times/day.

Objectives/Benchmarks:
- Judy will use her communication board to respond to questions 9 out of 10 times in class or in social settings, by December 2005.
- Judy will use her communication board to initiate a question in class or in social settings, without reminders, in 5 out of 10 opportunities by February 2005.
- Judy will use her communication board to initiate a comment in class or in social settings, 5 times in a 30-minute interaction period, by April 2006.

GOAL:
Juan will follow the rules of conversation (turn-taking, staying on topic, not interrupting, requesting and providing clarification), making only 3 errors in a 5-minute conversation with adults and 5 errors in a 5-minute conversation with peers by June 2006.

Objectives/Benchmarks:
- Juan will explain the rules of conversation with 90% accuracy by November 2005.
- Juan will identify when the rules of conversation have not been followed in role-playing, videotaped, or actual conversations with 80% accuracy by February 2006.
- Juan will self-correct, with prompting, when he makes errors in following the rules of conversation with adults 3 out of 4 times by May 2006.

GOAL:
Linda will pronounce “s,” “z,” “sh,” and “zh” 8 out of 10 times accurately in spontaneous conversation by June 2005.

Objectives/Benchmarks:
- Linda will identify her correct and incorrect productions 9 out of 10 times by November 2005.
- Linda will produce the phonemes correctly in consonant-vowel syllables and words 9 out of 10 times by January 2006.
- Linda will produce the phonemes correctly in vowel-consonant, consonant-vowel-consonant-vowel, and consonant-vowel-consonant syllables and words 9 out of 10 times by March 2006.
- Linda will produce the phonemes correctly in all positions in words in structured conversation in therapy by April 2006.

GOAL:
Khurrum will appropriately use Kindergarten vocabulary words for numbers, location, size, color, and shapes 90% of the time in conversation in the classroom.

GOAL:
Tonya will speak in the classroom and social settings without using secondary stuttering symptoms in 50% of her utterances by June 2006.

Each IEP must be reviewed and revised at least annually. During this review, the IEP team addresses the child's progress (or lack of progress) toward meeting the annual goals, the results of any re-evaluation, information provided by the parents, the child's anticipated needs, and any other matters. The IEP team must look at a variety of data sources, including data gathered by the speech-language pathologist regarding student performance; assessments completed; and teacher, student, or parent checklists. Audio and video recordings may be valuable in demonstrating progress.

If a standardized assessment is used to measure progress that is not referenced on the IEP, parental consent must be secured to complete an evaluation.

IEP revisions may include changes to the special education services, the related services, the goals, any objectives or benchmarks, the accommodations or modifications, and supplementary aids and services. In addition, the IEP team may add or terminate a related service.

Table 3 is a checklist that can be used to check whether all components of the IEP have been completed appropriately. This checklist may be useful at staff in-service meetings, when reviewing IEPs, and for identifying methods for improving the quality of the IEP.

Reporting Progress

IDEA 2004 requires IEPs to contain a statement of how the child's progress toward annual goals will be measured and when periodic reports on progress will be provided. Speech-language pathologists follow local procedures and timelines for reporting progress. Progress must be reported for each annual goal as indicated in the student's IEP. The American Speech-Language-Hearing Association's (ASHA)

Public school speech-language pathologists can participate in the National Outcome Measurement Systems (NOMS) program as an individual or by the school division. Data is kept on pre-and post-treatment ratings on functional communication measures, service delivery methods, treatment time, and treatment group size. This information is added to the national database and state and local data are also available to participants.

Table 3. IEP Checklist

Present Level of Performance

Yes	No	Does the present level of performance statement identify the child's strengths, especially in each problem area (i.e., what the student is able to do)?
Yes	No	Does it address the child's needs/weakness in each problem area (i.e., what the student is not able to do)?
Yes	No	Is it based on the most recent information gathered from formal testing?
Yes	No	Is it based on the most recent information gathered from informal testing?
Yes	No	Is it based on the most recent information gathered from teacher and related services personnel observations or student work samples?
Yes	No	Is it based on the most recent information gathered from parent observation?
Yes	No	Is it based on the most recent information gathered from state or division assessments?
Yes	No	Are the instruments used identified, including dates?
Yes	No	Are educational implications of evaluation results explained?
Yes	No	Are instructional needs identified?
Yes	No	Does it reflect the child's performance in the general curriculum?
Yes	No	Does it reflect the child's communication needs?
Yes	No	For a child whose behavior impedes his/her or other's learning, does it address behavior?
Yes	No	For a child who is blind or visually impaired, does it address Braille literacy?
Yes	No	For a child who is deaf or hearing impaired, does it address mode of communication and opportunities for direct communication in the child's language?
Yes	No	For a child with limited English proficiency, does it consider the child's language needs?
Yes	No	Is it written in understandable language?

Annual Goals

Yes	No	Are the goals clear? Is educational jargon avoided?
Yes	No	Are the goals measurable? Do they indicate how they will be measured?
Yes	No	Are the goals stated positively?
Yes	No	Is there at least one goal for each area of need identified in the Present Level of Performance?
Yes	No	Are the goals relevant to the student's academic, social, and vocational needs?
Yes	No	Are the goals practical and relevant, considering the student's age and remaining years in school?
Yes	No	Do the goals reflect progress from the previous year's goals?
Yes	No	Can the goals be achieved within one year or less?

Benchmarks or Short-Term Objectives (Required for students participating in the VAAP)

Yes	No	Does it identify *who* will achieve?
Yes	No	Does it identify *what* skill or behavior is to be achieved?
Yes	No	Does it identify *how* or *in what manner* or *at what level* the skill or behavior is to be achieved?
Yes	No	Does it identify *where*, *in what setting*, or *under what conditions* the skill or behavior will be achieved?
Yes	No	Does it identify *when* or *by what time,* the skill or behavior will be achieved?
Yes	No	Is it clear? Is educational jargon avoided?
Yes	No	Is it measurable? Does it indicate how it will be measured?
Yes	No	Is it presented in sequence?
Yes	No	Will the benchmark or short-term objective enable the student to accomplish the goals in the specified time period?

National Outcome Measurement Systems (NOMS) includes many functional measures of communication performance that are easy to complete, easily understood, and therefore, may be useful to division personnel.[2]

If services have been provided to address a particular IEP goal during the reporting period, but the student has not made progress, the IEP committee must be convened. The IEP committee must determine if the goal needs to be modified or if other aspects of the special education and related services need to be changed to facilitate the student's mastery of the current goal for which there has been "no progress." Methods of measuring progress are noted in the student's IEP and all notations of progress should be based on actual performance data collected over the reporting period. Parents may request an explanation of the data used to document progress (e.g., a percentage of accuracy).

Dismissal

The decision to dismiss a student from speech-language services (i.e., terminate eligibility for speech-language services) is the responsibility of the IEP team. When the speech-language pathologist, or anyone with a legitimate educational interest in the student, perceives that the student no longer requires speech-language services to benefit from the special or general education programs, the IEP team must be convened to discuss the possible change in services.

The regulations require school divisions to evaluate a child before determining that he/she meets or does not meet the requirements to be determined "a child with a disability." Evaluation is not required before termination of eligibility due to graduation with a standard or advanced studies high school diploma or before reaching the age of 22.

"Evaluate" does not mean that standardized testing or assessment is required. The team with the same composition as the IEP team (generally the IEP team in this situation) will review existing data about the child. This information can consist of relevant data collected through a variety of methods. Such performance data may be collected on the student's daily performance on activities associated with meeting the IEP goals, performance on class assignments, small- or large-group interactions, parental reports of performance outside the school environment, or student self-reporting. Audio or video recordings may be valuable ways to demonstrate student progress. The evaluation may warrant the administration of standardized assessment instruments. In these instances, parental consent for testing must be obtained prior to administration of the standardized assessment unless that particular instrument was already noted in the student's IEP as a means of measuring progress. The various severity rating scales included in the appendices of these guidelines may also be helpful in determining progress.

When the IEP team convenes to discuss the possible dismissal of the student from speech-language services, all evaluation information is shared and the IEP team determines if the information is sufficient to find the student is no longer in need of speech-language services. The decision to dismiss is based on the same principles as the decision to find the child eligible:

[2] Further information can be found at the American Speech-Language-Hearing Association Web site (www.asha.org).

- Does the child have a speech-language impairment?
- Is there an adverse educational impact?
- As a result, does the child need special education and related services?

A student may be dismissed from services in the following situations:

- The child no longer has a speech-language impairment;
- The child has a speech-language impairment, but it no longer affects his/her educational performance;
- The child continues to have a speech-language impairment that affects his/her educational performance, but the eligibility committee determines the child does not need special education; or
- The child has a speech-language impairment that affects his/her educational performance, but the IEP team determines the child no longer needs related services to benefit from special education. For example, the child's communication needs can be met through the communication goals worked on in the regular or special education classroom.

Some children demonstrate little if any progress for a period of time, prompting educators to consider dismissing the child from services due to lack of progress. IDEA requires that whenever there is a lack of progress, the IEP team must review the child's IEP to determine whether the annual goals are being achieved and revise the IEP as appropriate to address any lack of progress. Any decision to dismiss a child who continues to have a speech-language impairment and who is not making progress must occur after an IEP team has reviewed the child's progress and pursued a variety of options for achieving progress. Those options should include working with other special and general education teachers to incorporate the communication goals into their classrooms. This may be especially effective for children with other disabilities (e.g., mental retardation). Some children lack motivation to continue to work on their speech-language impairment. The IEP team should consider the causes of the motivation problem and may develop a joint effort to address motivation (e.g., working with the school social worker, guidance counselors, the teachers(s), or another speech-language pathologist).

If the lack of progress is not related to any of the above, the IEP team should consider whether further evaluation may be needed to understand the lack of progress. This evaluation may be conducted by a school-based speech-language pathologist, an outside speech-language pathologist with specialized skills, another school professional, or outside professionals.

Whenever the IEP team, including the parent, decides that the service is no longer needed, the division must secure parental consent to discontinue services. If the parent does not agree with the recommendation for dismissal, other courses of action must be considered. Further discussions with the IEP team, mediation, or a due process hearing may become appropriate depending on the individual case. The speech-language pathologist must refer to their school division's local policies. However, the speech-language services must not be discontinued until parental consent is obtained or the matter has been resolved by other means.

ASSESSMENT AND EVALUATION

The purpose of a special education evaluation is to determine whether the child has a particular disability or disabilities; the present level of performance and educational needs of the child; whether the child needs special education and related services; and whether any additions or modifications to the special education and related services are needed to enable the child to meet the measurable annual goals and objectives in the IEP and participate, as appropriate, in the general curriculum (*Virginia Special Education Regulations,* 8 VAC 20-80- 54 D).

The evaluation of a student to determine if he/she has a disability should be multifaceted and include multiple data sources (teachers, parents, students, other service providers), types of data (quantitative and qualitative), types of tools and procedures (standardized measures and authentic assessment), and environments (classroom, playground, home). As a result of the evaluation, the eligibility committee will have a complete picture of the child's communication abilities and needs. The evaluation report provides an understanding of the student's oral communication skills, identifies strengths and weaknesses, and provides information for determining if the child has a speech-language impairment that adversely affects educational performance.

A team, with the same composition as the IEP team, reviews existing evaluation data and determines if additional data are needed to make the above determinations. The team looks at the following data: evaluations and information provided by the parents of the child; current classroom-based assessments and observations; and observations by teachers and related services personnel (*Virginia Special Education Regulations,* 8 VAC 20-80-54 D). If the team decides that additional data are needed to determine if a child is eligible for special education and related services, the tests and materials must meet the following conditions (*Virginia Special Education Regulations,* 8 VAC 20-80-54 E).

- Tests and other evaluation materials used to assess a child must not be discriminatory on a racial or cultural basis.
- Assessment measures must be provided in the child's native language or other mode of communication unless it is clearly not feasible to do so.
- A variety of assessment tools and strategies should be used to gather relevant functional and developmental information on a child; this must include information related to enabling a child to be involved in and progress in the general education curriculum, or, in the case of a preschooler, to participate in developmentally appropriate activities. The tests and other evaluation materials should assist in determining whether the child has a disability and, if eligible, the contents of the IEP.
- The assessment instruments must be validated for the purpose for which they are used and administered by trained personnel in accordance with the instructions provided by their producer.
- Any test (standardized or nonstandardized), administered by qualified personnel, may be used to assist in determining whether the child meets the criteria to be determined a child with a disability and, if so, the contents of the child's IEP.

- Any deviation from standard administration must be described in the evaluation report.
- The assessment tools and strategies must provide relevant information that directly assists persons in determining the educational needs of the child.
- No single procedure can be used as the sole criterion for determining an appropriate educational program for a child.

This section will set forth best practice guidelines in the assessment and evaluation of children in determining the presence of a speech-language impairment. The following areas will be discussed:

- the importance of a comprehensive assessment,
- components of a comprehensive assessment,
- acceptable standards for standardized test selection,
- interpretation of assessment components, and
- educational impact of a speech-language impairment.

Comprehensive Assessment

A thorough and balanced assessment is critical to determining the existence of a disability and for educational planning for the child. Data collection and the gathering of evidence refer to assessment whereas evaluation brings meaning to that data through interpretation and analysis. The Guidelines for School-Based Speech-Language Pathologists (American Speech-Language-Hearing Association, 1999) state that the school based speech-language pathologist should select assessment measures that:

- are free of cultural and linguistic bias,
- are appropriate for the student's age,
- match the stated purpose of the assessment tool to the reported needs of the student,
- describe the differences when compared to peers,
- describe the student's specific communication abilities and difficulties,
- elicit optimal evidence of the student's communication competence, and
- describe real communication tasks.

A comprehensive assessment does not rely solely on standardized assessment instruments to determine a student's functional communication skills or to document progress in accessing the student's educational program.

Nonstandard assessment measures (e.g., language sampling, clinical observation) provide valuable information about the child's use of his/her communication skills in school.

A comprehensive speech-language assessment should be contextually and performance driven. It is the responsibility of the speech-language pathologist to assess the student's communication competence by a variety of methods and in a variety of settings. A comprehensive assessment should provide a picture of a student's functional speech and language skills as they relate to his/her ability to succeed in the educational setting and to access the academic and/or vocational program.

Comprehensive speech-language assessment is performance sampling across multiple domains with multiple people; it is essentially developing a database of a student's skills (Secord, 2002). Secord

views performance sampling as gathering information about multiple skills from different procedures and in varied contexts.

Such an assessment will focus on the classroom as a communication and language-learning environment and will identify how the child uses his/her speech-language skills in instruction, socialization, management, evaluation of knowledge, and literacy. It is student-centered, descriptive, and functional.

A comprehensive assessment should answer the following questions:

- What does the student know?
- What can the student do?
- What is the functional result of the student's speech-language skills?
- What language skills does the student need to be successful in his/her educational setting?
- What challenges does the child have in the educational environment? In what situations do they occur?
- How do the speech-language skills adversely affect the student's educational performance?
- What strategies are in place to assist the student develop his/her speech-language skills? How does use of these strategies affect the child's academic performance?

Using The Standards Of Learning Assessments

In order for the speech-language pathologist to identify the effect of any speech-language impairment on the student's academic performance, the speech-language pathologist must have a thorough understanding of the general education curriculum. The Standards of Learning in Virginia are the framework for the curriculum taught in each general education classroom in Virginia. These standards clearly demonstrate the need for effective communication skills, as illustrated:

- the phonological and phonological awareness requirements of English in primary grades,
- the mastery of syntax and morphology required for oral and written language throughout the grades in English and other content areas,
- the mastery of semantics, syntax, and morphology required for understanding mathematical terms and problems,
- the ability to use pragmatic skills to make a persuasive presentation in any content area, and
- the mastery of semantics in the acquisition of content-specific vocabulary in all areas.

A copy of the Standards of Learning can be found on the Virginia Department of Education Web site. Speech-language pathologists should become familiar with the grade-level curricula developed and used within his/her division to have a full understanding of the general curriculum requirements each student will be facing.

Components Of A Comprehensive Assessment

The comprehensive assessment, a picture of a child's functional communication skills as they relate to the educational environment, should involve several different components and reflect several different perspectives. By combining standardized (norm-referenced) and non-standardized (descriptive or authentic) assessment, a picture of a student's functional communication abilities and needs can be obtained (ASHA, 1999).

These include the following:

- norm-referenced tests that meet psychometric criteria for validity and reliability,
- criterion-referenced measures,
- curriculum-based assessment (including developmental scales),
- dynamic assessment,
- play-based assessment,
- parent, student, teacher interviews and checklists (see Appendix F for sample checklists),
- observations of the child in the educational environment (see Appendix F for sample observation forms),
- collection of evidence,
- review of student file for case information,
- written language samples,
- oral language samples, or
- ratings of intelligibility of speech.

See Table 4 for a comparison of the advantages and disadvantages of these assessment methods.

Standardized tests are norm-referenced and can be used to compare a student's performance with that of age or grade-level peers. Caution must be taken that the student matches the population used for establishing norms, as described in the test manual. In addition, the test must be administered exactly as prescribed in the test manual. If not, then the statistical scores are not valid. Standardized tests are not aligned with the curriculum and do not take into account how prior knowledge and experience impact performance. The speech-language pathologist should keep in mind that standardized tests are not contextually based and will provide an incomplete picture of the child's skills. As a result, they must not be the sole basis for determining if a student is demonstrating a communication difference, delay, or disorder.

A case history is essential for gathering information on the development of a student's speech-language skills, significant birth and medical, academic, and social-emotional functioning. Interviews with parents, service providers, teachers, and the student provide valuable information about a student's effectiveness in communication. This information can provide insight into how the student's speaking, listening, writing, and reading skills are impacted by the student's speech and language skills in various environments. Student interviews, when appropriate, can disclose the student's perception of his/her communication skills and his/her motivation to address these skills.

Developmental scales and language samples are particularly useful with preschool children, students with significant developmental delays, and students with cognitive impairments. These criterion-based measurements provide both a baseline of performance and a means to document qualitative changes in the student's communication skills.

Curriculum-based assessment uses the student's curriculum and focuses on what the student knows and is able to do. It takes place in the student's natural educational environment and provides meaningful information to the family and teacher. Curriculum-based assessment for a child with a speech-language impairment will investigate the child's communication skills and weaknesses within the context of the language and communication demands of the curriculum and education environment.

Table 4.Advantages and Disadvantages of Common Assessment Methods

Assessment Method	Advantages	Disadvantages
Norm-referenced tests	Objective comparison with age and grade-level peers Generally reliable and valid measures Diagnostic measure Widely available Measurable range of average performance	Assessment is in non-realistic, 1:1 situation Limited normative population In appropriate for planning intervention Inappropriate for documentation of progress Inappropriate for linking to general education requirements
Criterion-referenced measures, and dynamic assessments	Designed for natural environments Useful for: analysis of quality of responses, documentation of progress over time, and developing intervention	No statistical comparison with grade or age-level peers Fewer measures available Frequently not standardized
Development scales and play-based assessments	Designed for natural environments Identifies strengths and weaknesses Easily interpreted	Fewer measures available Frequently not standardized
Checklists, observations, and interviews	Information from multiple perspectives and environments (parent, teacher, student) Easy to administer Information can relate directly to general curriculum	Limited ability to compare with grade- or age-level peers Not standardized
Language sampling and speech intelligibility measures	Based on natural situation	Limited norm-referenced data for comparison with age-level peers Often time-consuming
Portfolio review and review of student file	Documentation of student performance in the general curriculum on an on-going basis Documentation of historical information about the child	Limited ability to compare with grade- or age-level peers Limited validity

A curriculum-based assessment conducted by a speech-language pathologist would address the following areas:

- the speech-language skills and strategies needed by the student to participate in the general curriculum,
- strategies the student currently uses,
- skills, strategies, or compensatory techniques that the student must acquire, and
- classroom instruction accommodations and modifications that will provide the student with greater opportunities for success.

Dynamic assessment is a test-teach-test approach that looks at guided learning to determine the student's potential for change. It looks at how well a student performs after assistance. Dynamic assessment focuses on the ability of the child to respond to learning experiences instead of the current level of performance, as is the case with standardized testing. Dynamic assessment is particularly useful for children from culturally and linguistically diverse backgrounds.

Collection of evidence is a collection of student work samples that document a student's achievement in specified areas. It permits students to assess their own work and provides a means to document progress. A collection of evidence may include observations, checklists, anecdotal records, photographs, drawings, work samples, and/or language samples. A collection of evidence is not designed to compare a student to others but instead to document an individual student's progress over time. Documentation of the information gathered via collection of evidence must clearly identify the tasks, the child's performance, and the child's communication strengths and deficits.

It may be useful to review samples of a student's written language. Non-corrected samples can be useful in identifying syntax and morphological errors, semantic misunderstandings, and phonological misperceptions (as found in spelling errors). Information gathered can then suggest areas for further sampling of a child's performance, especially in oral language tasks, to confirm the presence of skills deficits.

A variety of activities can be used to obtain the information for curriculum-based assessment, dynamic assessment, and/or collection of evidence to evaluate phonology, morphology, syntax, semantics, pragmatics, sequencing and attention. Table 5 displays a sampling of activities.

Criterion-referenced measures compare a student's performance on a specific skill, grammatical structure, or linguistic concept to predetermined criteria. These measures permit assessment of communication skills in a social context. Criterion-referenced measures are dependent on the use of well-documented and validated developmental data (Laing and Kamhi, 2003).

Play-based assessment is a child-centered method for obtaining a dynamic picture of young students in a natural environment. It is designed for students functioning between infancy and six years of age. A transdisciplinary play-based assessment permits an integrated approach to viewing a student. Parents and professionals together are involved in developing a picture of the student's functional skills. The team members from a variety of disciplines (e.g., speech-language pathology, occupational therapy, physical therapy, psychology, special education) observe a child interacting in a play environment.

Table 5. Sample Activities To Obtain Assessment Information

- ♦ Story telling based on the title and illustrations about the story.
- ♦ Student response to questions about a story read aloud, with and without visual cues from the book.
- ♦ Naming items in the room by category (size, color, shape, function)
- ♦ Following oral directions, in quiet and noise, in the classroom, and in one-on-one settings.
- ♦ Response to questions about daily activities.
- ♦ Observation of the student playing a game with adults or peers, in a one-on-one situation or in a group activity.
- ♦ Probe how the student responds when questions are asked in a different way, when a skill is taught and reassessed.
- ♦ Use of commercially developed/locally developed checklists and observations scales.
- ♦ Oral language sampling.

The transdisciplinary observation enables an analysis of the student's developmental level, learning style, and interaction patterns. A play-based assessment includes the following advantages:

- ♦ is conducted in a natural, non-threatening environment,
- ♦ generally involves parents,
- ♦ involves several professionals so the students' skills and deficits are viewed as a complex whole and not in isolated, individual segments,
- ♦ identifies service needs, assists in developing educational plans, and evaluates progress,
- ♦ permits a student to demonstrate what is known and eliminates the biases of standardized tests that can penalize students with physical and other impairments,
- ♦ provides a picture of a student's learning style and strengths and weaknesses, and
- ♦ is flexible and adaptive.

Best practice in a comprehensive assessment should include other components to obtain a complete picture of a student's communication skills. These include tasks completed as a component of the assessment by the speech-language pathologist:

- ♦ observation in several settings for students for whom there are fluency or pragmatic concerns,
- ♦ formal assessment in articulation and phonology,
- ♦ speech intelligibility measures, or
- ♦ oral-motor evaluation.

Other professionals in the school division or in the local medical community may complete other assessments:

- ♦ hearing screening (required by *Virginia Special Education Regulations* for all students during initial evaluation or when indicated for re-evaluations);
- ♦ audiological assessment for students with deafness or students who have failed two hearing screenings;
- ♦ audiological assessment for students whose performance and assessments suggest the presence of a central auditory processing disorder; or

- an evaluation by an otolaryngologist for a student's vocal quality that suggests the presence of an abnormality.

Selection And Use Of Standardized Tests

The challenge for the speech-language pathologist is to determine which assessment instruments meet the psychometric properties of statistical reliability and validity and are sensitive to the properties that they purport to measure. The speech-language pathologist must be cautious in deciding which assessment instruments to use. Neither the reputation of the producer of the test nor the fact that an earlier version of a test met specific psychometric standards is a guarantee that the measure meets the standards. One resource that can be used to analyze a standardized assessment is Mental Measurements Yearbooks, published by the Buros Institute if Mental Measurements.[3] Publications by the Buros Institute provide information on tests in print, mental measurement yearbooks, and access to current commercially produced tests. The yearbooks provide in-depth evaluations of standardized tests by assessing their reliability, validity, norming sample, and relationship to other standardized tests. The speech-language pathologist must consider carefully the statistical properties of standardized tests and review them before using with a student. This should be considered a critical part of any comprehensive assessment.

Standardized tests should not be used to write IEP goals and objectives/benchmarks or to determine if a student has met the IEP goals and objectives/benchmarks. Norm-referenced tests are used to determine the presence of an impairment and are not achievement tests.

Standardized tests are designed for screening and diagnosis, not to select goals or assess progress. Using norm-referenced tests for this purpose is not valid. Standardized tests should not be used to determine if a student has met the functional communication outcomes written in the IEP. Re-administration of a standardized instrument only confirms that the student continues to have an impairment. Non-standardized, functional assessment provides the critical information regarding the changing nature of the child's impairment and its impact on the child's ability to access the educational curriculum.

Reliability refers to the consistency of measurement. It determines if an instrument is stable and repeatable: if the instrument produces similar results if re-administered to the same student under the same conditions by the same tester or by several different testers. It is important to look at both the whole test and each subtest. A review of the test manual should provide information on the following types of reliability:

- test-retest (data that show that the test scores are dependable and stable across repeated administrations),
- inter-rater (data that show that scoring is objective and consistent across examiners),
- alternate form (different forms of the same test show consistency of performance), and

[3] The Mental Measurements Yearbooks can be located in public libraries and at the Buros Institute's Web site: www.unl.edu/buros.

♦ internal consistency (assumes all of the items are measuring the same thing) (Sattler, 1988).

The minimum acceptable reliability is 1.80 (Sattler, 1988). Local standards will determine the acceptable period of time between administrations of the same test, based on the population. For example, the locality may determine that a year is an acceptable standard for school-age children and that six months is the standard for preschoolers.

The best practice is not to report age-equivalency scores on a norm-referenced assessment.

A measure's validity informs the user as to whether test measures what it purports to measure. The test manual should provide detailed information as to the validity evidence that supports the test's interpretations and uses. Sources of validity evidence (Sattler, 1988) include:

♦ content validity (if there is adequate sampling of the content areas and if the content areas are generally accepted as the proposed construct),
♦ concurrent validity (if the test scores related to some currently available criterion measure),
♦ predictive validity (if an obtained score is an accurate predictor of future performance on the criterion), and
♦ construct validity (how the test items relate to the theoretical construct of the test).

The normative sample for every assessment should be analyzed for several factors. It should be based on the most recent national census data and include representative samples of all populations that the test states that it measures, including gender, ethnicity, race, native language, age, and primary caregiver education level. It is also desirable to include persons with disabilities in the normative sample. The sample should include a variety of geographical locations (e.g., urban, rural, and suburban). Prior to administration, it is important to review the normative sample to determine if it matches the student being assessed. Testing a student who represents a population not fairly represented in the norming sample would produce invalid results. Best practice is to administer the most recent version of a test because it represents the most current census data.

Scoring procedures should be analyzed to determine if correct answers are based on use of Standard American English, which will penalize students who use other dialects or languages. This is critical information when using standardized tests with students who are, for example, culturally and linguistically diverse. In such situations, standardized tests must be supplemented with other assessment measures, as the assessment may yield inaccurate results for students from culturally-linguistically diverse populations.

Prior to test administration, the speech-language pathologist should thoroughly review the test manual. This includes analyzing the standardization information and test administration guidelines. Failure to comply with strict standardized test administration invalidates test results. Best practice requires that the speech-language pathologist administer the test at least once in a practice session prior to initial administration to a target student.

Standard scores are equal interval units and provide statistically valid information on test performance. They are considered the most satisfactorily derived score to report.

An age-equivalent score indicates the age at which a certain raw score is average. Describing a student's performance as equal to that of a child of a certain age is statistically incorrect. It does not consider a range of normalcy as is provided by the standard error of measurement (SEM) for standard scores on a norm-referenced test. Age-equivalency is a developmental score that states, "based on a normative sample, the average raw score of a particular age group is X."

Age-equivalent scores imply a false standard of performance. Many teachers and parents erroneously assume that an age-equivalent score can reflect a child's standing within a group of same age-peers. Because the age equivalent score is the obtained or estimated average score for that particular age, simple arithmetic shows that for any group of children of a given age, about half will be expected to achieve a lower raw score, and about half will achieve a higher raw score, giving a broad range of normal performance. Therefore, age-equivalent scores cannot be used to demonstrate change and should not be used when determining if the child has a speech-language impairment.

Children with cultural or linguistic differences, such as speakers of African-American English, face content and/or linguistic bias when they are administered many norm-referenced tests. As a result, it is possible to inappropriately identify a child with a cultural or language difference as having a language disorder. The child may be found eligible for special education, when the test used is inappropriate for the student.

On some occasions, the situation or a child's particular disability will make it impossible to follow the test administration protocol, especially for children with physical or sensory (hearing, vision) disabilities. These may include enlarging the text or pictures, transferring the test to an alternate input device such as IntelliKeys, using sign language to present material and to provide responses. Any deviation from the standard administration must be reported in the evaluation report. The speech-language pathologist can contact the producer of the test for guidance regarding acceptable adaptations within the guidelines for standard administration. In such situations, the test may be used only to provide descriptive information as the deviation from standard administration invalidates the scoring. Federal and state requirements provide that any deviation from standard administration must be reported.

Speech-language pathologists must review carefully the norm-referenced tests they use. Use of multiple norm-referenced tests will be only as accurate as the results of the least accurate test selected. It is better to use a single, well-validated, and reliable measure, that is normed on a population comparable to that of the target student, than to use a variety of measures that are poorly constructed or that used a normative sample that does not represent the target student. See Table 6 for a checklist that can be used when reviewing norm-referenced tests.

There are times when a speech-language pathologist may consider using a standardized test under non-standardized conditions or which a student who is older than the norms provided. Any variation from the test directions is considered a non-standardized administration, even in situations in which the student cannot participate in standard administration procedures (e.g., a student who is deaf who is administered a test that does not allow for use of a sign language interpreter). If this is

done, the evaluation report must clearly state that a non-standardized test administration was used, describing the change in procedures (e.g., repeating an item, rephrasing a question, using an interpreter). The same situation applies when administering a norm-referenced test to a student older than the test norms.

> *"The speech-language evaluation should give an overall picture of the child as a communicator in the school setting."*
> *Moore-Brown and Montgomery (2001)*

Standardized scores may not be used in reporting the child's performance in the above situations, as the standardization is based on strict adherence to the testing protocol and age levels. As a result, percentile ranks, age-equivalencies, standard scores, and stanines cannot be used. The report should indicate that the test was administered only for informational purposes. One way to report the information would be to identify the percentage of items correct and the type(s) of errors made on particular tests or the age ranges in which most correct responses fell.

Figure 1 is a normal distribution curve, with percentile rank and standard score information, and guidance for using test scores. This figure may be useful in explaining test results to parents. Appendix G lists standardized tests most frequently used by a variety of school divisions in Virginia in October, 2003. Appendix H lists the Fairfax County Public Schools approved assessment instruments.

Table 6. Checklist for Use in Reviewing Norm-Referenced Tests

Name of Test_________________________ Edition _________________

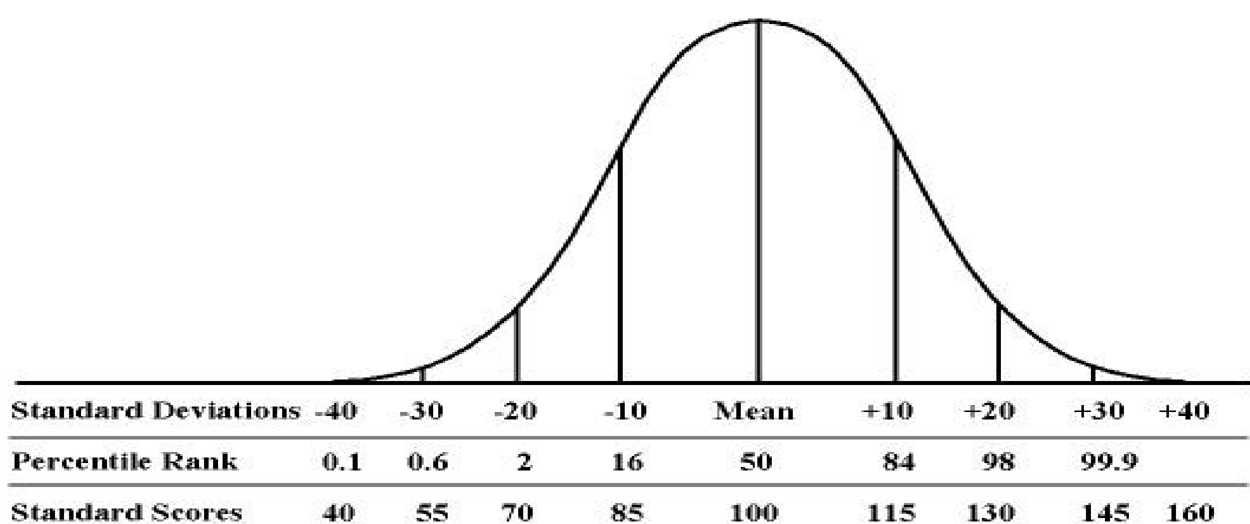
Reviewer ______________________________ Date ________________

Present?		Criteria
Yes	No	Does the normative sample represent the most recent census data?
Yes	No	Is the normative sample large enough?
Yes	No	Does the normative sample include representative samples of all populations that the test states it measures?
Yes	No	Does the normative sample include students with disabilities?
Yes	No	Does the normative sample represent the target students in terms of racial-ethnic and geographic status and disability?
Yes	No	Does the test meet reliability standards of at least .80?
Yes	No	Is it a valid measure for the planned assessment? (Is the theoretical model upon which the test is based represent currently accepted research?)
Yes	No	Does the test have test-retest validity?
Yes	No	Does the test have predictive validity? Is the predictive validity relevant to the purpose of the planned assessment?
Yes	No	Does the test items or scoring procedures penalize students who are not speakers of Standard American English?
Yes	No	Does the test manual provide cautions in the use of age-equivalent scores?
Yes	No	Does the test provide valuable assistance in analyzing a student's communication skills?
Yes	No	Is this the most recent version of the test?

Interpretation Of Assessment Components

When the data collection (assessment) is completed, then the information must be interpreted (evaluation). Interpretation of the assessment components requires careful interpretation of norms on standardized assessments and integrating nonstandardized measures to create a picture of a student's speech-language skills. It is critical that there not be an over reliance on any one piece of information or assessment source. The strengths and needs of the student must be considered within the context of the school, home, and community.

Figure 1. Normal Distribution Curve



Standard Deviations	-40	-30	-20	-10	Mean	+10	+20	+30	+40
Percentile Rank	0.1	0.6	2	16	50	84	98	99.9	
Standard Scores S.D. = 15	40	55	70	85	100	115	130	145	160

- A score within one standard deviation is considered within normal limits. Sixty-eight percent of the population falls within one standard deviation.
- Significant difference is a statistical term and should only be used in reference to the guidelines of the norm-referenced measure.
- The percentile rank should not be confused with a percentage score. A percentile rank reflects the percentage of individuals whose scores fall below a given value. Percentile ranks of 16-84 are within the average range.
- The average range for a test with a mean of 100 and a standard deviation of 15 is 85-115.
- Standard scores should always be interpreted with words.
- Standard scores are generally accepted as the most robust of the derived scores.
- Age- and grade-equivalent scores should be used with caution. These scores should not be used to determine eligibility or estimate performance. Equivalent scores do not compare students to others in the same population and do not include a measure of normal variation. Because they do not represent equal intervals on a scale, a one-point difference in a raw score may translate into a significant difference or change in an equivalent score.

Service Delivery

Students eligible for special education and related services should receive therapy from school-based speech-language pathologists that is:

- curriculum-based,
- outcome-oriented,
- integrated with educational activities,
- diagnostic in nature,
- dynamic, changing as the child's needs change,
- based on research-proven strategies, and
- designed to ensure access to the general curriculum so the child can be successful in mastering the Standards of Learning.

IDEA 1997 and 2004 directed educators to focus on access to the general curriculum for all students. This shift created the need for modification of service delivery approaches. Reliance on the traditional approach of pull-out therapy, focusing solely on discrete speech or language skills, is no longer sufficient for all students. A comprehensive intervention program that supports students' involvement in academic, nonacademic, and extracurricular programs is necessary to meet students' needs. Direct services that utilize curricular materials or activities, provided in a classroom setting, facilitate the language abilities of students. Speech-language pathologists will need to maintain a therapeutic focus in their use of curricular materials, activities, and classroom-based interventions. To ensure effective integration of speech-language pathology services with the educational setting, collaborative consultation with the teachers and classroom-based services need to be part of the service delivery continuum. The focus on performance in the general curriculum requires a team approach, with specific responsibilities shared by various professionals.

Speech-language pathologists must use evidence-based practice in their service delivery. Evidenced-based practice incorporates specific steps such as: identification of clinical issues, review of existing research, definition of expected outcomes, and evaluation of clinical practice. It is inappropriate to use a service delivery approach or therapeutic technique that has not been proven to have a positive outcome. Any use of a practice that is not research-based should be used on a trial basis, with pre- and post-testing to determine the outcome of that practice for that particular student (Meline and Paradiso, 2003). When services are based on research-proven strategies, there is improved accountability for students, schools, and families.

Service Delivery Methods

Effective service delivery is dynamic and changes with the needs of the students. Services may be provided directly to the student or indirectly through consultation with educators and families. The IEP team will make the decisions about the type and amount of direct and indirect services the child will receive. Decisions are based upon the child's present level of performance, progress made in services received to date, assessment results, IEP goals, and any objectives/benchmarks. In addition, the IEP team will consider the advantages and disadvantages of specific settings and the necessity for repeated practice in a controlled environment. No single service delivery model can be used exclusively. Multiple perspectives are needed for different children as their needs change. When speech and language services are

indicated, the service delivery and clinical methods must focus on achieving the goals in the child's IEP. Regardless of the service delivery model used, it is essential that time be scheduled for regular collaboration with parents, general educators, special educators, and other service providers.

Direct Services

The IEP team may determine that the child's goals and objectives will be met most effectively through direct services. Direct services may be offered in a variety of settings (the speech-language room, the classroom, the cafeteria, or other school settings). The type, location, and amount of services are adjusted to meet the needs of the student. Whenever possible, therapy should be provided in the least restrictive setting and result in the least amount of disruption to the student's academic day. However, the nature and severity of the speech-language impairment may necessitate service delivery in a pull-out situation.

Pull-Out Therapy

Therapy services provided in an individual or small group setting, with intensive specialized instruction in specific skills or strategies, are typically referred to as pull-out therapy. This service delivery model generally focuses on remediation of articulation, language, voice, fluency, or swallowing deficits.

Integrated Therapy

Integrated therapy provides individualized service in a less restrictive setting and does not remove the student from the general or special education classroom. This service delivery method allows the student to receive direct therapy from a speech-language pathologist while continuing to receive classroom instruction. Classroom teachers become an integral part of the process as they learn to reinforce speech-language goals, assess student progress, and learn specific techniques that will benefit the students with speech-language impairment as well as general education students. This incidental benefit to regular education students is a naturally occurring outcome of collaborative service delivery.

The speech-language pathologist has exposure to classroom communication including: levels of adult and child communication (rate, volume, complexity of language), daily routines, the language of the curriculum, vocabulary demands, and the student's coping strategies. Using this model, the general or special education teacher and speech-language pathologist jointly plan, teach, and assess the student's progress within the classroom setting. Integrated therapy can involve several approaches to sharing instruction. Throughout the academic week, the teacher may then choose to employ strategies learned, use prompts or cues the speech-language pathologist has demonstrated, or monitor students for use of a particular skill. This type of information is especially helpful in determining the educational impact of a speech or language impairment.

While in the classroom, the speech-language pathologist and classroom teacher may present instructional materials collaboratively. With the speech-language pathologist's assistance, these instructional materials and activities can focus on the speech-language objectives of the students receiving speech-language services. The speech-language pathologist may use this as an opportunity to provide reinforcement for specific objectives in a more natural setting

Table 7. Teaching Models for Integrated Therapy in the Classroom

Team Teaching	**Small Group Instruction**
The speech-language pathologist: ♦ paraphrases information ♦ creates graphic organizers ♦ teaches strategies for vocabulary learning ♦ teaches strategies for sequencing ♦ teaches strategies for developing a narrative ♦ cues and prompts the student ♦ modifies the language level of instruction to meet students' needs.	The speech-language pathologist: ♦ works in small group instruction with targeted students, reviewing academic material ♦ presents the academic material with a focus on enabling the child to generalize his/her communication skills

(the classroom) or gather data on the child's performance in the classroom setting without direct instruction. The speech-language pathologist may work with individual students, small groups, or with the entire class. Table 7 provides examples of teaching models for integrated therapy. This method also enables the speech-language pathologist to observe the student in a more natural setting and gather data on his/her use of skills learned in pull-out therapy. It is important to note that only time spent providing direct service to the students with speech-language impairment can be counted toward the frequency and duration of services required.

Communication Skills Secondary Course

Some school divisions have found it beneficial to offer a course on communication skills. These are most often offered at the middle or secondary level as an elective class. They may be semester or year-long classes. These classes offer direct instruction to special and general education students, addressing communication skills in home, school, community and work settings. Topics generally include rate, volume, eye contact, social communication skills, topic, maintenance, and code-switching skills.

Although the speech-language pathologist may be a natural choice to teach this class, other special or general educators may also have the necessary skills to serve as the instructor. In other situations, the speech-language pathologists may co-teach this class or consult with the teacher. If the speech-language pathologist is the instructor, his/her caseload should be adjusted accordingly.

Community-Based Instruction

Many school divisions offer community-based instruction for students with disabilities. Providing instruction and experiences in the community facilitates the development of skills that are required for success in life. Opportunities are provided to practice daily living or work skills during community trips with monitoring and support provided by teachers and other staff. The speech language pathologist may participate in these outings if the functional setting provides opportunities to monitor the generalization of skills or provides opportunities for structured practice. The speech-language pathologist may also provide consultation services to the teachers

who are providing community-based instruction.

Indirect Services

Indirect services, or consultative services, are provided when a student's IEP specifies support for school personnel as a part of the accommodations, modifications, or supplemental support services provided to a teacher on behalf of the student. These services include providing information and demonstrating effective instructional and facilitation procedures. The speech-language pathologist may provide support for staff or analyze, adapt, modify, and create instructional materials and assistive technology for targeted students. While providing consultative services on behalf of a child, the speech-language pathologist will monitor the student's progress. Consultative services usually do not involve the direct provision of therapy to the student.

This model is appropriate for students who are nearing dismissal from speech-language services or students whose teachers require additional support to create materials, implement specific communication strategies, or modify augmentative/alternative communication (AAC) equipment. The classroom teachers may request assistance as they plan, monitor student progress, or make decisions regarding the presentation or selection of materials.

Consultative services may be provided to family members. Such consultation can include information on speech-language development and facilitation, home programs, recommended environmental changes, or parent-support groups. This level of service may be provided to a family member of a child who is receiving services or a child who is not eligible for services.

Information, home programs, and demonstration that can positively impact communication development or maintenance skills may be offered. This type of support is especially valuable for families and teachers when there is concern about the child's development.

Scheduling And IEPs

Speech-language pathologists can increase the effectiveness of their treatment if a flexible approach to service delivery is adopted. Working with school administrators is a strategy often used by veteran special educators and speech-language pathologists. This can enable the speech-language pathologist to group students in one class, enhancing the opportunity to collaborate with the teacher, decreasing the disruption to classrooms, and limiting the amount of time students are pulled from a classroom. If three to five students with similar speech and language needs are grouped in one teacher's classroom, the speech pathologist can work with the teacher to provide services integrated within the classroom or can select a time for pull-out services that limit the disruption to the classroom. By working with one or two teachers per grade level, speech-language pathologists can efficiently provide services. This can reduce planning time by addressing concerns for multiple students and classroom activities in fewer sessions. This scenario also decreases the need for individual students to be pulled from different classrooms causing a disruption in multiple locations for a single therapy session. This practice is becoming increasingly important with the higher academic expectations of the general curriculum and No Child Left Behind's (NCLB) requirements for minimum amount of instructional time in the content area for certain students.

Table 8. Possible Delivery Options for 60 minutes of Services per Week

Delivery Options	**Representative Students**
10 minutes, 6 times/week or 15 minutes, 4 times/week or 20 minutes, 3 times/week or	Students with articulation, fluency or voice goals, who are generalizing skills, or Students who benefit from short, intense therapy sessions on a frequent basis (e.g., students with apraxia), or Students needing frequent review of specific strategies or devices (e.g., alternative/augmentative communication) out of the classroom setting.
30 minutes, 2 times/week	Students who are learning skills such as articulator placement and fluency strategies in a therapy room.
60 minutes, once a week or 45 minutes + 15 minutes once a week	Students with language or pragmatic needs who receive therapy in a classroom setting (Note: some students will benefit from an additional 15 minutes for pull-out sessions to reinforce a particular skill or strategy)

Speech-language pathologists will have greater control over their own schedules if a flexible approach to service delivery is maintained. When IEPs are written appropriately, frequency, duration, and setting can provide built-in flexibility for a speech-language pathologist. Frequency and duration of services, setting, and method of service delivery may vary, depending on the needs of the child. Provision of the same frequency and duration to each student violates the requirement that services be individualized and leaves little room for flexibility and creativity within a speech-language pathologist's schedule. This allows speech-language pathologists to adjust the delivery of services a child receives at a particular period to capitalize on the benefits of increased therapy (ASHA, 2004).

Flexibility in service delivery can be built into IEPs and the speech-language pathologist's schedule in a variety of ways. Rather than consistently scheduling two sessions per week for 30 minutes each, schedule 60 minutes per week or 120 minutes per two-weeks period, when appropriate for student needs. In addition to accommodating student and classroom needs, this offers the speech-language pathologist greater flexibility when providing services. The speech-language pathologist is better able to capitalize on opportunities to integrate services in the classroom or during school events and to reschedule sessions to accommodate absences. This type of frequency and duration statement allows the speech-language pathologist a myriad of scheduling options that can change to meet the students' needs (see Table 8). Another option is the provision of intense services early in the year, with the amount of time reduced later in the year (e.g., 30 minutes daily for the first quarter; no services for the second quarter; 30 minutes once a week for the third and fourth quarters). This approach can be

used to teach a new skill and give the child time to practice it or to accommodate particular curricula and/or classroom demands.

A third option may be to schedule the student on a monthly basis. This may be most useful for students who are monitoring their own performance and need periodic opportunities to check in with the speech-language pathologist to gauge their progress. It is not uncommon for this level of service delivery to be provided immediately prior to a determination by the eligibility committee that the student no longer has a speech-language impairment that adversely affects his/her educational performance and therefore no longer needs special education and related services.

Speech-language pathologists must always provide the total amount of service written on the IEP, regardless of the wording of the frequency and duration statement. Use of a range (i.e. 30 – 40 minutes) is typically not considered acceptable because the service provider and the parents may view the expected time requirements differently. Unfortunately, this type of ambiguity may result in a complaint or due process hearing. Speech-language pathologists and their administrators of special education should work together to discuss new scheduling formats prior to implementation.

The child's IEP should also specify where services will be provided – in the speech-language pathologist's room; in the general, special, or career-technical education classroom; on the playground or in the cafeteria (or other school locations); in the community; or other specific location. The identification of location may be flexible, recognizing that there may be a valuable opportunity to practice a newly acquired skill in a classroom setting or that a child may need a few sessions of direct pull-out therapy to work on a specific strategy before returning to classroom-based intervention. When specifying location on the IEP, it is useful to identify multiple locations for services, as follows:

Johanna will receive 60 minutes of services/week in the speech-language pathologist's room, in the classroom, in the cafeteria or playground.

In addition, it may be useful to specify that the child will receive services individually, in a group, or in a classroom. In this manner, the speech-language pathologist has the flexibility to work with the child one-on-one to establish skills, in small groups to practice them in a structured setting, and in the classroom to use them in a more natural environment.

Whatever the type of scheduling option used, it should be clearly documented in the student's IEP and include dates, frequency, and duration statements. If the student's speech or language needs change, the IEP team needs to reconvene to make appropriate adjustments.

CASELOAD ESTABLISHMENT

The speech-language pathologist's caseload includes all students eligible for special education and related services. In addition, all students eligible for services under 504 should be counted. (See "Special Topics" section on "Students Eligible under Section 504" for further information on 504).

Federal law does not mandate caseload size. Each state sets it's own caseload caps. Virginia's current cap on the caseload for full-time speech-language pathologists is 68. The average caseload in Virginia is lower than the state cap (50 to 55 students).

The caseload maximum is lower for part-time personnel or persons assigned other responsibilities in proportion to the amount of time spent as a service provider (8 VAC 20-80-45). Table 9 shows how the cap would be reduced depending upon the time assigned to provide services.

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

When managing multiple speech-language pathologists within a school division, characteristics of students, such as the age and the severity of their needs can also be considered. For example, a student who is enrolled in speech-language services for an articulation error may requires less service time, paperwork, consultation or preparation than a student who has an augmentative device and is physically and cognitively impaired. To count these two students equally on a caseload does not reflect the amount of time involved in addressing each student's needs. The scenario above may be reversed if the student has a severe intelligibility problem, requiring intensive therapy, versus a student with significant disabilities who is a proficient augmentative communication user, and only requires consultation to monitor the equipment. Table 10 provides a format for documenting and comparing caseload responsibilities. Consideration of student needs is important to caseload distribution and management.

Table 9. Examples of Caseload Reduction Based on Schedule

	Speech-Language Pathologist's Schedule	**Caseload Maximum**
Part-time employee	example: 2 days/week or .4 FTE proving speech- language services	27 (.4 FTE x 68)
Department chair/lead teacher	example: 3 administration periods out of a 6 period day or 3/6 time (.5 FTE) providing speech- language services	34 (.5 FTE x 68)
Provides phonological awareness remediation	example: 1 hour/day providing phonological awareness out of a 5 ½ hr day or 4 ½ hours (.82 FTE) providing speech-language services	56 (.82 FTE x 68)

Table 10. Sample Speech-Language Documentation Log and Schedule

Speech-Language Pathologist________________________________Time Period___________

School	Total Number of Students	Number of Preschoolers	Contacts per week	Home Programs	Number of Evaluations Due
1.					
2.					
3.					
Totals:					

Time	Monday School:	Tuesday School:	Wednesday School:	Thursday School:	Friday School:

SPECIAL TOPICS

STUDENTS WITH LIMITED ENGLISH PROFICIENCY (LEP)

There has been a significant increase in the number of students from culturally and linguistically diverse populations who are developing English proficiency in Virginia (VDOE data). The increasing numbers of linguistically and culturally diverse students present a unique challenge to school divisions 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.

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)]

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 immigrant family.

Speech-language pathologists should become familiar with the culture and communication style (e.g., independent research and consultation with knowledgeable individuals) of the student being assessed.

Second Language Acquisition

Speech and language pathologists must understand the first as well as the second language acquisition process. 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 children.

The primary goal for most second language learners is to function as proficient learners in the classroom. Literacy skills will transfer from the first language (L1) to the developing second language (L2) if the student has learned the academic skills (reading, writing, organization of information) in the "home" or first language. Most language learners experience a time when they acquire receptive language skills before they are able to use the language expressively. They listen but do not speak. This silent period parallels the stage in first language acquisition when the children are internalizing the vocabulary and rules of the new language.

Students with Limited English Proficiency (LEP) may be more comfortable speaking with other second language learners in a social setting yet remain silent in the general education classroom. The silent period is part of the learning process. The students are making needed connections between the first language and their new language. Conversational proficiency is the ability to use language in face-to-face communication. It is important to remember that oral proficiency does not constitute second language proficiency. Oral proficiency is not sufficient for the increased language demands required for academic competence.

The acquisition of first and second languages share many similarities. The field of bilingual education has adopted a model of second language (L2) acquisition that is based on Basic Interpersonal Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALP) (Roninson, 2003). After one to two years of exposure to L2, an average child usually acquires BICS. At this level the child socializes with peers and participates in everyday interactions. Achieving the CALP requires at least five to seven years of L2 exposure. This time period is comparable to the period needed for a monolingual child to learn the formal aspects of the linguistic code. CALP development may be longer (up to 10 years) for students. Individual differences in prior knowledge, learning styles, previous academic and abilities will determine how quickly a student will progress through the various stages.

Table 11. Common Myths about Students with Limited English Proficiency

Myth: Learning a second language takes little time and effort.
Fact: Studies show that learning English as a second language make take from two to three years for oral language skills and 5 –7 years for higher level, cognitive and academic language skills.

Myth: All language skills (listening, speaking, reading, and writing) readily transfer from L1 to English (L2).
Fact: Reading is the skill that transfers most readily (for students who were readers in L1)

Myth: Exposure to English is sufficient for L2 learning.
Fact: Conditions for language learning include: need to communicate; access to speakers from that language (English); interaction, support and feedback from speakers of that language; and time.

Myth: Code switching is an automatic indication of a language disorder.
Fact: Code switching may indicate high-level language skills in both L1 and L2.

Source: Brice, A. (2002). Guidelines for English-speaking SLPs in Treating Bilingual Patients. Available at http://asha.ucf.edu/ASHA2002.html.

The student's social-emotional characteristics can also influence the rate of L2 learning. The student's personality (extrovert vs. introvert, low vs. high self-esteem, shy vs. assertive), home culture's attitudes toward L2 and cultural adjustment, and socioeconomic status can be factors that will alter the time for L2 acquisition (Roninson, 2003). Brice (2002) identifies a number of commonly held myths about students with limited English proficiency that can impede educators' or speech-language pathologists' ability to understand the difference between a language impairment and language difference (Table 12).

Eligibility for special education with a speech-language impairment must be based on the presence of a speech-language impairment in L1, not the child's limited English proficiency. Care must be given to determine the cause of the communication skill deficits. Table 13 contrasts the characteristics of students with limited English proficiency alone and limited English proficiency in conjunction with a communication impairment.

When a child with limited English proficiency is referred for an evaluation for special education the following practices should guide the evaluation:

- 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.
- Parental concerns about L1 communication skills
- ESL teacher reports slower than typical acquisition of English.

Table 12. 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 in home country.	May observe limited progress in second language acquisition, difficulty retaining academic information, difficulty in schoolwork of home country, or difficulty in 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.

Adapted from the Fairfax County, *CLiDES Handbook* Team (2003).

Use standardized tests with caution. If the normative sample for the test did not include a comparable group or if the testing procedure was modified, scores should not be reported. Review the child’s written work to identify any language patterns. Complete an MLU assessment in both languages.

The speech-language pathologist should become familiar with the student’s cultural communication norms. Analysis of the English errors of phonology, morphology or syntax should consider the phonology, morphology, syntax, semantics and pragmatics of the student’s native language (Derr, 2003).

At any point in the process of acquiring second language 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.

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.

Students With Auditory Processing Disorders

Children who have an impairment in auditory processing may have a diagnosis of Auditory Processing Disorder.[4] Students with auditory processing disorders may have an underlying receptive language disorder and abnormal language scores.

The central auditory nervous system develops and matures through age 12. Persons with auditory processing disorders generally develop symptoms at an early age and continue to experience significant difficulty with auditory tasks as they mature.

Auditory processing is a neural process that is separate from language comprehension and is not a hearing acuity impairment.

A student with an auditory processing disorder may have difficulty in one or more of the following areas:

- auditory attention - the ability to focus on an auditory signal (speech or non-speech),
- auditory memory - the ability to remember information presented auditorily, either immediately or after a delay,
- auditory discrimination – the ability to hear differences between sounds (speech or non-speech),
- auditory figure-ground problems – the ability to attend to the primary auditory message in the presence of competing auditory signals (e.g., background noise, other speakers), and
- auditory cohesion – is the ability to integrate information gathered auditorily.

These skills build on one another, as shown in Figure 2 auditory processing disorder is not one of the 14 federal disability categories outlined in IDEA. To qualify as a "child with a disability," the student must have the characteristics of one of the disability categories, demonstrate an educational impact as a result of the disability, and require specialized instruction.

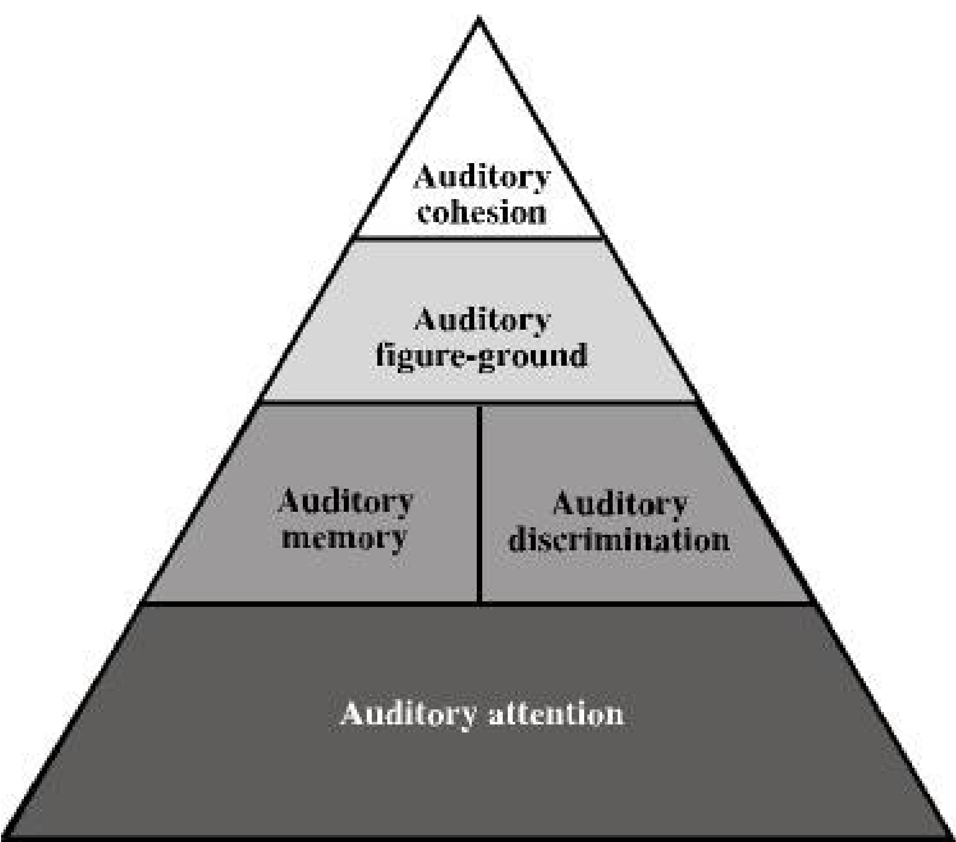
Differential Diagnosis

Children with an auditory processing disorder will benefit from a multidisciplinary team approach to management. The team may include the classroom teacher, speech-language pathologist, special education teacher (often the teacher of students with learning disabilities), school psychologist, educational diagnostician, audiologist, and parent. Team members should recognize the significant overlap in the presenting characteristics of attention deficit disorder (with or without hyperactivity), speech-language impairment, and auditory processing disorders. It is important to address and rule out other common disabilities that may impact student performance (see Table 14).

When a child is referred for an evaluation to determine special education eligibility due to a diagnosis of auditory processing disorder or a potential disorder, and the special education director or designee decides to move forward with an evaluation, the team should consider certain assessment measures and medical information about the child.

[4] Auditory Processing Disorder may also be termed Central Auditory Processing Disorders (CAPD).

Figure 2. Auditory Processing Skills Hierarchy



The following procedures are offered as a best practice approach to completing an assessment of a child suspected of having an auditory processing disorder.

- An audiological evaluation should be conducted following a referral for auditory processing. A licensed audiologist with experience working with school-age children with auditory processing disorders should conduct the evaluation.
- Review developmental and student records. Identify onset of symptoms, developmental characteristics, and educational background. Review current medications and possible effects on performance.
- Use questionnaires, checklists, and interviews to gather input from teachers and parents regarding student performance, distractibility, attentiveness, and compensatory strategies in both quiet and noisy settings.
- Complete multiple classroom observations with special attention to the following areas: classroom noise (i.e. in-class, outside-class reverberation), proximity to teacher, and comparison with other students in the class.
- Gather sufficient assessment data to allow for analysis of all auditory skills (attention, memory, discrimination, figure-ground, and cohesion).

Management

Children with auditory processing disorders will benefit most from management of three aspects of the following factors: environmental

modifications, development of compensatory strategies, and direct treatment for specific deficits. The following summarizes some key management strategies.

- Place the child away from noise sources and within 6 – 8 feet of the speaker.
- Work one-on-one or in small groups.
- Reduce or eliminate background noises (e.g., audiovisual equipment).
- Keep doors and windows closed to reduce outside and hall noise; place windows and doors to the child's back to put the noise behind the child

Environmental modifications

Use sound absorbers in the classroom to reduce sound reverberation (e.g., curtains at the windows, acoustical tile ceiling, carpeting or pads/tennis balls on chair legs for non-carpeted floors, sound-absorbing room dividers and bulletin boards).

Compensatory strategies:

- Develop habit of previewing (announcing content), stating (presenting content), and reviewing (summarizing content).
- Teach the child how to manage his/her placement within the classroom to reduce the impact of noise.
- Teach the child how to maximize his/her visual strengths to compensate for auditory weaknesses.
- Consider the use of a personal or classroom FM auditory trainer (best used on a trial basis with pre- and post-testing to determine the effectiveness).
- Teach the child to ask for clarification; to get organized and maintain a neat desk and calendar; to study aloud (when not interfering with others); to repeat what was said; to take accurate notes, using key words/concepts; and to note communication clues (teacher's voice, time of day, setting)

Direct treatment:

- Teach auditory discrimination skills through examples of curriculum and/or age appropriate vocabulary
- Teach auditory memory enhancement activities (e.g., imagery and drawing)
- Use of phonemic awareness, sequencing training, and language building exercises
- Teach mnemonic strategies.

These strategies can be implemented by the classroom teacher (especially environmental strategies), the speech-language pathologist, or a special education teacher and should be addressed, as appropriate in the child's IEP or 504 plan.

Table 13. Differential Diagnosis between Auditory Processing Disorders, Attention Deficit Disorders, and Speech-Language Impairments

Behavior	Auditory Processing Disorder	ADD/ ADHD	Speech-Language Impairment
Attention Conerns			
Distractibility	X	X	X
Difficulty listening	X	X	X
Difficulty understanding verbal information	X	X	
Poor attention to auditory detail	X	X	X
Poor attention to visual detail		X	
Forgetfulness of routines		X	
Short attention span		X	
Need for repetition of information	X	X	X
Appears to 'daydream'	X	X	
Appears to lack motivation	X	X	
Delayed response to verbal requests	X	X	X
Frequently says, "Huh?" or "What?"	X	X	X
Often misunderstands what is said	X	X	X
Poor short term memory	X	X	
Hyperactivity, Impulsivity and Emotional Concerns			
Fidgety - active hands and feet		X	
Often leaves seat		X	
Excessive movement		X	
Difficulty playing quietly		X	
Talks excessively		X	
Blurts out answers		X	
Restlessness	X	X	
Irritability		X	
Poor social interactions		X	X
Difficulty awaiting turn		X	
Interrupts or intrudes with others		X	X
Academic Achievement			
Difficulty following verbal instructions	X	X	X
Difficulty identifying, blending, and manipulating sounds	X		X
Poor receptive and expressive language skills	X		X
Deficits in reading, writing, or comprehension	X	X	X
Decreased performance in noisy environments	X	X	X
Difficulty completing work		X	
Worry about academic performance	X		X
Frequently looses or misplaces items		X	
Poor organizational skills		X	

Adapted from Chesterfield County Public Schools, 2000.

STUDENTS WITH DYSPHAGIA

Dysphagia is a disorder in swallowing that is becoming an increasingly portion of the practice of school-based speech-language pathologists. In the school setting it is important that teams be established to address the needs of children with swallowing disorders. Ideally, there will be a team in each school where there is a child with dysphagia. Districts may want to begin by creating a division-wide dysphagia team. The team should be comprised of the following individuals:

- speech-language pathologist,
- occupational therapist,
- school nurse,
- child's teacher,
- school nutrition director,
- cafeteria manager, and
- the child's parent.

NOTE: Most schools have a list of Cardio Pulmonary Resuscitation (CPR) trained staff within their schools.
It is important to ascertain where trained staff members are in relationship to the children with dysphagia.

This team should stay in close contact with the child's parent and physician, in addition to educating the staff on the symptoms and support available within the school. The team will be responsible for educating other school staff (principals, teachers, central office administrators) about dysphagia (it's definition, treatment, and educational relevance).

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. Ideally, the speech-language pathologist will spend some time shadowing or being coached by a speech-language pathologist with significant experience in this area (Power-deFur, 2000). In some circumstances, a consultation with a person outside the school division may be required.

Symptoms And Support At School

Speech-language pathologists, occupational therapists, nurses, teachers, parents, and paraprofessionals should be observant of the following symptoms of dysphagia:

- 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.

Any school staff member or parent with concerns about the child's eating and swallowing should make a referral to the dysphagia team. The team should complete observations and the dysphagia checklist and assign a case manager. The case manager should ensure the parents are informed of swallowing concerns and are interviewed regarding their observations and concerns. In addition, the case manager will observe student eating in natural setting, determine if further assessment is necessary, if there is a need for a medical referral for a modified barium swallow study, or if there is a need for positioning or diet changes.

An Individualized Health Care Plan shall be developed to gather the child's medical history, discuss the need for a possible modified barium swallow study, devise a feeding and swallowing plan for school, and develop an in-school emergency plan. If a modified diet is required for the student the school nutrition director will need a doctor's order to modify the food items offered or the texture of foods offered as part of a school meal. The following page displays a checklist that may be used by a school-based swallowing team.

The Individualized Health Care Plan may be attached to the child's IEP. In some cases, the child will need direct intervention to develop his/her feeding skills. In such a situation, an IEP meeting will also be held to develop the goals and objectives of intervention. Sample IEP statements are shown below.

- Present Level of Performance (PLOP)
  Maria has low lip tone resulting in excessive drooling and spillage when eating and drinking. Maria needs to be visually cued to close her lips.

- Goals and Objectives
  Anna will improve her ability to eat independently, increasing the number of different foods, textures, and temperature she eats during lunch without assistance.

- Services
  The amount and frequency of direct intervention should be listed. The service provider may be any member of the team with the appropriate skills.

- Supplemental Services
  The dysphagia team member will train the paraprofessional, classroom teachers, and other staff, as appropriate, in safe feeding techniques.

If the parents refuse swallowing intervention plans (as is their right through the 1990 Patient Self-Determination Act), after informed discussions with the dysphagia team, then it is strongly recommended to request their refusal in writing. This request should acknowledge receipt of the dysphasia report, consequent treatment discussion, and desire for continued unaltered feedings at school.

Swallowing/Dysphagia Team Procedure Checklist[5]

Student:________________________________ Date ________________________

Speech-Language Pathologist: ____

Occupational Therapist: ____

Nurse:________________________Classroom Teacher__________________________

Date:

Parent informed of concern ________________

Interdisciplinary consultation conducted ________________

Individual Health Care Plan developed ________________

Referral made to physician for clinical evaluation ________________

Referral made to physician for modified barium swallow study (MBSS) ________________

Studies conducted (MBSS attended by case manager) ________________

IEP meeting held (check person in attendance)

_____ Teacher _____ Administrator
_____ Speech-language pathologist _____ Nurse
_____ Occupational therapist Parents
_____ Other: __________________________________

Physician referral for special diet received ________________

School cafeteria manager and parent notified of diet order ________________

Diet change started at school ________________

Training is conducted on feeding techniques (check persons trained)

_____ Classroom Teacher _____ Nurse
_____ Paraprofessional _____ Speech-Language Pathologist
_____ Parent _____ Other: _____________________

Feeding plan initiated ________________

[5] Adapted from ASHA

PRIVATE SCHOOL STUDENTS WITH DISABILITIES

The reauthorization of IDEA in 1997 and 2004 significantly altered the rights of children placed in private schools by their parents when there is no disagreement about special education services. These are students whose parents prefer private education to public education, often placing their children in parochial or other private schools. In Virginia, children who are home schooled are treated as children in private schools.

(This section does not address children placed in private schools by the school division or children placed by their parents when they disagree with the school division about the provision of a free appropriate public education for their children. The speech-language pathologist should refer to local division policies for addressing such situations.)

Regulations Governing Special Education Programs for Children with Disabilities in Virginia require each local school division to locate, identify, and evaluate all private school and home-schooled children. Upon completion of the evaluation, the eligibility committee will determine whether the child is a child with a disability. If the determination is made that the student has a disability and requires special education, an IEP must be developed.

The proposed IEP presumes that the student will enroll in a local public school in order to receive services. If parents elect to continue providing educational services through a private or home school, they must refuse to consent to the proposed IEP and work with the school staff to develop a services plan (*Virginia Special Education Regulations*, 8 VAC 20-80-66.D).

The rights of these children to receive services are reduced, however. Each school division must develop a plan for how it will serve these children according to a federal funding formula. This plan will address the type of service, location of the service, and transportation (if applicable) the school division will provide. Regardless of the type of service needs that are identified by the evaluation, the child is only entitled to receive those services identified on the school division's plan.

The services plan does not require the same amount or type of services provided to public school students (*Virginia Special Education Regulations*, 8 VAC 20-80-66.D.5). It may exclude those sections that are not relevant based on the divisions' plan for serving private school children. For example, if the division plan does not include the provision of transition services, this section will not be included.

STUDENTS WITH DEAFNESS OR HEARING IMPAIRMENT

Speech-language pathologists will be part of a team of professionals working with students who are deaf or hard of hearing. The speech-language pathologist may work on auditory-oral skills and language skills for students using sign language, cued speech/language, or children who are oral. Ideally, the speech-language pathologist will be fluent in sign language when working with a student who uses manual communication. Whenever that is not the case, the speech-language pathologist will need to use an interpreter to ensure the accuracy of communication.

Due to the advancements in technology surrounding cochlear implants, more children are entering school with cochlear implants and requiring different services from their peers who use sign language. 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. There is no state or federal requirement that children with cochlear implants receive services from a certified auditory-verbal therapist. School-based speech-language pathologists should work collaboratively with any private clinician, including auditory-verbal therapists, to assure use of consistent strategies and prompts. School-based speech-language pathologists have greater opportunities than private providers to integrate the skills into the classroom and other school settings.

The speech-language pathologist frequently will 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.

STUDENTS ELIGIBLE UNDER SECTION 504

Section 504 is a federal civil rights statute that prohibits discrimination based solely upon a disability. Obligations for school divisions begin when federal funds are received. Section 504 provides an equal opportunity for a student with a disability to have access to educational programs offered to other students. The Section is part of the Rehabilitation Act of 1973; it is not part of the Individuals with Disabilities Education Act (IDEA). Although this is a general education mandate, it is often confused with special education because both mandates pertain to persons with disabilities. However, there are distinct differences between the two laws as delineated in Tables 15 and 16.

This statute ensures that a qualified student with disability receives reasonable accommodations that are necessary for the student to obtain access to the general education program. Each school division determines its own set of procedures for maintaining compliance under Section 504. Some divisions have very extensive guidelines while others' guidelines are minimal. Speech-language pathologists need to follow their division's procedures for conducting 504 assessments and developing 504 plans. In each school division there must be one person appointed and recognized as the division's contact person for any Section 504 concern.

Generally, the school division will specify that a team of knowledgeable individuals consider a referral of any student for a possible 504 Plan. Upon reviewing available data in addition to any newly requested assessment information, this appointed group of individuals will determine if the student does indeed meet the 504 qualification criteria. When the 504 committee has obtained all needed information, it will determine whether a student meets the requirements for a qualified individual under Section 504 by discussing the following:

- the student's mental or physical disability,
- how the disability impacts the student in the educational program, and
- how the disability limits any of the student's major life functions.

This includes any student for whom the 504 committee determines direct or indirect speech-language services are warranted for the student to have equal access to the appropriate general education curriculum.

Table 14. Disability Identification under Section 504

A person may be considered disabled under the definition of Section 504 if the individual:

1. Has a mental or physical impairment, which substantially limits one or more of the person's major life activities.
   Major life activities include functions such as:
   - *walking*
   - *hearing*
   - *seeing*
   - *breathing*
   - *speaking*
   - *working*
   - *learning*
   - *caring for one's self*

   When a condition does not substantially limit a major life activity, the individual does not qualify for services under Section 504.

2. Has a record of such an impairment; or is regarded as having such impairment.

Source: Rehabilitation Act of 1973.

Table 15. A Comparison of IDEA and Section 504

	IDEA	SECTION 504
Legal basis and purpose	Education Law - The Individuals with Disabilities Education Act: A federal funding law that provides financial aid to states as they provide assurance of a free appropriate public education for students with disabilities.	Civil Rights Law - The Rehabilitation Act of 1973: A federal law that prohibits discrimination against people with disabilities in any program or activity receiving federal funds
Responsibility	Special education	General education
Individual program/plan	Individualized Education Program An Individualized Education Program designed to provide educational benefit (NOT maximum benefit). Reviewed at least annually	504 Plan A written plan that provides access to an education comparable to that provided students without disabilities Reviewed periodically (per local policy)
Definition	A student who meets the eligibility criteria of one or more of the 13 categories of disability, with an adverse impact on the child's educational performance, and therefore requires special education (autism, developmental delay, emotional disturbance, specific learning disability, multiple disabilities, mental retardation, other health impairment, speech-language impairment, orthopedic impairment, traumatic brain injury, visual impairment, hearing impairment/deaf, deaf-blind).	Any student who has a physical or mental impairment that substantially limits one or more major life activities, has a record of such an impairment, or is regarded as having such an impairment. Major life activities include walking, seeing, hearing, speaking, breathing, learning, working, caring for oneself, and performing manual tasks.
Eligibility	The eligibility committee determines whether the student is eligible by applying the two-prong definition of a "child with a disability." A child evaluated in accordance with IDEA and found to have one or more of the 13 categorical disabilities causing a need for special education.	The 504 Committee reviews the individual profile to determine whether the student has a physical or mental impairment that substantially limits a major life activity. The committee considers the nature and severity of the impairment, its expected duration, and the long-term impact on the student's opportunity to access and benefit from the school's programs and activities.
Funding	Federal, state, local	Local

Assistive Technology

The increase in the availability of technology in general education, in conjunction with IDEA's delineation of the school's responsibility to provide assistive technology in the educational setting, had a significant impact for children with disabilities. It has increased the availability of appropriate assistive technology (AT) services and devices for these students to ensure their participation in both academic and social communities. The use of assistive technology can enable a student to:

- increase his/her access to and participation in the general education curriculum,
- increase productivity,
- expand his/her educational/vocational options,
- improve communication opportunities and effectiveness,
- reduce the amount of support services needed, and
- increase his/her levels of independence.

Every IEP team must consider whether the child requires assistive technology devices and services and that such devices and services willbe provided as needed. (*Virginia Special Education Regulations* 8 VAC 20-80-62 E 2 f, 60 E.1.). The *Virginia Special Education Regulations* define assistive technology device 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." (*Virginia Special Education Regulations*, 8 VAC 20-80-10).

This definition is general and allows IEP teams the flexibility that 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 division. See Appendix I for a comprehensive list of assistive technology strategies, modifications, accommodations of tasks, and assistive technology solutions for specific academic and communication areas. Up-to-date information on assistive technology can be found at the Virginia Assistive Technology System Web site (www.vats.org) or from the Virginia Department of Education's Training and Technical Assistance Centers (found at www.ttaconline.org).

The *Virginia Special Education Regulations* also define assistive technology services as:

> "any service that directly assists an individual with a disability in the selection, acquisition, or use of an assistive technology device. These services can include:

1. Evaluating: the evaluation of needs, including a functional evaluation, in the child's school environment;
2. Providing devices: purchasing, leasing, or otherwise providing for the acquisition of assistive technology devices;
3. Selecting, repairing: selecting, designing, fitting, customizing, adapting, applying, maintaining, repairing, or replacing assistive technology devices;

4. Coordinating: coordinating with other therapies, interventions, or services with assistive technology devices, such as those associated with existing education and rehabilitation plans and program;
5. Training and technical assistance for the child: training or technical assistance for an individual with disabilities, or, where appropriate, the child's family;
6. Training and technical assistance for professionals: training or technical assistance for professionals, employers, or other's who provide services to, employ, or are otherwise substantially involved in the major life functions of children with disabilities. (*Virginia Special Education Regulations*, 8 VAC 20-80-10)

Assistive Technology Teams

The scope of knowledge and amount of service that is required for the successful consideration, assessment, and implementation of AT services is so broad and intensive that it requires a collaborative team approach. Potential members of an AT team include the speech-language pathologist, occupational therapist, physical therapist, special education teacher, regular education teacher, and assistive technology specialist Those knowledgeable in assistive technology should participate in the evaluation, eligibility, and IEP teams whenever AT is being discussed.

Assistive Technology And The Special Education Process

The special education assessment process includes data gathering that enables consideration of the child's need for assistive technology. In general, four conclusions can be reached.

1. Data about the student's performance indicates AT is not needed.
2. AT is being used successfully (or has been used successfully and is no longer needed.) The IEP should reflect the specific AT that is used.
3. The IEP team may conclude that AT should be tried. The IEP team should describe the type and characteristics of AT and the conditions associated with the trial use.
4. The IEP team decides an AT evaluation is needed.

Evaluation

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?

IEP Development And Implementation

- 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.)
- Should the child's AT needs be met as 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?

Periodic Review

- 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?
- Has preparation for the child's AT needs in future years been considered?

Assistive technology can be a part of the annual goals and short-term objectives on 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 can be listed in the accommodations or services 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, but will tell them using a communication device.

Assistive technology is necessary as a supplementary aid if its presence (with other necessary aids) supports the student sufficiently to maintain the placement, and its absence would require the student to be placed in a more restrictive setting.

> For example, if a student with multiple physical disabilities can make progress on his or her IEP goals in the regular classroom

with the use of a computer and an augmentative communication device, and cannot make such progress in that setting without the devices, then those devices are necessary supplementary aids.

Assistive technology services can be a related service, just like physical therapy, or speech-language services, if the services are necessary for the student to benefit from his or her special education. For a student to be successful in using assistive technology, he or she must be trained in its use. Training to use a computer or an augmentative communication device, or other similar devices can occur as a related service that supports the student's education program.

For example, Joshua, who has Amyotrophic Lateral Sclerosis (Lou Gehrig's Disease), uses a laptop computer every day in his seventh-grade class. His upper body strength is decreasing, and he is having increasing difficulty using his hands for writing. Using a computer allows him to participate, without muscle fatigue, in the classroom. As a related service in his IEP, Joshua is receiving occupational therapy designed to prepare him for additional adaptations that may be necessary as he loses muscle strength and speech therapy to explore alternate modes of communication. He and his therapists are experimenting with computer access devices (e.g., switches, trackball) on screen keyboards and communication devices to determine what assistive technology will be necessary when he is no longer strong enough to type on a standard keyboard or communicate verbally. This special training for assistive technology is written into Joshua'a IEP as a related service because such training is necessary for him to continue to benefit from his education.

The *Virginia Special Education Regulations* require training and technical assistance to be provided for a child with a disability and, as needed, for those members of the school and home communities. This may be especially valuable for persons working with a child who uses assistive technology. Training for the student may be written into the IEP as a service provided on behalf of the child. In general, this training will be provided by an AT specialist from within the division or an outside source (e.g., the Training and Technical Assistance Centers) through in-service, modeling or coaching in effective use of AT devices and use of equipment in an AT "lab."

The AT team members will also need training to keep their knowledge and skills current. This may be provided through participation in regional, state, or national training opportunities; distance education, including Web-based training; or self-study.

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
    - Are any changes needed in the student's AT devices as a result of the transition services?

- Who will ensure effective use of AT?
- Student advocacy
  - 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
  - What AT devices and services will be needed?
  - Who will be responsible for purchasing and maintaining of the devices?
  - 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.

MEDICAID/FAMIS REIMBURSEMENT

In 1988 the Supreme Court upheld a Massachusetts ruling, which clearly established that health services provided as part of a child's IEP cannot be denied Medicaid reimbursement merely because they are in an IEP. Also, in 1988, the Medicare Catastrophic Coverage Act was signed into law. The act amended Title XIX to prohibit the restriction of Medicaid funds from reimbursement for services provided to a child with a disability because services were outlined in the IEP. The Conference Committee Report specified that while the state education agencies are financially responsible for educational services, in the case of a Medicaid-eligible child with a disability, state Medicaid agencies remain responsible for the "related services" identified in the child's IEP if they are covered under the state's Medicaid plan.

Virginia introduced the Family Access to Medical Insurance Security Plan (FAMIS) in 2001. This program provides comprehensive health insurance for children whose families earn too much to qualify for Medicaid, but do not earn enough to pay for private health insurance. FAMIS is designed to increase access to preventive health care and to promote regular immunizations and well-child care. The program also encourages enrollment by providing a simple application process and straightforward eligibility requirements. FAMIS enables families to participate financially in the cost of their children's health care.

There are two facets to the Medicaid program in schools. Special education billing, billing Medicaid for services specified on the IEP that can be considered medical as well as educational (e.g., speech-language services, occupational therapy, nursing) has been in place in Virginia since 1991. Administrative claiming, claiming expenses that support the Medicaid program, was initiated in 2003.

Special Education Billing

In Virginia, the Department of Medical Assistance Services (DMAS), Virginia's Medicaid agency, establishes Medicaid policies. The special education billing program for speech-language services, occupational therapy, and physical therapy are based on the rehabilitation model. School divisions must have an active provider agreement with DMAS for both special education billing and administrative claiming. This is a central office function. In addition, the division must submit each service provider's qualification with the Department of Education. Since Medicaid is a health care program, the qualification requirements vary from those required by the Board of Education. In order to bill for Medicaid, the providers' qualifications must meet the DMAS qualification requirements (See Appendix J for the qualification requirements).

Confidentiality requirements for both Medicaid and education (the Family Education Rights and Privacy Act [FERPA]) limit the amount of information about a child that can be shared without parental consent. School personnel may not release information about the special education services a child is receiving to Medicaid for billing purposes without parental consent. The Virginia Department of Education has created a form to secure parental consent.[6]

---

[6] All DMAS forms can be accessed at www.doe.virginia.gov/VDOE/Instruction/Sped/medicaidmain.html

It is most efficient if the team requests parental consent during the meeting to determine needed evaluation components for the child.

Initial evaluations will be reimbursed when a child is initially evaluated to determine eligibility for special education and related services or when the child has been found to be no longer eligible and has been referred for an evaluation to determine if he/she is again eligible. Re-evaluations will be reimbursed when there has been an interruption in services, or a change in child's condition. DMAS does not reimburse "program generated" evaluations (i.e., 3-year re-evaluations). These evaluations can be billed as a visit, with proper documentation in the Progress Notes form.

DMAS requires the following components of an evaluation:

- medical diagnosis,
- history,
- functional limitations and deficits,
- medical findings,
- clinical signs and symptoms,
- identify needs, and
- therapist's recommendations.

This information must be documented on an Order for Therapy form and signed by a DMAS qualified speech-language pathologist who does not require supervision and who is part of the IEP team.

Plan Of Care

DMAS requires completion of a Plan of Care (POC) for all billable services.[7] The IEP may be used as the Plan of Care as long as it is prepared, signed and dated annually and meets certain information.

- Includes the Medicaid number.
- Includes the medical diagnosis (ICD-9 code) identified on the POC that is specific to the condition/deficit being treated.
- Identifies the child's functional deficits with current limitations requiring rehabilitation therapies.
- Summarizes previous treatment for a child who has had
  - no previous therapy
  - previous school therapy
  - previous community therapy
  - summer therapy
  - a hospital visit or surgery;
- Includes long-term goals that are
  - specific and individualized (the child "drives" the treatment plan)
  - measurable, using a percentage or quantifiable measure (e.g., out of times)
  - specific regarding the degree of assistance provided (minimum/moderate/ maximum)
  - realistic
- Includes the time frames for goal achievement, including documentation that summer services aren't needed (if appropriate). Long term goals' dates typically correspond with IEP annual review date
- Specifies the discipline (speech-language pathology)
- Specifies whether services will be individual and/or group (Medicaid permits a maximum of 6 children in group therapy.)
- Identifies therapeutic interventions/treatment modalities
- Includes the implementation date
- Includes the discharge plan and estimated date of discharge (typically the 3-year reevaluation date).

[7] http://www.doe.virginia.gov/VDOE/Instruction/Sped/medicaidmain.html

- Includes the therapist’s signature, title and date. The therapist must be a DMAS qualified speech-language pathologist who is a member of the IEP team.

On occasion, it will be necessary to modify the POC when the following occur:

- a change in the long-term goals (i.e., changes, additions, and/or deletions),
- a change in the frequency or duration of the therapy,
- a change from individual to group therapy (or vice versa), or
- there is a significant change in the child’s condition.

In these situations, the POC Addendum or a revised IEP (including all DMAS requirements) is completed.

DMAS requires documentation about the child’s response to treatment, as follows:

- Identify all therapy visits as either individual or group,
- Include short-term goals/objectives that are measurable and have a date of completion (typically 1 or 2 months),
- Identifies therapeutic activity/procedure,
- Specifies the child’s expected response to therapy or progress (e.g., a percentage, X out of Y,),
- Includes the therapist’s initials for each session, and
- Includes the therapist’s signature (no signature stamps), title and full date.

Whenever a speech-language pathologist assistant (any speech-language pathologist not meeting DMAS requirements as a speech-language pathologist) provides treatment, there must be a supervisory 30-day on-site review. This must be documented in the monthly progress notes section.

DMAS requires a periodic review of the child’s progress and revising or deleting goals throughout the time frame of the POC, as needed. This review allows for determining if the child has reached a plateau, regressed, or progressed as anticipated.

It should be noted that DMAS will only reimburse services that result in significant and practical improvement in the child’s level of functioning within a reasonable period of time (Improvement of Function). DMAS will not reimburse for services that do not result in significant practical improvement, or the skills of a licensed therapist are not required in carrying out the treatment to maintain function (e.g., “maintenance therapy” or “monitoring”).

When a child has met his/her goals and objectives and is no longer eligible for Medicaid reimbursement, a Discharge Order must be in place. The components of the Discharge Order are:

- reason for discharge,
- discharge goal (describe the child’s anticipated function),
- discharge plan (functional outcome),
- discharge disposition (home/other),
- date of discharge, and
- signature of DMAS qualified speech-language pathologist who does not require supervision.

Discharge orders are not necessary at the end of the school year if rehabilitation services are ongoing (i.e., continued in the fall). In addition, orders are not necessary if the child transfers to another school division. In this situation, the progress notes should document the transfer.

Whenever the eligibility committee finds a child is no longer eligible for special education and related services or the IEP determines that a specific related services can be terminated, a Discharge Summary must be prepared. This summary includes:

- the child's functional outcome,
- the child's goals achieved, and
- the discharge disposition.

The speech-language pathologist must sign the document and provide his/her title and the complete date. The Discharge Summary must be completed within a reasonable time frame (30 days).

Utilization Review (UR): Medicaid requires the completion of a utilization review for all children served to ensure that services are medically necessary and the rehabilitation criteria are met. In addition Medicaid wants to ensure that high quality care and services are provided as ordered. DMAS will review information for the appropriateness of the care provided, the medical necessity of continuing in the program, and the adequacy of services available. DMAS's utilization review is based on its verification of the documentation requirements.

When completing utilization review, the provider must be responsible for:

- identifying the child,
- justifying the diagnosis/reason for treatment,
- identifying the treatment provided, and
- documenting the child's response to the treatment program.

Medicaid-reimbursed rehabilitation services will be terminated when further progress toward the established goals is unlikely and/or the family or caretaker can provide the services (i.e., home program) and the skills of a qualified therapist are no longer required.

Coordination of Services: Medicaid requires that when two or more rehabilitation providers are providing services to a child that those services are coordinated (i.e., school and after school therapies). Coordination of services allows two treatment therapists to assure that maximum benefit of services is achieved for the child based on the treatment goals per the POC. Coordination of services may prevent duplication (e.g., when a school speech-language pathologist and community-based speech-language pathologist have identical treatment plans and provide identical services.) Documentation of coordination should be recorded in the therapist's progress notes.

Administrative Claiming

Administrative expenses in support of the Medicaid program may be claimed. Activities include outreach, translation, coordination of services, and referrals. Participation requires completion of a time study for five consecutive days every quarter, three times per year, by all relevant employees. This information, plus financial data provided by the division's central office, generates the administrative claim on the school's behalf.

Use Of Funds

Federal requirements state that federal funds must be used to supplement, not supplant, other appropriations (20 U.S.C. Sec. 613 (a)(9)). This means that Medicaid revenue may not be used to replace IDEA funds. There is no other federal or state requirement regarding the use of Medicaid revenue.

School divisions are encouraged to use the funds for special education or health related services. Some funding may be used to provide support to those employees who are completing the additional requirements to generate the funds. Potential uses include: supplement salaries, pay workshop and conference fees; purchase augmentative/alternative communication devices or other assistive technology; pay fees to secure the license needed to bill Medicaid; or purchase computer software, supplies, materials, equipment. Some localities have used Medicaid revenue to fund additional staff, lowering caseloads for all speech-language pathologists in the division.

SPEECH-LANGUAGE PATHOLOGY PERSONNEL

Qualification Requirements

All children who have IEPs that specify the provision of speech-language services must receive those services by a qualified speech-language pathologist (*Virginia Special Education Regulations*, 8 VAC 20-80-45). Speech-language pathologists in the schools must hold a current license from the Board of Education with an endorsement in speech-language impairment (Postgraduate Professional license, speech-language disorders pre k-12, code 7091). [8] This endorsement is based on the masters degree in speech-language pathology, with clinical experience (tracking the requirements for the Certificate of Clinical Competence in Speech-Language Pathology offered by the American Speech-Language-Hearing Association and consistent with those of the Board of Audiology and Speech-Language Pathology).

Persons who held a valid endorsement with a bachelor's degree in speech-language pathology when the licensure requirements first shifted to the master's degree were grandfathered after completing 15 hours of graduate study in articulation, language, voice, fluency and audiology or aural rehabilitation (speech-language disorders NK-12, code 7900).[9]

Some school divisions contract with private agencies to provide speech-language pathology services. The Code of Virginia requires that any person not employed by a local or state government who provides speech-language pathology services must hold a license from the Board of Audiology and Speech-Language Pathology (BASLP). Therefore, any persons providing services through a contract with an outside agency must be licensed by the BASLP.

IDEA requires that personnel providing services to children with disabilities be qualified and hold the necessary credentials required by the state education agency. In recognition of the shortage of qualified personnel, IDEA does permit use of conditional/provisional licenses as emergency waivers.

IDEA specifies that qualified professionals conduct assessments and that the decisions regarding a child's eligibility for special education include personnel representing the discipline providing the assessments. In addition, *Virginia Special Education Regulations* specify that the special education provider on the IEP team will be a speech-language pathologist for children whose only disability is speech-language impairment.

---

[8] The specific requirements are reflected in the Board of Education regulations, *Licensure Regulations for School Personnel*, found on the VDOE Web site at http://www.pen.k12.va.us/VDOE/newvdoe/teached.html.

[9] See Appendix J for a delineation of the qualification requirements of the Board of Education, the Board of Audiology and Speech-Language Pathology, and the Department of Medical Assistance Services [Medicaid]).

SPEECH LANGUAGE PATHOLOGY ASSISTANTS[10]

Some divisions have considered using assistants to supplement the services of the speech-language pathologist. The special education staffing requirements (*Virginia Special Education Regulations*, 8 VAC 20-80-45) do not include a paraprofessional for speech-language caseloads, as they do for classroom special education teachers. This does not prohibit the use of paraprofessionals; however, they must be used with caution.

IDEA specifies that a paraprofessional is an appropriately trained employee who assists and is supervised by qualified professional staff. In Virginia, there is no credentialing of assistants, resulting in local determination of the nature, degree, and quantity of training. The Virginia Administrative Code addresses the use of Speech-Language Pathology assistants (SLPA) and supervisory responsibilities of the licensed SLP (18 VAC 30-20-240).

The Virginia Administrative Code (18 VAC 30-20-240) states that:

1. A licensed audiologist and speech-language pathologist shall provide documented supervision to unlicensed assistants, shall be held fully responsible for their performance and activities, and shall ensure that they perform only those activities which do not constitute the practice of audiology or speech-language pathology and which are commensurate with their level of training.
2. The identity of the unlicensed assistant shall be disclosed to the client prior to treatment and shall be made a part of the client's file.

As a result, the paraprofessional is not allowed to practice independently and must be supervised by qualified staff. Given these restrictions, the following list reflects those tasks a speech-language assistant may assume:

- Assisting the speech-language pathologist with screening;
- Assisting the speech-language pathologist with copying, distributing, and filing special education forms, and contacting parents to set up meetings;
- Preparing materials;
- Assisting with transporting children to and from services (within the school); and
- Monitoring the child's performance, following the directions provided by the speech-language pathologist and only after the speech-language pathologist has verified that the assistant can accurately gather the data.

Speech-language pathology assistants may not be used to provide services to the caseload in the absence of qualified speech-language pathologists. A speech-language pathologist with an assistant may serve more students than the division average, but not higher than the caseload maximum of 68 (*Virginia Special Education Regulations*, Appendix A). School divisions may consider the addition of a speech-language assistant to facilitate the completion of nonclinical duties.

---

[10] For further information on using special education paraprofessionals, see the Virginia Department of Education document, *The Virginia Paraprofessional Guide to Supervision and Collaboration: A Partnership.*

Substitutes

The U.S. Department of Education's Office of Special Education Programs (OSEP) has addressed the impact of an interruption of services on the student's right to a free and appropriate public education (FAPE). In addressing an inquiry in this regard, OSEP stated that in order to meet its FAPE responsibilities, a school division is generally responsible for making alternative arrangements to provide services set out in a student's IEP when there is an interruption of services. This may be due to the absence of the service provider or other school-related activities. However, the school division is not obligated to do so when the student is unavailable for other reasons, as absences from school.

Given these requirements, school divisions face significant challenges when they have vacant positions or temporary absences. Every effort should be made to secure a qualified speech-language pathologist, maintaining an open job announcement for a qualified speech-language pathologist and on-going recruitment efforts. The division may wish to contract with a private agency to provide services, assuring that their personnel hold a license from the Virginia Board of Audiology and Speech-Language Pathology. In addition, divisions should recruit a pool of qualified speech-language pathology substitutes to cover caseloads during short- or long-term absences. (Retired speech-language pathologists may be a valuable pool for substitutes or part-time personnel.)

For short-term absences, speech-language pathologists should take advantage of the flexibility written into the IEP for scheduling services to enable them to reschedule the child at another time. However, when rescheduling, the division must ensure that the child does not receive any reduction in the services specified on the IEP.

For long-term interruption of services, the division must inform the parents of children who are not served or underserved of the interruption of services. The interruption may be due to a vacancy or medical leave. The parents must be assured that once the services resume, the IEP team will determine if the student is entitled to compensatory services. The compensatory services may be provided during the summer, during school breaks, or by providing additional time during the school year. Division speech-language pathologists may provide these services. In order to be sure this does not result in an excess caseload, the services should be provided after school. Speech-language pathologists should be appropriately compensated for working additional hours.

Non qualified substitutes shall not conduct assessments, write evaluation reports, prepare IEPs, represent speech-language pathology at meetings, or teach new skills. These tasks are reserved for qualified speech-language pathologists.

RECRUITING/RETAINING QUALIFIED SPEECH-LANGUAGE PATHOLOGISTS

Recruiting and retaining qualified speech-language pathologists for rural and urban school divisions challenges school divisions statewide. A variety of creative approaches to enhance work conditions or employment opportunities can be used to recruit and retain qualified staff.

Working conditions:
- reduce caseloads,
- pay for membership dues in professional organizations (American Speech-Language-Hearing Association, the Speech-Language-Hearing Association of Virginia),
- pay for license fees (board of audiology and speech-language pathology),
- pay for continuing education,
- provide a laptop computer,
- provide individual copies of popular assessment materials, and
- provide a clerical assistant.

Employment opportunities:
- create part-time positions, with benefits,
- enable job-sharing,
- recruit retired speech-language pathologists for long-term substitutes or part-time personnel,
- provide salary supplement for maintaining national (ASHA) certification such as a percentage differential or lump-sum addition to annual salary,
- provide 11 month salary for certain staff to cover summer evaluations and services and administrative responsibilities,
- adjust pay scale upward, and
- provide salary supplement for billing Medicaid.

A number of school divisions have determined that the American Speech-Language-Hearing Association's certificate of clinical competence is equally rigorous and comparable to the National Board for Professional Teaching Standards (NBPTS) requirements. The NBPTS does not offer certification to speech-language pathologists, so the ASHA standard was used as a proxy in those divisions (ASHA Leader, June 10, 2003).

Shortages of school-based speech-language pathologists are an on-going concern for many school divisions.

Recruiting efforts should include:
- participating in local, regional, state and national job fairs (e.g., Speech-Language-Hearing Association of Virginia [SHAV], ASHA),
- posting job opportunities on the Internet (e.g., the Virginia Department of Education, teacher-teacher.com),
- mailing brochures to speech-language pathologists after securing a list from professional associations (e.g., SHAV, ASHA) or state agencies (e.g., the Board of Audiology and Speech-Language Pathology),
- contacting state and regional universities with master's programs in speech-language pathology,
- serving as a site for student practica or internships with state or regional universities,
- creating part-time positions for retirees or stay-at-home parents.

Mentoring

One of the most challenging experiences for a speech-language pathologist can be the first year of employment in a public school setting. Mentoring has proven to be a valuable technique to assist new personnel in their new work situations. Mentoring is a cooperative arrangement between peers in which an experienced speech-language pathologist provides a new clinician with ongoing support and assistance. The relationships should be collegial in nature and all experiences should be directed toward the development and refinement of the knowledge and skills necessary for effective learning. The goal of mentoring is to develop knowledge of the values, beliefs, and practices that lead to a more productive,

efficient, and effective professional. It contributes to successful retention, career satisfaction, better decision-making, and greater perceived confidence (Horgan and Simeon, 1991).

School divisions may have procedures in place for a mentoring program; however, there are numerous resources available. The *Guidelines for Mentor Teacher Programs for Beginning and Experienced Teachers* is available on the Virginia Department of Education Web site at http://www.doe.virginia.gov/VDOE/newvdoe/teached.html. These guidelines point out that "losing a well-educated and talented teacher in the first year of teaching is a tragic loss. Losing a talented teacher because of inadequate support during the early years is a tragic loss that can be avoided."

The guidelines identify certain mentoring objectives that are applicable to new speech-language pathologists:

- ♦ retain quality speech-language pathologists;
- ♦ improve the beginning speech-language pathologist's skills and performance;
- ♦ support the speech-language pathologist's morale, communications, and collegiality;
- ♦ build professional and positive attitudes;
- ♦ enable new speech-language pathologists to put theory into practice;
- ♦ facilitate a seamless transition into the first year of employment in the schools;
- ♦ prevent speech-language pathologist isolation; and
- ♦ build self-reflection skills.

The Council for Exceptional Children offers suggestions for the roles and responsibilities of beginning and mentor teachers in special education (2001). Both are to play an active role, with specific, responsibilities, that are applicable to beginning speech-language pathologists:

The beginning speech-language pathologist

- ♦ requests assistance proactively related to service delivery, school and community culture, working with other school personnel, and other personal or professional issues,
- ♦ attends all training sessions and sessions with the mentor speech-language pathologist,
- ♦ remains open and responsive to feedback,
- ♦ observes other experienced personnel, including the mentor speech-language pathologist,
- ♦ conducts self-assessments and use reflective skills to enhance clinical skills, and
- ♦ participates in the evaluation of the mentoring program.

The mentor speech-language pathologist

- ♦ provides support and guidance to the beginning speech-language pathologist in the areas of planning, assessment, working with parents and colleagues, obtaining materials and equipment, cultural sensitivity, school procedures, district policies, and local special education procedures,
- ♦ acclimates the beginning speech-language pathologist to the culture of the school and community,
- ♦ observes the beginning speech-language pathologist regularly,
- ♦ provides post-observation feedback on progress in clinical skills and professional behavior,
- ♦ attends all training sessions relevant to mentoring,
- ♦ maintains a professional and confidential relationship based on respect and trust, and
- ♦ participates in the evaluation of the mentoring program.

Supervision Of Speech-Language Pathologists

Speech-language pathologists may be supervised by a variety of persons within a school division: principal, special education director, speech-language pathology coordinator, or lead speech-language pathologist. Often the supervisor is not familiar with the field of speech-language pathology and may come from a variety of different backgrounds in general or special education. Most likely, the speech-language pathologist will receive supervision from a principal, special education director, or a program specialist. Administrators and/or supervisors should have expertise and competencies required of a supervisor, including knowledge of special education law, and should have experience in conducting performance appraisals.

The speech-language pathologist has the responsibility to provide his/her supervisor with sufficient information about the role and responsibilities of speech-language pathologists to enable the supervisor to provide effective supervision. The non-speech-language pathologist can provide effective evaluation of the speech-language pathologist's teamwork, cooperation, professionalism, and ability to complete required special education procedures in a timely fashion. The non-speech-language pathologist is not able to provide evaluative feedback regarding the speech-language pathologist's clinical skills. Speech-language pathologists may wish to work collaboratively to self-evaluate or peer-evaluate their clinical skills.

Speech-language pathologists may also find themselves in supervisory roles for fellow speech-language pathologists seeking to complete the Clinical Fellowship requirements for ASHA's certificate of clinical competence, for paraprofessionals, for university practicum students, or for school-approved volunteers. Speech-language pathologists in such supervisory roles should pursue continuing education to develop and enhance their skills as supervisors.

Space And Equipment

Adequate facilities for the many services provided by speech language pathologists are necessary to meet the IEP requirements of students and to meet IDEA and Americans with Disabilities Act of 1990 regulations. In addition, specialized equipment and materials are required to meet the goals and objectives of students' IEPs. This section contains recommendations to meet those needs for adequate facilities and materials and equipment.

Rooms For Provision Of Services

The following parameters are necessary to ensure appropriate service delivery for children receiving pull-out services.

- Location: The room should be located
  - away from noisy activities. (gym, band room, cafeteria, etc.)
  - in an area that is readily accessible. This makes mobile units less desirable.
  - accessible to non-ambulatory students.
- Size: The room should be of an adequate size to allow for small group activities. Generally, 180 square feet is recommended if the room also serves as an office for the speech-language pathologist.
- Climate control: The room should have adequate ventilation and climate control.

- Lighting: Adequate lighting is necessary to allow for testing and observing.
- Internet access: This allows for the professional and instructional use of the World Wide Web.
- Wiring: A minimum of two 110-volt double outlets are recommended.
- Availability: To provide privacy for assessment, conferences and therapy, the room should be reserved for the exclusive use of the speech-language pathologist at scheduled times.
- Acoustics: Acceptable acoustics optimize instruction.

Equipment

The following list of equipment should be present in the speech-language pathologist's room:

- teacher's desk and chair;
- student furniture of correct sizes and adequate number;
- file cabinets or drawers with locks;
- adequate and secure storage for materials and equipment;
- marker or chalk board, bulletin board, mirror;
- computer, microphone, speakers, printer, and workstation for computer;
- clock; and
- penlight and otoscope;

In addition to this equipment, speech-language pathologists should have access to the following:

- tape/digital voice recorder, camcorder, TV, VCR, DVD player, digital camera (still and video);
- assistive communication devices (see assistive technology section);
- audiometer that is calibrated annually;
- phone for confidential conversations, ideally in the speech room;
- laminating machine, paper cutter;
- copy machine; and
- paper shredder.

The school division should provide adequate maintenance and prompt repair of any equipment that is needed to meet the IEP goals of students. As technology advances, equipment should be updated.

Materials

The materials a speech-language pathologist needs include, but are not limited to, the following.

- computer software, including word processing, spreadsheet, data base and creation software; clinical evaluation and instructional software; assistive technology software
- current standardized tests and protocols;
- materials for nonstandard, informal assessment;
- clinical and instructional materials and supplies;
- access to instructional materials and textbooks used in the classrooms;
- printer supplies (paper and cartridges);
- file folders/pocket folders;
- disposable gloves (latex-free);
- cassette tapes, VCR tapes, writeable compact discs; and
- office supplies – stapler/staples, scissors, pencil sharpener, paper clips, pens/pencils, correction fluid, post-its, hole punch, chalk or dry erase markers.

Speech-language pathologists should work with building principals and special education administrators to identify appropriate locations and to prepare a budget to secure the necessary equipment and materials. Speech-language pathologists must remain up-to-date in their knowledge of appropriate materials and technology.

REFERENCES AND RESOURCES

Annett, M. (June 10, 2003). Arizona, Virginia School Districts Recognize Values of CCCs. ASHA Leader.

American Speech-Language-Hearing Association. (2004) K-6 Schools. National Outcomes Measurement System. Rockville, MD: Author.

American Speech-Language-Hearing Association. (2002). Technical Report: Appropriate school facilities for students with speech-language-hearing disorders: Technical report. ASHA Supplement 23.

ASHA (2002). A workload analysis approach for establishing speech-language caseload standards in schools: Guidelines. Rockville, MD: Author.

American Speech-Language-Hearing Association. (2000). IDEA and Your Caseload: A Template for Eligibility and Dismissal Criteria for Students Ages 3 – 21. Rockville, MD: Author.

American Speech-Language-Hearing Association. (1999). Guidelines for the Roles and Responsibilities of the School-Based Speech-Language Pathologist. Rockville, MD: Author.

Board of Audiology and Speech-Language Pathology. (2004). Regulations Governing the Practice of Audiology and Speech-Language Pathology. Richmond, VA: Author.

Brice, A. (2002). Guidelines for English-speaking SLPs in Treating Bilingual Patients. Available at **http://asha.ucf.edu/ASHA2002.html**.

Chesterfield County Public Schools. (2001). Auditory Processing: Best Practice Guide

Connecticut State Department of Education. (1999). Guidelines for Speech and Language Programs. Vol. II: Determining Eligibility for Special Education Speech and Language Services. Hartford, CT: Author.

Council for Exceptional Children. (2003). Mentoring Induction Principles and Guidelines. Reston, VA: Author.

Derr, A. (July 2003). Growing Diversity in Our Schools-Roles and Responsibilities of Speech-Language Pathologists. Special Interest Division 11 Perspectives on Language Learning and Education. Rockville, MD: American Speech-Language-Hearing Association.

Fairfax County Public Schools. (2003). Culturally and Linguistically Diverse Exceptional Students (CLiDES) Handbook. Fairfax, VA: Author.

Homer, E.M. (October 10, 2002). Dysphagia Teams in School Settings. ASHA Telephone Seminar.

Horgan, D & Simeon, R.J. (1991). The Downside of Marketing, Performance, and Instruction, 30(1) 34-36

Kentucky Department of Education. (2002). Kentucky Eligibility Guidelines for Students with Speech or Language Impairment. Frankfort, KY: Author

Laing, S. & Kamhi, A. (2003). Alternative assessment of language and literacy in culturally and linguistically diverse populations. Language, Speech and Hearing Services in Schools. 34.

Meline, T. & Paradiso, T. (2003). Evidence-based practice in schools: Evaluating research and reducing barriers. Language, Speech, and Hearing Services in Schools. 34. 273-283.

Miccio, A.W. (2002). Clinical problem solving: Assessment of phonological disorders. American Journal of Speech-Language Pathology. 8, 347-363.

Moore-Brown, B. & Montgomery, J. (2001). Making a Difference for America's Children. Speech-Language Pathologists in the Public Schools. Eau Clair, WI: Thinking Publications.

Nelson, N. (1996). Opening remarks: Are we asking the wrong question? Division 1 Newsletter. (April 1996). American Speech-Language-Hearing Association.

Plake, L., Impara, J. & Spies, R. (Eds.) (2003). The Fifteenth Mental Measurements Yearbook. Buros Center for Testing.

Power-deFur, L. (March 20, 2001). Reducing Caseloads: A Potpourri of Ideas. ASHA Leader.

Power-deFur, L. (April 2001). Making changes: Advocacy suggestions for reducing caseloads. Special Interest Division 16 School-Based Issues. Rockville, MD: American Speech-Language-Hearing Association.

Power-deFur, L. (2000). Serving Students with Dysphagia in the Schools? Educational Preparation is Essential! Language, Speech and Hearing Services in Schools. 31, 76 – 78.

QIAT Consortium. (August 2003). Quality Indicators for Assistive Technology Services in Schools. http://www.qiat.org.

Rehabilitation Act of 1973. 34 CFR § 104.

Roninson, O. (April, 2003). But they don't speak English!: Bilingual students and speech-language services in the public school. Special Interest Division 16. School-Based Issues. Rockville, MD: American Speech-Language-Hearing Association.

Runyan, C. (January, 2004). Personal communication.

Sattler, J.M. (1988). Assessment of Children. (3rd edition). San Diego, CA: Jerome M. Sattler Publisher.

Secord, W. (March 22, 2002). Classroom Performance Assessment: Where Meaningful Access Begins! Presentation to Speech Language Hearing Association of Virginia.

Shriberg, L. & Kwiatkowski, J. (1982). Phonological disorders III: A procedure for assessing severity of involvement. Journal of Speech and Hearing Disorders. 47. 256-270.

Smit, A., Hand, L., Freilinger, J., Bernthal, J., & Bird, A. (1990). The Iowa Articulation Norms Project and its Nebraska Replication. Journal of Speech and Hearing Disorders. 55. 779 – 798.

Virginia Board of Education. (2002). Regulations governing special education programs for children with disabilities in Virginia. Richmond, VA: Author.

Virginia Board of Education. (2000). Guidelines for mentor teacher programs for beginning and experienced teachers. Richmond, VA: Author.

Virginia Board of Education. (1998). Licensure regulations for school personnel. Richmond, VA: Author.

Virginia Department of Education. (2002). Guidelines for participation of students with disabilities in the assessment component of the state's accountability system. Richmond, VA: Author.

Virginia Department of Health. (1999). Virginia school health guidelines. Richmond, VA: Author.

Virginia Institute for Developmental Disabilities. (2001). Creating collaborative IEPs: A handbook. Richmond, VA: Virginia Commonwealth University.

Weiss, C. (1980). Weiss Comprehensive Articulation Test. Austin: Pro-Ed.

APPENDICES

A. GLOSSARY

B. ACRONYMS

C. WEB RESOURCES

D. SPEECH-LANGUAGE SCREENING FORM

E. SPEECH-LANGUAGE SEVERITY RATING SCALES

F. TEACHER CHECKLISTS, PARENT AND STUDENT INPUT FORMS

G. SPEECH-LANGUAGE ASSESSMENTS USED MOST OFTEN BY SPEECH-LANGUAGE PATHOLOGISTS IN VIRGINIA (OCTOBER 2003)

H. APPROVED SPEECH-LANGUAGE ASSESSMENT MEASURES FROM FAIRFAX COUNTY PUBLIC SCHOOLS

I. ASSISTIVE TECHNOLOGY STRATEGIES, MODIFICATIONS, ACCOMMODATIONS, AND SOLUTIONS FOR SPECIFIC ACADEMIC AND COMMUNICATION AREAS

J. QUALIFICATION REQUIREMENTS OF THE BOARD OF AUDIOLOGY AND SPEECH-LANGUAGE PATHOLOGY, DEPARTMENT OF EDUCATION, AND THE DEPARTMENT OF MEDICAL ASSISTANCE SERVICES

APPENDIX A
GLOSSARY

Assessment is the data to be collected. Assessment includes tests and other measures such as:

- Authentic Assessment - a collection of data including teachers' anecdotal records, student work portfolios, and previous educational records (also called performance assessment).
- Educational Assessment - a measure of current academic achievement, classroom performance, and observed strengths and weaknesses.
- Psychological Assessment- a measure of cognitive ability, learning style, perceptual skills, and emotional functioning,
- Sociocultural Assessment - a developmental , family and educational background, adaptive behavior, and medical status.
- Speech and Language Assessment - a measure of articulation, voice, fluency, oral language, and oral motor functioning.

Other types of assessments may include: hearing screening, medical exam, occupational or physical therapy assessment, and audiological exam.

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 (see CALP).

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.

Culturally and Linguistically Diverse (CLD) describes a home cultural and language different than that of the mainstream culture.

Child With a Disability means a child evaluated in accordance with the regulations governing special education and determined to have autism, deaf-blindness, a developmental delay, emotional disturbance, hearing impairment, mental retardation, multiple disabilities, orthopedic impairment, other health impairment, severe disability, specific learning disability, speech or language impairment, traumatic brain injury, or visual impairment, who, as a result of the disability, needs special education and related services. (*Virginia Special Education Regulations).*

Code Switching is a stage in the second language acquisition process in which learners use words from both the first and second language while writing or speaking. This term is also known as language mixing.

English as a Second Language (ESL) [also may be termed English for Speakers of Other Languages (ESOL)**]** is the program designed to meet the needs of identified language minority students to develop their English language proficiency skills in order to function successfully in the classroom. Program models include both pull-out and in-classroom support.

Evaluation refers to the process of collecting, reviewing, and interpreting assessment data.

General Education Curriculum means the same curriculum used with children without disabilities adopted by a local educational agency. The term refers to the content of the curriculum and not the setting in which it is taught. (*Virginia Special Education Regulations*).

Home Language (L1) is the language spoken in the home by family members or caregivers; it is sometimes referred to as native, heritage, or home language.

Intelligibility refers to the level at which a student's speech is understood by listeners.

Interpreter is a person who converts verbal information presented in one language into another language.

L1 is the abbreviation for first language and refers to the language first learned by the student in the home.

L2 is the abbreviation for second language and refers to the second or additional language learned by the student.

Limited English Proficient (LEP) as defined by Public Law 103-382, Improving America's Schools Act, Title VII, Part E, Section 7501 (8), refers to a student who can be described in one of the three items listed after A. and can be described by the item listed after B:

A. i) was not born in the United States or whose language is a language other than English and comes from an environment where a language other than English is dominant.
ii) is a Native American or Alaskan Native or a native resident of the outlying areas and comes from an environment where a language other than English has had a significant impact on such individual's level of English language proficiency.
iii) is migratory and whose native language is other than English and comes from an environment where a language other than English is dominant.

B. has sufficient difficulty speaking, reading, writing, or understanding the English language that he or she may be denied the opportunity to learn successfully in classrooms in which the language of instruction is English or denied the opportunity to participate fully in society.

Native language is the language spoken in the home by family members or caregivers; it is sometimes referred to as home or heritage language. (See Home Language)

Related services means such developmental, corrective and other supportive services as are required to assist a child with a disability to benefit from special education and includes speech-language pathology and audiology services (*Virginia Special Education Regulations*).

Special education means specially designed instruction, at no cost to the parent or parents, to meet the unique needs of a child with a disability, including instruction conducted in a classroom, in the home, in hospitals, in institutions, and in other settings and instruction in physical education. The term includes each of the following if it meets the requirements of the definition of special education:

1. Speech-language pathology services;
2. Vocational education; and
3. Travel training (*Virginia Special Education Regulations).*

Speech or language impairment means a communication disorder, such as stuttering, impaired articulation, a language impairment, or a voice impairment, that adversely affects a child's educational performance (*Virginia Special Education Regulations).*

Speech-language pathology services means the following:

1. Identification of children with speech or language impairments;
2. Diagnosis and appraisal of specific speech or language impairments;
3. Referral for medical or other professional attention necessary for the habilitation of speech or language impairments;
4. Provision of speech and language services for the habilitation or prevention of communicative impairments; and
5. Counseling and guidance of parents, children, and teachers regarding speech and language impairments (*Virginia Special Education Regulations*).

APPENDIX B
ACRONYMS

ASHA	American Speech-Language-Hearing Association
AT	Assistive Technology
BASLP	Board of Audiology and Speech-Language Pathology
BICS	Basic Interpersonal Communication Skills
CALP	Cognitive Academic Language Proficiency
CAPD	Central Auditory Processing Disorder
CCC	Certificate of Clinical Competence (in either speech-language pathology [SLP] or audiology [A]; granted by ASHA)
CF	Clinical Fellowship (supervised work experience after completing masters' degree requirement, required for CCC)
CLD	Culturally and linguistically diverse
CMS	Centers for Medicare and Medicaid (the agency overseeing Medicaid)
CFR	Code of Federal Regulations
dBHL	decibels, measured in Hearing Level (measure of a sound's loudness)
DMAS	Department of Medical Assistance Services (Virginia's Medicaid agency)
ESL	English as a Second Language
ESOL	English for Speakers of Other Languages
FAMIS	Family Access to Medical Insurance Services (Virginia's health insurance programs for families that do not quality for Medicaid)
FAPE	Free Appropriate Public Education
FERPA	Family Educational Rights and Privacy Act
FM	Frequency modulated
Hz	Hertz (measure of a sound's frequency)

ICD-9-CM	International Classification of Diseases, 9th revision, Clinical Modification (standardized listing of descriptive terms and identifying codes for reporting diagnoses and medical services performed)
IDEA	Individuals with Disabilities Education Act
IEP	Individualized Education Program
LEP	Limited English Proficient
L1	First Language of a child
L2	Second Language of a child
MBSS	Modified Barium Swallow Study
NBPTS	National Board for Professional Teaching Standards
NOMS	National Outcome Measurement System (developed by ASHA)
PLOP	Present Level of Educational Performance
POC	Plan of Care
SHAV	Speech-Language-Hearing Association of Virginia
SOL	Standards of Learning
SRS	Severity Rating Scale
USC	United States Code
VAC	Virginia Administrative Code
VDOE	Virginia Department of Education

APPENDIX C
WEB RESOURCES

The following web resources were found to be useful to members of the task force developing these guidelines. It is not an exhaustive list of useful Web sites. Further, inclusion on this list does not constitute endorsement of the site.

http://www.asha.org/default.htm Main Web site of the American Speech-Language-Hearing Association. ASHA position statements, information sheets, and journals are available at this site.

http://www.tesol.org Main Web site of the Teachers of English to Speakers of Other Languages.

http://www.doe.virginia.gov/ Main Web site of the Virginia Department of Education. Links to the Special Education Training and Technical Assistance Centers can be found on the special education web page http://www.doe.virginia.gov/VDOE/sped

http://www.ed.gov Main Web site for the United States Department of Education

http://www.cal.org Main Web site for the Center for Applied Linguistics

http://www.dmas.virginia.gov Main Web site for the Virginia Department for Medical Assistance Services (Medicaid)

http://www.shav.org Main Web site for the Speech-Language-Hearing Association of Virginia.

http://www.dhp.state.va.us/aud/default.htm Main Web site for the Board of Audiology and Speech-Language Pathology

http://www.vats.org/ Main Web site for the Virginia Assistive Technology System

http://www.vddhh.org/ Main Web site for the Virginia Department for the Deaf and Hard of Hearing.

APPENDIX D
SPEECH-LANGUAGE SCREENING FORM

This screening instrument is designed for the classroom teacher to administer. Teachers may "pass" students who demonstrate no speech-language-voice problems on this checklist. Any student who does not "pass" must be referred to the speech-language pathologist who will conduct a second screening.

Within 60 business days of initial enrollment in a Virginia public school, the teacher will use this checklist to screen the speech, language, and voice of each student in his/her class using this checklist.

Completed forms shall be forwarded promptly to the designated person in the school division. The speech-language pathologist will be notified to conduct the rescreening for any student who does not "pass." The rescreening must be completed within the 60- business day time frame.

NEW STUDENT SPEECH, LANGUAGE AND VOICE SCREENING INSTRUMENT: K-3

Check observed behaviors. A student passes if "never" is checked for **all** behaviors.

Student Name: Screening Date: Grade Teacher:

Does the child have limited English proficiency?___Yes___NO

	In comparison with his/her peers:	NEVER	SOMETIMES	ALWAYS
1	The child is difficult to understand			
2	The child has a hoarse and/or nasal voice that does not seem related to a cold or allergies.			
3	The child has difficulty with phonological awareness activities (e.g., rhyming, sound blending, syllable segmentation).			
4	The child has difficulty following directions and/or responding to questions.			
5	The child has difficulty making his/her wants and needs known.			
6	The child has difficult using complete sentences or correct grammar.			
7	The child has limited vocabulary.			
8	The child has difficulty expressing an idea or event (e.g., what he did over the weekend).			
9	The child appears frustrated when speaking.			
10	The child exhibits part-word or word repetitions, sound blockages, or excess facial or neck movement when speaking (i.e., stuttering).			

Other communication concerns:

	PASS	"Never" is checked for all items and there are no other communication concerns. The student "passes" the screening.
	NOT PASS	"Sometimes" or "always" is checked for ANY item and/or other communication concerns are identified. The student does "not pass" the screening. The speech-language pathologist shall rescreen the child and make the final determination regarding "pass" or "fail."

APPENDIX E
SPEECH-LANGUAGE SEVERITY RATING SCALES

Severity rating scales are valuable tools for describing the child's speech-language impairment, communicating with eligibility and IEP team members, and assuring consistency among speech-language pathologists in the division. The presence of a severity rating on any of the four scales does not guarantee eligibility; rather, it describes the results of the speech-language assessment in consistent terms. The eligibility committee will consider the severity rating, in conjunction with other information, as it determines eligibility. Eligibility is based on (1) the presence of a speech-language impairment, (2) that has an adverse educational impact, and (3) that results in the need for special education (specialized instruction) and related services (services required for the student to benefit from special education). See the eligibility section of these guidelines for further information on eligibility.

Further, a particular severity rating does not specify or predict a certain level of service. The level of service is determined by the goals, objectives/benchmarks specified by the IEP team. See the IEP section of this manual for further information on IEP development and decision-making.

After indicating the severity rating in the columns, compare the rating score to the functional narrative. If the rating and overview do not match, consider the data used and select the functional narrative that best describes the student.

When completing ratings in multiple areas, complete all pages. Individual ratings are reviewed and functional narratives are selected to describe performance for each area. Service recommendations are based on the area with the most severe rating. Do not add or average separate rating scales to determine severity.

SEVERITY RATING SUMMARY SHEET

Name_______________________________________DOB ______________________

Date Completed____________Speech-Language Pathologist ________________________

Record points assigned for each factor considered in each area.

FACTORS CONSIDERED

AREAS	A	B	C	D	TOTAL POINTS	OVERALL FUNCTIONAL LEVEL
Articulation						
Language						
Voice						
Fluency						

Do not add or average separate rating scales to determine severity.
See individual severity rating scales for full description of factors considered and overall functional levels.

	Overall Functional Level	
Level 0	0-3 points	No apparent problem
Level 1	4-6 points	Mild
Level 2	7-9 points	Moderate
Level 3	10-12 points	Severe

The presence of a severity rating on any of the four scales does not guarantee eligibility; rather, it describes the results of the speech-language assessment in consistent terms. The eligibility committee may consider the severity rating, in conjunction with other information, as it determines eligibility.

Eligibility is based on (1) the presence of a speech-language impairment,
(2) that has an adverse educational impact, and
(3) that results in the need for special education (specialized instruction) and related services (services to benefit from special education).

A particular severity rating does not specify or predict a certain level of service.

ARTICULATION SEVERITY RATING SCALE

An articulation/phonological impairment is characterized by a failure to use speech sounds that are appropriate for a person's age and linguistic dialect. Such errors in sound productions may interfere with intelligibility, social communication, and/or academic and vocational achievement.

Students cannot be considered to have an articulation/phonological impairment based on characteristics that are consistent with cultural and/or linguistic diversity. Students who use American Sign Language or other alternate forms of communication (e.g., augmentative/alternative communication) should be assessed in their primary mode of communication.

Children who evidence problems with hearing, structure and function of the speech mechanism (e.g., cleft palate), or motor speech difficulty (e.g., apraxia) should be viewed differently than those with more common developmental speech sound disorders. The presence of such etiological variables would suggest a high priority for intervention. After intervention, when the child has reached a plateau in his/her motor skills and has mastered compensatory strategies, the child may not require services.
This rating scale represents the most current research in the area of articulation and phonology at the time of printing (2005).

The presence of an articulation/phonological impairment does not guarantee the child's eligibility for special education.

Evaluation Data[11]

The following measures are appropriate for use in determining the presence of an articulation/phonological impairment:

speech sample
contextual probe
structured observation
classroom work
other curriculum/academic results
standardized test(s)
teacher report, interview, or checklist
child report, interview, or checklist
parent report, interview, or checklist

NOTE: Teacher, child, and parent reports, interviews, or checklists are not sufficient evidence by themselves and must be supported with additional data.

[11] Adapted from Connecticut State Department of Education. (1999). Guidelines for Speech and Language Programs. Vol. II: Determining Eligibility for Special Education Speech and Language Services.

Overall Functional Level

The speech-language pathologist should complete the attached rating scale first, adding the points assigned to each factor. Then the total points should be applied to the Articulation Rating Scale Overall Functional Level to determine an overall severity rating.

Articulation/Phonological Measures

The severity scale uses the following measures. Some measures may be more important than others at certain ages. The following guidelines may be helpful:

> Children 3-5 years of age: Intelligibility, severity, process usage, and stimulability are most important.
>
> Children 6-9 years of age: Children in this age range are typically those for whom speech sound production norms and stimulability will have greatest significance. In addition, social and academic variables should be given stronger consideration.
>
> Children above the age of 9 years: Children in this age range are those for whom social and academic/vocational considerations are of high importance.

Intelligibility
Select 100 consecutive words from contextual speech. Determine the percentage of words understood based on a tape-recorded sample (Weiss, 1980).

Speech sound (segmental) production:
This factor should be rated if the *Phonological Patterns* factor is not used. Determine developmental appropriateness by using the Iowa-Nebraska (I-N) norms (Smit, *et al*, 1990). These norms were originally published in a *Journal of Speech and Hearing Disorders* article and reflect the most recent and comprehensive normative study that has been reported. While results are comparable to those of Templin (1957), the I-N norms represent a larger normative sample. Sanders' (1972) report of normative data does not reflect data that is original to him, but rather represent a reinterpretation (albeit useful) or Templin's normative data.

Using norms to determine if therapy is warranted is not best practice, for students producing lateralized sibilants, because self correction does not usually occur with lateralization of sibilants. There is literature to support not using developmental norms to determine when to provide therapy for lateral /s/.

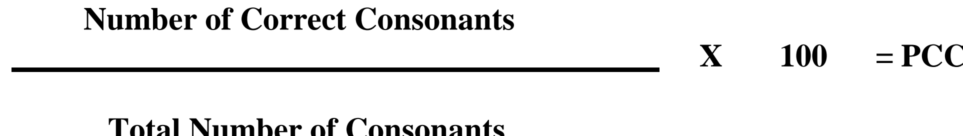
The literature also supports provision of therapy for developmental errors /r/ and /s/ at or around age 8. There is no support for the idea that error production become more resistant to correction and should be treated at an younger age.

Stimulability
Data suggests that lack of stimulability for a misarticulated sound is a good indicator of an appropriate target for therapy, since ability to produce a sound is essential before children begin to acquire a sound or otherwise generalize from one context to another. Determine stimulability using the Miccio Probe (Miccio, A.W., 2002). Stimulability is determined for all error sounds, regardless of age appropriateness.

Use of the Miccio Probe is best described in Miccio's article in the American Journal of Speech-Language pathology.[12] "To facilitate quick administration of a stimulability probe, only sounds absent from the inventory are tested. The student is asked to imitate these specific consonants in isolation or nonsense syllables. Those sounds imitated correctly some of the time (at least 30% of possible opportunities) are presumed to be stimulable." If multiple sounds are absent from the inventory, the probe may be shortened by administering only one vowel context during the initial assessment. In the complete probe, a child has 10 opportunities to produce a sound: in isolation and in three word positions in three vowel contexts, [i], [u], and [a]. The corner vowel contexts: a high (or close) unround front vowel, a high round back vowel, and a low unround vowel usually reveal any consonant-vowel dependencies. If time does not permit the completion of the probe, stimulability is tested in isolation and with the vowel [a], for example, [sa], [asa], [as]"

Percentage of Consonants Correct
The procedures below are based on the recommendations of Shriberg and Kwiatkowski (1982), but are abbreviated for purposes of simplicity.

1. Obtain a tape-recorded connected speech sample that will include 90 different words – usually a sample of around 225 total words is sufficient. If the child is so unintelligible that it is impossible to identify this number of different words, then a single word assessment tool can be used to gather a corpus of single word productions for analysis.
2. Only consonants are scored, not vowels (i.e., only the consonantal /r/ is scored).
3. Score only the first production of a consonant if a syllable is repeated (e.g., ba-balloon. Score only the first production of /b/).
4. Do not score consonants if a word is unintelligible or only partially intelligible.
5. Errors include substitutions, deletions, distortions, and additions. Voicing errors are only scored for consonants in the initial position of words.
6. If /ng/ is replaced with /n/ at the end of a word, do not score it as an error. Likewise, minor sound changes due to informal speech and/or selection of sounds in unstressed syllables are not scored as errors (e.g.,/fider/ for "feed her," /dono/ for "don't know").
7. Dialectal variations are not scored as errors.
8. To determine the PCC value use the following formula:



$$\frac{\textbf{Number of Correct Consonants}}{\textbf{Total Number of Consonants}} \quad \textbf{X} \quad \textbf{100} \quad \textbf{= PCC}$$

[12] *Clinical Problem Solving: Assessment of Phonological Disorders.* ***Volume 11, Issue 3. Pages 221 - 229. August 2002***

Iowa - Nebraska Articulation Norms[13]

Listed below are the recommended ages of acquisition for phonemes and clusters, based generally on the age at which 90% of the children correctly produced the sound.

Phoneme	Age of Acquisition (Females)	Age of Acquisition (Males)
/m/	3;0	3;0
/n/	3;6	3;0
/˜/	7;0	7;0
/h-/	3;0	3;0
/w-/	3;0	3;0
/j-/	4;0	5;0
/p/	3;0	3;0
/b/	3;0	3;0
/t/	4;0	3;6
/d/	3;0	3;6
/k/	3;6	3;6
/g/	3;6	4;0
/f-/	3;6	3;6
/-f/	5;6	5;6
/v/	5;6	5;6
/†/	6;0	8;0
/∂/	4;6	7;0
/s/	7;0	7;0
/z/	7;0	7;0
/ß/	6;0	7;0
/tß/	6;0	7;0
/dΩ/	6;0	7;0
/l-/	5;0	6;0
/-l/	6;0	7;0
/r-	8;0	8;0
/❙/	8;0	8;0

Word-Initial Clusters	Age of Acquisition (Females)	Age of Acquisition (Males)
/tw kw/	4;0	5;6
/sp st sk/	7;0	7;0
/sm sn/	7;0	7;0
/sw/	7;0	7;0
/sl/	7;0	7;0
/pl bl kl gl fl/	5;6	6;0
/pr br tr dr kr gr fr/	8;0	8;0
/†r/	9;0	9;0
/skw/	7;0	7;0
/spl/	7;0	7;0
/spr str skr/	9;0	9;0

Note regarding phoneme positions:
/m/ refers to prevocalic and postvocalic positions
/h-/ refers to prevocalic positions
/-f/ refers to postvocalic positions

[13] Smit, Hand, Freilinger, Bernthal, and Bird (1990). *Journal of Speech and Hearing Disorders,* 55, 779-798.

Miccio Stimulability Probe

Name: ____

Transcriber: ____

Date: ____

Prompt: *"Look at me, listen, and say what I say."*

Sound	Isolation	__i	i_i	i__	__a	a_a	a_	__u	u_u	u_	% Correct
p											
b											
t											
d											
k											
g											
†											
∂											
f											
v											
s											
z											
ß											
Ʒ											
tß											
dΩ											
m											
n											
~											
w											
j											
h											
l											
r											

PERCENTAGE CONSONANTS CORRECT (PCC)

Child____Date of Birth ______________________________

PCC Scoring Date______________Speech-Language Pathologist ________________________________

Consonant Class	Consonant Sound	Initial	Medial	Final	Number of Consonants Correct	Total No. Consonants
	/m/					
Nasal	/n/					
	/˜ /					
Glides	/w/					
	/j/					
	/p/					
	/b/					
Stops	/t/					
	/d/					
	/k/					
	/g/					
	/f/					
	/v/					
	/ß/					
	/Ω/					
Fricatives/	/s/					
Affricates	/z/					
	/j/					
	/†/					
	/∂/					
	/dΩ /					
	/h/					
Liquids	/l/					
	/r/					
				TOTALS		

$$\frac{\textbf{\# of Consonants Correct}}{\textbf{Total \# of Consonants}} = \textbf{PCC}$$

ARTICULATION RATING SCALE
OVERALL FUNCTIONAL LEVEL

Level 0 (0 – 3 points) No apparent problem	The student's connected speech during educational activities is consistently understood and not distracting to the listener. Student's verbal participation in educational activities is rarely limited by self-consciousness or listener reaction.
Level 1 (4 – 6 points) Mild	The ability to understand the student's connected speech in educational activities may be affected by listener familiarity and/or knowledge of the context. The student's articulation is occasionally distracting to the listener. The student's verbal participation in educational activities may occasionally be limited by self-consciousness about listener reactions to his/her speech.
Level 2 (7 – 9 points) Moderate	The student's connected speech in educational activities requires context cues to be understood. The student's articulation is usually distracting to the listener. The student is aware of errors. The student's verbal participation in educational activities may frequently be limited by self-consciousness about listener reactions to his/her speech.
Level 3 (10 - 12 points) Severe	The student's connected speech in educational activities is rarely understood in known context. The student may or may not be aware of errors and is rarely stimulable for correct production. The student's verbal participation in educational activities is usually limited by self-consciousness about listener reactions to his/her speech.

ARTICULATION SEVERITY RATING SCALE

	Factors	No Apparent Problem (0 pts)	Mild (1 pt)	Moderate (2 pts)	Severe (3 pts)	Points Assigned
A	Intelligibility (connected speech)	Age 3: 75% or > Age 4: 85% or > Age 5 and up: 90% or >	Age 3: 65–75% Age 4: 75 – 85% Age 5 and up: 80 – 90%	Age 3: 50 – 65% Age 4: 65 – 75% Age 5 and up: 70 – 80%	Age 3: <50% Age 4: <65% Age 5: <70%	
B (Use B1 OR B2, not both)	1. Speech sounds (segmental productions)	Meets Iowa-Nebraska (I-N) norms for acquisition of phonemes and clusters	1 – 2 sounds do not meet I-N norms for acquisition of phonemes and clusters	3 – 4 sounds do not meet I-N norms for acquisition of phonemes and clusters	5 or more sounds do not meet I-N norms for acquisition of phonemes and clusters	
	2. Phonological Processes	No error processes.	One or more of the following error processes occur in 40% or more available opportunities: • gliding of liquids • cluster reductions with /s/ • vowelization of post-vocalic liquids (/r/, /l/)	One or more of the following error processes occur in 40% or more of available opportunities: • weak syllable deletion depalitization of initial singletons • cluster reduction with /l/, /r/, /w/ • fronting of initial velars Presence of Level 1 processes at 20% or greater	One or more of the following error processes occur 40% of more of available opportunities: • initial consonant deletion • final consonant deletion • stopping • depalitization of final singletons Presence of Level 1 and/or 2 processes at 15% or greater	
C	Stimulability (Miccio Probe)	Error sounds are 90% stimulable	Error sounds are 60 – 90% stimulable.	Error sounds are 50 - 60% stimulable.	Error sounds are less than 50% stimulable.	
D	Percentage of Consonants Correct (PCC)	PCC value more than 95%	PCC value of 85 – 95%	PCC value of 50 – 85%	PCC value less than 50%	
					TOTAL POINTS	

LANGUAGE SEVERITY RATING SCALE

A language impairment is defined as the inadequate or inappropriate acquisition, comprehension or expression of language. Students who have Limited English Proficiency (LEP) or those students who are not speakers of Standard American English due to sociocultural dialects are not automatically considered to be students with a speech-language impairment. The presence of a language impairment does not guarantee the child's eligibility for special education.

Evaluation Data[14]

The following measures are appropriate for use in determining the presence of a language impairment:

1. language sample
2. contextual probes
3. structured observation
4. classroom work samples (e.g., look at syntax, morphology, organization, vocabulary and spelling in narratives)
5. other curriculum academic results (e.g., analysis of SOL assessment results by test item)
6. standardized tests
7. teacher report, interview, or checklist
8. child report, interview, or checklist
9. parent report, interview, or checklist

NOTE: Teacher, child, and parent reports, interviews, or checklists are not sufficient evidence by themselves and must be supported with additional data.

Best Practice: Assess with at least one standardized test and two nonstandardized measures of functional language. If a standardized test reveals a deficit, a second measure should be administered to confirm the findings. Language samples and pragmatic assessments must be included as part of the initial assessment.

Spoken Language Comprehension and Production[15]

The severity scale uses the following terms to describe spoken language comprehension and production:

Low comprehension demand: Listening situations that primarily require the student to understand language content and forms acquired at a younger age than the student's current

[14] Adapted from Connecticut State Department of Education. (1999). Guidelines for Speech and Language Programs. Vol. II: Determining Eligibility for Special Education Speech and Language Services.
[15] Adapted from the American Speech-Language-Hearing Association. (2004) K-6 Schools: National Outcomes Measurement System. Rockville, MD: Author.

chronological age.
High comprehension demand: Listening situations that primarily require the student to understand language content and forms representing more recently acquired structures for the student's chronological age.

Low verbal demand: Verbal initiations and responses that primarily require language content and forms acquired at a younger age than the student's current chronological age.

High verbal demand: Verbal initiations and responses that primarily require language content and forms representing more recently acquired structures for the student's chronological age.

Overall Functional Level

The speech-language pathologist should complete the attached rating scale first, adding the points assigned to each factor. Then the total points should be applied to the Language Severity Rating Scale Overall Functional Level for an overall severity rating.

NOTE: When completing the scale, the rating should be based on the child's performance in his/her preferred mode of communication (e.g., American Sign Language, augmentative/alternative communication). This should be documented in the evaluation report, eligibility minutes, and IEP. On occasion, it may be valuable to complete the rating without the preferred mode of communication to contrast the difference in the child's skills between the preferred mode of communication and standard oral communication.

LANGUAGE SEVERITY RATING SCALE

OVERALL FUNCTIONAL LEVEL

Level	Description
Level 0 (0 – 3 points) No apparent problem	The student's independent language skills are consistently age-appropriate. The student is able to use compensatory strategies when needed.
Level 1 (4 – 6 points) Mild	The student's independent language skills are age appropriate. He/she is successful in participating in most low comprehension and low verbal demand educational activities with minimum support. However, the student's participation in high comprehension and high verbal demand situations may occasionally be limited.
Level 2 (7 – 9 points) Moderate	The student's independent language skills are often age appropriate in low comprehension and low verbal demand educational activities. The student's successful participation is frequently limited in high demand activities unless maximum support is provided to reduce the comprehension and verbal demands.
Level 3 (10 – 12 points) Severe	The student's independent language comprehension and verbal messages are rarely age-appropriate even in low comprehension and low verbal demand educational activities. His/her participation in high comprehension and high demand educational activities is not age appropriate and tends to be extremely limited even with supports.

LANGUAGE SEVERITY RATING SCALE

	Factors	No Apparent Problem (0 pts)	Mild (1 pt)	Moderate (2 pts)	Severe (3 pts)	Points Assigned
A	Description of language in low comprehension and low verbal demand situations	No deficits in receptive, expressive, or pragmatic language	Mild deficit in receptive, expressive, or pragmatic language	Moderate deficit in receptive, expressive, or pragmatic language	Severe deficit in receptive, expressive, or pragmatic language	
B	Description of language in high comprehension and high verbal demand situations	No deficits in receptive, expressive, or pragmatic language	Mild deficit in receptive, expressive, or pragmatic language	Moderate deficit in receptive, expressive, or pragmatic language	Severe deficit in receptive, expressive, or pragmatic language	
C	Standardized Assessment measures (1 or more; standard score assumes mean of 100)	• 1 standard deviation below mean – Standard score at or above 85 – 17th %ile or above	• 1 – 1.5 standard deviations below mean – Standard score between 78 and 84 – 7th - 16th %ile	• 1.5 – 2 standard deviations below mean – Standard score between 70 and 75 – 3rd - 7th %ile	• 2 standard deviations below mean – Standard score of 69 or below – below 3rd %ile	
D	Non-standardized assessment (functional analysis)	• May indicate differences from Standard American English • Minimal or no impact on pragmatics, semantics, or syntax-morphological skills	• May indicate mild deficits in language behavior • Minimal impact on pragmatics, semantics, or syntax-morphological skills	• May indicate moderate deficits in language behavior • Moderate impact on pragmatics, semantics, or syntax-morphological skills	• May indicate severe deficits in language behavior • Severe impact on pragmatics, semantics, or syntax-morphological skills	
					TOTAL POINTS	

FLUENCY SEVERITY RATING SCALE

A fluency disorder is primarily characterized by repetitions (sounds, syllables, part words, whole words, phrases), pauses, and prolongations that differ in number and severity from those of normally fluent individuals. The onset usually occurs during the time that language skills are developing, and onset is generally gradual in nature. Secondary characteristics are frequently evident, and these vary in type and severity from individual to individual. The dysfluencies may interfere with intelligibility, social communication, and/or academic and vocational achievement.

Evaluation Data[16]

The following measures are appropriate for use in determining the presence of a fluency impairment:

1. speech sample
2. total dysfluency index of the types and number of dysfluencies and secondary characteristics obtained in the language sample and a structured reading activity
3. contextual probes
4. structured observation
5. anecdotal records – impact of dysfluencies on oral/expressive language tasks
6. standardized tests
7. teacher report, interview, or checklist
8. student report, interview, or checklist
9. parent report, interview, or checklist

Note: Teacher, student, and parent reports, interviews, and checklists are not sufficient evidence by themselves and must be supported with additional data.

Best Practice: An assessment for a fluency disorder should include the following components:

- background information: a history of the development of the student's stuttering, family history of stuttering, etc.
- communication abilities: a report of his/her skills in the five parameters of communication – stuttering, articulation, voice, language, and hearing.
- oral-peripheral examination: a description of any atypical structures and the functional abilities of the oral mechanism.
- reports, interviews, checklists: completed by the parents, the student, and the teacher.
- structured observation: observation of student's speech and language during oral language activities in the classroom/school environment.

When considering a preschool-age child who is exhibiting dysfluent behavior, research indicates that the chances of success are greater the sooner a problem and its contributing factors are identified. When a preschool-aged child exhibits the following chronic non-fluent behaviors, it is likely the child will benefit from early intervention: the insertion of the schwa, uneven stress

[16] Adapted from Connecticut State Department of Education. (1999). Guidelines for Speech and Language Programs. Vol. II: Determining Eligibility for Special Education Speech and Language Services.

and rhythm, difficulty initiating and sustaining airflow, body tension and struggle behavior during speech, and the presence of significant predictors such as family history (Runyan, 2004).

Overall Functional Level

The speech-language pathologist should complete the attached rating scale first, adding the points assigned to each factor. Then the total points should be applied to the Fluency Severity Rating Scales Overall Functional Level for an overall severity rating.

Fluency Rating Scale

The fluency rating scale uses the following terminology:

- Description of dysfluency addresses the duration of pauses (from less than 1 second to more than 3 seconds) and number of reiterations per repetition (from less than 4 reiterations per repetition to 6 or more reiterations per repetition)

- Associated non-vocal behaviors means the presence of facial grimaces; visible tension of the head, neck, jaw, and/or shoulders; audible tension, as noted in uneven stress, pitch changes, increased rate, or tension during inhalation or exhalation

For preschool children, the consideration of the adverse effect should be based on the effect of the fluency impairment on the child's developmental skills in play, adaptive/self-help, communication, social-emotional, cognitive, and sensori-motor.

FLUENCY RATING SCALE

OVERALL FUNCTIONAL LEVEL

Level	Description
Level 0 (0 – 3 points) No apparent problem	Dysfluencies are primarily characterized by easy whole word repetitions that comprise less than 4% dysfluent speech behaviors per minute or less than 3 dysfluencies per minute. The student's speech and language skills during educational activities are consistently understood and not distracting to the listener. Student's verbal participation in educational activities is not limited by self-consciousness about listener reaction to his/her speech.
Level 1 (4 – 6 points) Mild	Dysfluencies are transitory and characterized by easy repetitions, prolongations and some hesitations that comprise 4-5% dysfluent speech behaviors per minute or 3-5 dysfluencies per minute. Blocking, if it occurs, is less than a full second. Tension is noticeable but dysfluencies and tension are not distracting to the listener. Student does not usually avoid speaking situations and participates in oral language activities. Student's verbal participation in educational activities may occasionally be limited by self-consciousness about listener reactions to his/her speech.
Level 2 (7 – 9 points) Moderate	Dysfluencies are frequent and characterized by repetitions, prolongations, and some hesitations/interjections, and blocking that comprise 6-10% dysfluent speech behaviors per minute or 6-10 dysfluencies per minute. Tension is noticeable, distracting to the listener. Associated behaviors, such as grimacing, and other distracting behaviors are evident during speaking situations. Student is aware of dysfluent speech and avoids some speaking situations and oral language activities. Student's verbal participation in educational activities is impacted by self-consciousness about listener reactions to his/her speech.
Level 3 (10 - 12 points) Severe	Dysfluencies are habitual and are characterized by repetitions, prolongations, hesitations/interjections, and blocking that lasts 3 or more seconds. Dysfluencies comprise greater than 10% dysfluent speech behaviors per minute or 10 or more dysfluencies per minute. There is evidence of significant vocal tension, some noticeable tremors, and noticeable associated behaviors that are distracting to the listener. Student generally avoids speaking situations and oral language activities. Student's verbal participation in educational activities is significantly impacted by self-consciousness about listener reactions to his/her speech.

FLUENCY SEVERITY RATING SCALE

	Factors	No Apparent Problem (0 pts)	Mild (1 pt)	Moderate (2 pts)	Severe (3 pts)	Points Assigned
A	Frequency of Dysfluency	Less than 4% vocal dysfluencies per speaking minute OR less than 3 dysfluencies per minute	4% vocal dysfluencies per speaking minute OR 3 – 5 dysfluencies per minute	6 – 10% vocal dysfluencies per speaking minute OR 6 – 10 dysfluencies per minute	10% of more vocal dysfluencies per minute OR 10 or more dysfluencies per minute	
B	Description of Dysfluency	Primarily whole multisyllabic word repetitions Occasional whole-word interjections and phrase/sentence revisions Less than 1 second pauses OR less than 4 reiterations	Transitory dysfluencies in specific speaking situations including repetitions, prolongations, blocks, hesitations or interjections, and vocal tension. 1 second pauses OR 4 reiterations	Frequent dysfluencies in many speaking situations including repetitions, prolongations, blocks in which sounds and airflow are shut off, hesitations or interjections and vocal tension 2 second pauses OR 5 reiterations	Habitual dysfluencies in a majority of speaking situations, including repetitions, prolongations, blocks (long and tense with some noticeable tremors), hesitations or interjections, and vocal tension 3 or more second pauses OR 6 or more reiterations	
C	Associated Non-vocal Behaviors	No associated behaviors	One associated behavior that is noticeable but not distracting	One associated that is noticeable and distracting	Two or more associated behaviors that are noticeable and distracting	
D	Avoidance	Does not avoid speaking situations	Usually does not avoid speaking situations	Does avoid some speaking situations	Generally avoids speaking situations	
					TOTAL POINTS	

VOICE SEVERITY RATING SCALE

A voice impairment is defined as a pitch, loudness or quality condition that calls attention to itself rather than to what the speaker is saying.

Evaluation Data[17]

The following measures are appropriate for use in determining the presence of a voice impairment:

1. speech sample
2. structured observation
3. classroom work results (e.g., oral presentations)
4. standardized tests
5. teacher report, interview, or checklist
6. child report, interview, or checklist
7. parent report, interview, or checklist

Note: Teacher, child, and parent reports, interviews, or checklists are not sufficient evidence by themselves and must be supported with additional data.

Best Practice: A comprehensive voice examination should include information obtained from both subjective measures (e.g., perceptual ratings and clinical impressions based on observations and analysis of speech samples) and objective measures (e.g., standardized tests or instrument evaluations). Observations should take place in situations calling for both low and high vocal demand:

- low vocal demand: utterances produced in a relatively quiet environment or short responses that do not require talking over a prolonged period of time.
- high vocal demand: talking in a noisy environment (e.g., in the cafeteria), for a prolonged period of time (e.g., oral presentation or reading aloud), or controlling the voice over a wide pitch range (e.g., singing).

NOTE: Before a child may be found eligible for services for a voice impairment, the child should receive a medical examination from an otolaryngologist (i.e., ear, nose and throat physician), clearing the child for intervention. This is important to ensure the source of the voice impairment is not an organic problem for which therapy is contraindicated. See the Voice Referral Form in Appendix F.

Overall Functional Level

The speech-language pathologist should complete the attached rating scale first, adding the points assigned to each factor. Then the total points should be applied to the Voice Severity Rating Scale Overall Functional Level to determine an overall severity rating.

[17] Adapted from Connecticut State Department of Education. (1999). Guidelines for Speech and Language Programs. Vol. II: Determining Eligibility for Special Education Speech and Language Services.

VOICE IMPAIRMENT REFERRAL FORM TERMINOLOGY

The following terminology is used on voice referral form.

Abusive Vocal Behaviors – activities such as frequent "throat clearing" or shouting (e.g., cheerleading)

Breathing Pattern – the general contributions of the thoracic, clavicular, and abdominal areas involved in breathing during conversational speech. Look for reliance upon one pattern to the exclusion of the others.

Glottal Attack – the relative (soft vs. hard) onset of vocal fold activity.

Loudness Level - the estimated level of the student's speech during normal conversation in a quiet environment. Persistent whispering or shouting would be positive indications.

Maximum Phonation Time - averaged over three different trials, the maximum amount of time (in seconds) that the student can continuously sustain /a/ (or /i/) on one exhalation.

Muscle Tension –the amount of tension visible in the student's face, neck, and chest areas during normal conversation. Abnormal tension suggested by a stiff posture and/or accompanying strain.

Nasal Resonance - the amount of perceived resonance associated with the production of nasal consonants. An inappropriate degree of hypo – hyper nasality perceived during conversation would be a positive indication. Note: mixed nasal resonance (i.e., both hypo – and hypernasal resonance perceived within the same speaker) may occur.

Oral Resonance – the perceived amount of resonance associated with oral consonants and vowels. Positive indications might include speaking with limited oral openings and reduced intelligibility.

Phonation Breaks – the inappropriate cessation of voicing during speech. A positive indication would be an unintentional and relatively brief period of silence during a normally voiced consonant or a vowel.

Pitch – consider if the vocal pitch is too high, too low, or monotonic for a student's height/weight, age and gender

Pitch Breaks – the cessation of a continuous and appropriate pitch level during speech.

Quality – the overall quality of the student's conversational speech including hoarseness, breathiness, and/or harshness.

s/z ratio – the ratio of the maximum sustained production of /s:/ (in seconds) relative to /z:/ (in seconds). Two trials with the longer production of each sound used to computer the ratio. A ratio greater than 1.4 is an indication of possible laryngeal inefficiency for speech. Report data to the nearest single decimal place.

VOICE RATING SCALE

OVERALL FUNCTIONAL LEVEL

Level 0 (0 – 3 points) No apparent problem	The student's voice consistently sounds normal and does not call attention to itself. The student's ability to participate in educational activities requiring low or high vocal demands is not limited by his/her voice. The student self-monitors vocal production as needed.
Level 1 (4 – 6 points) Mild	The student's voice occasionally sounds normal and is usually distracting to the listener. There is some situational variation. The student's ability to participate in educational activities requiring voice is rarely limited in low vocal demand activities, but occasionally limited in activities with high vocal demand. The student occasionally self-monitors.
Level 2 (7 – 9 points) Moderate	The student's voice is occasionally functional for communication but is consistently distracting to the listener. The student's ability to participate in educational activities requiring voice is usually limited to low vocal demand activities, but consistently limited in high vocal demand activities.
Level 3 (10 – 12 points) Severe	The student's voice is persistently abnormal. He/she may not be able to use his/her voice to communicate.

VOICE SEVERITY RATING SCALE

	Factors	No Apparent Problem (0 pts)	Mild (1 pt)	Moderate (2 pts)	Severe (3 pts)	Points Assigned
A	Voice Quality (hoarse, breathy, no voice)	Normal voice quality	Inconsistent problems; noticeable to the trained listener.	Consistent problems in conversational speech. Noticeable to all listeners.	Persistent problem. Noticeable at all times.	
B	Resonance (hypernasal or hyponasal)	Normal resonance	Inconsistent problems; noticeable to the trained listener.	Consistent problems. Inappropriate for age, gender or culture. Noticeable to all listeners.	Persistent problem. Always inappropriate for age, gender or culture. Noticeable at all times.	
C	Loudness (judged for appropriateness and variability)	Normal loudness	Inconsistent problems; noticeable to the trained listener.	Consistent problems. Inappropriate for age, gender or culture. Noticeable to all listeners.	Persistent problem. Always inappropriate for age, gender or culture. Noticeable at all times.	
D	Pitch (judged for appropriateness for age and gender, and for appropriate variability)	Normal pitch.	Inconsistent problems; noticeable to the trained listener.	Consistent problems. Inappropriate for age, gender or culture. Noticeable to all listeners.	Persistent problem. Always inappropriate for age, gender or culture. Noticeable at all times.	
					TOTAL POINTS	

APPENDIX F
FORMS AND CHECKLISTS

TEACHER CHECKLISTS, PARENT AND STUDENT INPUT FORMS

Checklists:

Teacher

- ♦ Educational Assessment for Speech-Language Evaluation
- ♦ Preschool Teacher Assessment for Speech-Language Evaluation

Parent

- ♦ Speech-Language (School-Age)
- ♦ Speech-Language (Preschool)
- ♦ Fluency/Stuttering
- ♦ Voice

Student

- ♦ Student Speech and Language Checklist – Kindergarten through 5th Grade
- ♦ Student Speech and Language Checklist –6th through 12th Grade

Observation form:

Communication Observation Form (for Speech-Language Pathologists)

Referral forms:

Voice Referral

Swallowing Disorder Consultation and Referral

EDUCATIONAL ASSESSMENT FOR SPEECH-LANGUAGE EVALUATION

Name:___________________________ **Grade**________
Teacher___________________________ **Date:**_________

Academic Performance Rating:

Elementary	**Reading**	**Writing**	**Science**	**Soc. Stud.**	**Math**
Below Grade Level					
On Grade Level					
Above Grade Level					

Middle or High School	
Letter Grade	
Subject	

Communication Skills: Please compare the student's performance to that of his/her classmates. Answer all questions by placing a circle around the appropriate answer.

	Yes*	**No**	**Sometimes**
Do you have difficulty understanding this student?			
Does the student avoid speaking in class?	**Y**	**N**	**S**
Do peers tease the student about the way s/he talks?	**Y**	**N**	**S**
Do you feel the student's speech and language skills negatively affect his/her academic performance?	**Y**	**N**	**S**
Does the student appear to be upset when communicating?	**Y**	**N**	**S**
Have you observed the student's speech and language skills influencing his/her personal adjustment (including adult and peer relationships)?	**Y**	**N**	**S**
Does the student require classroom modifications to be successful?	**Y**	**N**	**S**
Does this student have difficulty attending?	**Y**	**N**	**S**
Check all settings that apply: ☐one to one ☐small group ☐large group ☐during lengthy instruction ☐noise in the environment			
Does the student have difficulty following directions?	**Y**	**N**	**S**
Does the student have difficulty understanding curriculum vocabulary and/or concepts?	**Y**	**N**	**S**
Does the student require excessive "wait time" to either comprehend or respond?	**Y**	**N**	**S**
Does the student have difficulty expressing ideas in an organized and coherent manner?	**Y**	**N**	**S**
Does the student use incorrect grammar?	**Y**	**N**	**S**
Does the student have difficulty asking relevant questions?	**Y**	**N**	**S**
Does the student exhibit noticeable hesitations, repetitions and/or tension?	**Y**	**N**	**S**
Does the student's voice sound unusual (e.g., hoarse, nasal, high-pitched)?	**Y**	**N**	**S**
Does the student's speech rate/volume interfere with your ability to understand him/her?	**Y**	**N**	**S**
Does the student mispronounce sounds or words?	**Y**	**N**	**S**
Please provide examples:____			
Have the parents expressed concerns regarding communication?	**Y**	**N**	**S**

***If you have circled YES for any items please complete the back of this form.**

Describe the weaknesses of the student's speech and language skills, and his/her academic progress.

____

____

____

____

Identify any classroom strategies that you have used to adapt to the student's communication needs.

____

____

____

____

What adaptations, modifications have you used to assist the child with communication in the classroom setting?

____

____

____

____

Comments:

____

____

____

____

Teacher's Signature:____

Please return to:____________________________________ by ____________

PRESCHOOL TEACHER ASSESSMENT FOR SPEECH-LANGUAGE EVALUATION

Name:____________________________ **Grade**________
Teacher____________________________ **Date:**________________________

Please compare the child's performance with his/her peers.

The child:	Yes	Sometimes	No
uses social language (hi, by, please, thank you)			
is learning new words every week			
repeats new words without being asked			
uses describing words (big, red, etc.)			
gets my attention with words			
rejects/denies/says no			
takes turns in a "conversation"			
asks for help			
is understood by familiar adults			
is understood by unfamiliar adults			
names pictures in a book			
listens to a short picture book			
answers "yes/no" questions			
answers "wh" questions			
asks questions with his/her tone of voice			
asks "yes-no" questions			
asks "wh" questions (what, where, why, how)			
uses pronouns correctly (I, she, he, my, etc.)			
knows some songs or nursery rhymes			
has trouble saying sounds; list:			
is teased by peers about the way s/he talks			
has difficulty following directions			
has difficulty attending If Yes or Sometimes, check all that apply: ☐ *one to one* ☐ *during lengthy instruction* ☐ *small group* ☐ *large group* ☐ *noisy environment*			
has noticeable hesitations, repetitions, or tension when speaking			
has an unusual voice (e.g., hoarse, nasal, high-pitched)			
has a rate or volume that interferes with understanding him/her			

Rate your concern for the child's communication skills.
None 0 1 2 3 A lot

Approximately how many words are in the child's vocabulary? (check quantity) ☐ *10* ☐ *11 to 50* ☐ *more than 50*

How many words does the child combine into sentences? _____________

Do the child's communication skills influence his/her adult and peer relationships or participation in activities?
☐ Yes ☐ No If YES,explain:____

____

What does the child do when he/she is not understood? Check all that apply: ☐ *points or gestures* ☐ *gives up*
☐ *repeats the words* ☐ *says different words* ☐ *other:* ____

____ ____________________
Teacher signature Date
Please return to______________________________________by ________________

Parent Checklist: Speech-Language (School Age)

Student's name______________________________ Date of birth ___________________________

Person completing this form____Date__________________

Return to____by_____________________________________

Your input will help us understand your child's speech and language skills. Please check the following comparing your child with other children his/her age. Thank you.

My child...	Yes	Sometimes	No
interrupts politely			
starts conversations appropriately and takes turns in a conversation			
stays on the topic and changes topics appropriately			
asks for help/clarification appropriately			
uses correct grammar			
uses complete sentences			
tells what happened in the recent past			
uses words to reject or deny information			
uses words to negotiate			
uses words to express feelings			
tells a story in sequence			
has a similar vocabulary to children his/her age			
is understood by family members and familiar adults			
is understood by unfamiliar adults			
can follow 2-3 step directions			
knows when a listener does not understand his/her message			
can reword information/questions if not understood by listener			
understands and remembers school vocabulary			
participates in conversations with friends			
understands figures of speech (for example "butterflies in my stomach")			
is a good listener			
has trouble thinking of the right word to say			
has trouble saying what he/she is thinking and getting to the point			
has trouble making speech sounds; list:			

Rate your concern for your child's communication skills.

None 0 1 2 3 A lot

What does your child do when he/she is not understood? Check all that apply: ☐points or gestures ☐repeats the words ☐says different words ☐ gives up ☐other (please explain)____

What other information do you think would be helpful for this evaluation? (please identify on the back of this form)

Parent Checklist: Speech-Language (Preschool)

Child's Name :_______________________________________ Date of birth ____________________

Person completing this form____ Date_________________

Return to____ by__________________________

Your input will help us understand your child's speech skills. Please check the following. Thank you.

My child	Yes	Sometimes	No
responds to his/her name			
says 10 words			
is learning new words every week			
repeats new words			
says 50 words			
puts two words together			
gets my attention with words			
rejects/says no			
asks questions with his/her tone of voice			
takes turns in a "conversation"			
asks for help			
says 3-4 word sentences			
is understood by family members			
is understood by familiar adults			
is understood by unfamiliar adults			
follows one-step directions			
follows two-step directions			
listens to a short picture book			
names pictures in a book			
answers "yes/no" questions			
answers "wh" questions			
asks "yes/no" questions			
asks "wh" questions (what, where, why, how)			
uses pronouns correctly (I, me, we)			
knows some songs or nursery rhymes			
participates in pretend play			

Rate your concern for your child's communication skills.

None 0 1 2 3 A lot

What other information do you think would be helpful for this evaluation? (Please identify on the back.)

Parent Checklist: Fluency/Stuttering

Child's name________________________________Date of birth______________________

Person completing this form_________________________Date _______________________

Return to____by_________________________

Your input will help us understand your child's speech skills. Please check the following. Thank you.

My child....	Yes	Sometime	No
repeats whole words "why, why, why, why"			
repeats parts of words			
reports sounds "w-w-w-w-hy"			
prolongs or holds onto a sound "w-----------hy"			
blocks - sounds and airflow are shut off			
is frustrated by his/her speech difficulty			
has a family member with similar difficulty			
has vocal tension			
avoids speaking situations			
avoids eye contact			
has associated physical behaviors (eye blinking, body movements, grimacing, etc.)			
speaks rapidly			

Rate your concern for your child's communication skills.

None 0 1 2 3 A lot

When did your child first begin to stutter?____

What things seem to help your child's speech?____

What things seem to make your child's speech worse?__________________________________

Which situations seem to be the most difficult for your child?___________________________

Tell us about the speech of members of your family. Does anyone: speak like your child, speak rapidly, or stutter? If so, who?____
(Describe)____

What other information do you think would be helpful for this evaluation?

Parent Checklist: Voice

Name______________________________Date_____________________________________

Person completing this form____

Return to_____________________________________by_____________________________

Your input will help us understand your child's speech skills. Please check the following items. Thank you.

My child	Yes	Sometimes	No
has a hoarse voice			
clears his/her throat frequently			
sounds nasal - talks through his/her nose			
sounds denasal - stuffed up			
speaks too quietly			
speaks too rapidly			
has pitch unusual for his/her age or sex			
speaks in a monotone			
has breaks in his/her voice			
is frustrated by his/her speech difficulty			
has a family member with similar difficulty			
has allergies			
has frequent ear infections			
is exposed to environmental factors like kerosene fumes, wood or cigarette smoke			
frequently yells or plays loud games (for example, car, gun or animal noises)			
participates in sports or activities (singing) where he/she uses his/her voice loudly			

Rate your concern for your child's voice.

Rate your concern for your child's communication skills.
None 0 1 2 3 A lot

Does your child's voice change during the day? _______________
If so when is it better?____

What other information do you think would be helpful for this evaluation?

Communication Observation Form

Student:______________________**D.O.B.**_____________**Date**_________________

Time:______ **Length of Observation:**__________ **Grade:**____

Reason for Observation:____

Setting (classroom, playground, cafeteria, etc.):__________________________________

Physical Environment: Where is student seated? What is the student's proximity to teacher?

- at table
- on chair in group
- at chalkboard
- front of room
- at desk
- at listening center
- middle of room
- on the floor
- at learning center
- back of room
- Other:____

Auditory Environment (Background noise, outside noise, etc.)______________________

____

Language Demands of the Activity / Instruction (include examples)

Comprehension - **Low** - **High**

Verbal - **Low** -
High Demands

Responsiveness to Instructional Strategies:

- wait time
- repetition
- rephrasing
- visual supports
- graphic organization
- other:____

Is the student's communication comparable to the other students'?

- yes
- no

Comments:____

____

Summary:____

____

____

____

_________________________________ _______________
Speech-language pathologist's signature Date

Student Speech and Language Checklist
Kindergarten through 5th Grade

Name:___________________________ **Grade________**
Teacher___________________________ **Date:________________________**

Directions: Please read and check the box that is the best answer to each question. (If student needs items read to them, please assist.)

	Yes	No	Sometimes	Don't Know
Do you like to talk with your family and friends?				
Do you like to answer questions in class?				
Do you like to talk in class?				
Do others tease you about the way you talk?				
Do people have trouble understanding what you say?				
Does your speech sound different from the other students?				
Is it hard for you to make some of your sounds?				
Is it hard to hear the sound the letter makes?				
Can you follow the teacher's directions?				
Can you follow directions from your family?				
Can you tell what happened in a story you read or had read to you?				
Is it hard to think of the words you want to say?				
Is it hard to answer questions?				
Is it hard to remember information you have learned?				
Is it hard to learn new words?				
Is it hard to make complete sentences?				
Do you like the way your voice sounds?				
Do you speak in a loud voice or shout?				
Do you speak in a soft voice?				
Do you ever lose your voice?				
Do you repeat some of your words or sounds?				
Is it sometimes hard to get your words out?				
Is it hard for you to look at people when you talk?				

- Over -

Please answer the following questions:

1) What do you like best about the way you talk?

2) What would you like to change about the way you talk?

3) Would you like some help with the way you talk**?**

____
Student

Student Speech and Language Checklist: 6th through 12th Grade

Name:_____________________________ **Grade**________
Teacher_____________________________ **Date:**_________________________

Directions: Please read and check the box that best answers each question.
(If student needs items read to them, please assist.)

	Yes	No	Sometimes	Don't Know
Do you like to talk with your family and friends?				
Do you like to answer questions in class?				
Do you like to express yourself in class?				
Do others tease you about the way you talk?				
Do people have trouble understanding what you say?				
Does your speech sound different from the other students?				
Is it hard for you to make some of your sounds?				
Is it hard for you to hear the sound differences in words?				
Do you have difficulty using grammatically correct sentences?				
Do you have difficulty following oral directions?				
Do you have difficulty following written directions?				
Do you have difficulty recalling and telling what happened in a story you read?				
Do you have difficulty recalling and telling what happened in a story read or told to you?				
Is it hard to think of the words you want to say?				
Is it hard to answer questions?				
Is it hard to remember information you have learned?				
Is it hard to learn and remember new vocabulary words?				
Do you like the way your voice sounds?				

(over)

	Yes	No	Sometimes	Don't Know
Do you speak in a loud voice or shout?				
Do you speak in a soft voice?				
Do you ever lose your voice?				
Do you repeat some of your words or sounds?				
Is it sometimes hard to get your words out?				
Is it hard for you to look at people when you talk?				

Please answer the following questions:

1) What do you like best about the way you talk?

2) What would you like to change about the way you talk?

3) Would you like some help working on your speech and language skills?

____
Student

VOICE REFERRAL FORM

Part I. General Information

Student's Name:_________________________ Gender:_________ DOB:___________

Address:_____________________________ Parent's Name: ____________________
____

School: ________________________ Grade:________

Speech-Language Pathologist:________________________________Date: _________

Part II. Speech-language evaluation results (completed by a Speech-Language Pathologist)

Reason(s) for referral: ____
____

Student's complaint (if any): ____
____

Brief description voice (e.g., onset pattern, variations, impact on communication, student's level of awareness and motivation for possible therapy). Include relevant oral-peripheral examination and hearing screening/evaluation results.

Clinical Impressions: Rate each attribute (**1** = normal, **2** = Mild Impairment, **3** = Moderate Impairment, **4** = Severe Impairment, **5** = Profound Impairment, and **X** = Not Observed).

Quality (breathy, hoarse, harsh) ________________
Pitch (too high/ too low) ______________________
Nasal resonance (hypo-/hypernasal/mixed)________
Loudness (too soft/ too loud)___________________
Pitch breaks ________________________________
Glottal attack (hard/soft) ______________________
Maximum phonation time: /a:/=_________seconds
s/z ratio (maximum /s:/=_______seconds/maximum /z:/=_____seconds):

Muscle tension ___________
Oral resonance ___________
Phonation breaks___________
Breathing pattern__________
Abusive vocal behaviors____

Other (describe in detail):____
____
____

Signature of speech-language pathologist   Date

____   ______________________

Voice Referral Form Page 2

Student's Name ________________________________ Date _________________
Part III. To be completed by the parent or caregiver
Instructions: Please circle "yes" or "no" and provide additional information as needed.

Does your child's voice sound like that of other family members? Yes No
Has he/she had frequent ear infections? Yes No
Does he/she have a sore throat frequently? Yes No
Does he/she have allergies? Yes No
Does he/she often breathe through the mouth? Yes No
Does he/she snore while sleeping? Yes No
Does your child seem unusually tense when speaking? Yes No
Have you noticed that your child has a persistent voice problem? Yes No
If yes Does your child's voice sound hoarse? Yes No
Does your child seem short of breath when speaking? Yes No
Does your child's voice sound as though it is coming through his/her nose rather than through the mouth? Yes No
Does your child's voice sound as though he/she has a stopped-up nose? Yes No
Does your child's voice sound worse in the morning? Yes No
in the evening? Yes No
Does your child seem to speak more loudly than necessary? Yes No
Has he/she had a serious injury to the neck? Yes No
to the head? Yes No
to the chest? Yes No
Has your child had any surgery to the lips, mouth, throat, or ears? Yes No
If yes, please describe and include dates ______________________________

____
Does your child have any problems swallowing? Yes No
Does he/she often have heartburn or acid indigestion? Yes No
Does your child use tobacco products? Yes No
Does your child consume caffeinated drinks? Yes No
Does he/she consume alcoholic beverages? Yes No
Is your child in choral groups, cheerleading, or other talkative activities? Yes No
Yes No
Is your child frequently exposed to dust, mold, or air-borne chemicals? Yes No
Does he/she have any other health problems? Yes No
Describe:____________________________________
Is your child currently taking any medications? Yes No
Please list:____
When did you first notice the problem and how has his/her voice changed since then?
____
____

Parent signature ___________________________________ Date ___________________________

Voice Referral Form Page 3

Student's Name__________________________________Date ___________________

Part IV: To be completed by a licensed physician.

What is the physical condition of the patient's larynx? ______________________________________

____

____

Are there any abnormal growths/edema on any part of the vocal mechanism? Yes No

If so, please specify type and location____

____

Are there vocal fold asymmetries during phonation? Yes No

If so, please describe____

____

Is there evidence of inadequate velopharyngeal function?Yes No

If so, please describe ____

____

Is there obstruction(s) of the nasal passages? Yes No

If so, please explain____

____

Is there presence of any sinus infection or nasal allergy? Yes No

During phonation did the vocal folds exhibit normal amplitude? Yes No

Is there evidence of excessive muscular tension during phonation? Yes No

How were the vocal folds visualized during the examination? ________________________________

What is your medical diagnosis?____

____

Are there any contraindications for voice therapy? Yes No

How may the Speech-Language Pathologist best contact you for consultation if needed?

Phone #______________________E-mail________________(with parental consent)

______________________________ _____________________

Examining Physician's Signature Date

Please return this form to__________________________________at___________________(fax) or

____ (address). Thank you.

Swallowing Disorder Consultation and Referral Form

Part 1: Referral to school-based swallowing team

Student:____Date of Birth:________________

Person Requesting Consultation:___________________________Date____________________

Instructions: Please check all characteristics that apply to the student.

______ Poor upper body control
______ Repeated respiratory infections or recurring pneumonia
______ Poor oral motor functioning
______ Receives nutrition through tube feeding
______ Maintains open mouth posture
______ Vocal cord paralysis
______ Drooling
______ Nasal regurgitation
______ Cleft palate
______ Food remains in mouth after meals (pocketing)
______ Coughing/choking during meals
______ Eyes watering/tearing during mealtime
______ Unusual head/neck posturing during eating
______ Requires special diet or diet modification (i.e. baby foods, thickener, soft food only)
______ Hypersensitive gag reflex
______ Reported medical of swallowing problems
______ Weight loss/failure to thrive
______ Refusal to eat
______ Food and/or drink escaping from tracheostomy tube
______ Reflux (spitting up or vomiting)
______ Limited or unintelligible speech
______ Mealtime takes more than 30 minutes

Additional Information or Comments:

____

____

____

____

Swallowing Disorder Consultation/Referral Form

Part 2: Interdisciplinary Swallowing Consultation

Student:________________________Age:______Date of Birth:______________________

Consultation Date:_________________Physician:__________________________________

Current Diet:____

Current positioning during meal:____

Team members (name and titles):

____

Rate the child's status and history during the consultation:

	Yes	No	Unknown
Current nutritional intake adequate			
Alert and oriented			
Can swallow voluntarily (on command)			
Cough, chocking, gagging during meal			
Requires increased time to eat			
"Wet" cough or voice			
Gag reflex			
Specific food avoidance behaviors: ________________________			
Oral apraxia			
History of frequent upper respiratory infections, pneumonia			
History of cleft lip or palate			
History of dysarthria			
History of chronic low grade fever			
History of aspiration			
History of prolonged intubation or tracheostomy			
History of neurological impairment			
History of nasal or gastric feeding			
Food allergies			
Current tracheostomy			
Current nasal or gastric tube			

Swallowing Disorder Consultation/Referral Form

Part 2 continued

General Observations

Rate student on the following scales (1 being least and 3 being most), check the appropriate description, or complete the information needed.

Behavior: Cooperative: 1 2 3

Alertness: 1 2 3

Follows directions: ☐ Verbal ☐ 1 Step ☐ 2 Step ☐ Gestures

Vision: ☐ No (known) Deficit ☐ Partial Deficit ☐ Severe Deficit

Trunk: ☐ Dystonia ☐ Scoliosis ☐ Excessive Extension

Breathing Patterns: ☐ Audible inhalation ☐ Mouth breather ☐ No apparent difficulty

Head control: ☐ Adequate ☐ Poor

- ☐ Reflexive position patterns ☐ Jaw extension ☐ Grimaces/tics
- ☐ Asymmetrical ☐ Contortions ☐ Open mouth posture
- ☐ Increased tone ☐ Decreased tone
- ☐ Receives external positioning ☐ Receives manual positioning
- ☐ Excessive head/neck hyperextension

Identify any abnormal reflexes: ____

Observation of Feeding

During this assessment patient was fed________________________by __________________

Positioning______________________Equipment __________________________________

Indicate functioning by checking (+) for adequate and (-) for inadequate for each food texture.

	Liquid	Puree	Soft	Solid
Accept				
Lip Closure				
Tongue Movement				
Jaw Movement				
Swallow				
Cough				

Check any behaviors or characteristics observed during feeding:

- ☐ Drooling
- ☐ Food remnants on lips
- ☐ Oral apraxia
- ☐ Hoarse/wet voice
- ☐ Poor jaw control
- ☐ Delayed swallow
- ☐ Excessive oral secretions
- ☐ Bites tongue/lips
- ☐ Gagging
- ☐ Increase clearing throat
- ☐ Absent tongue lateralization
- ☐ Poor oral hygiene
- ☐ Tongue thrust
- ☐ Cued Swallow
- ☐ Coughing (>2x)(1x on milk)
- ☐ Fatigues easily

Swallowing Disorder Consultation/Referral Form

Part 3. Physician Input Form: Swallowing

Student's Name:____________________ Date of Birth:____________________

Dear Dr.______________________,

Your patient was observed during speech and/or occupational therapy on_______due to feeding and swallowing concerns. The clinical indication(s) of possible aspiration included:

- □ Changes in respiration rate
- □ Coughing
- □ Oral residue
- □ Facial grimacing
- □ Gagging
- □ Refusal to eat
- □ Delay in swallowing
- □ Other: ____________________________
- □ Reddening of the face
- □ Audible breathing
- □ Gurgled vocal quality
- □ Chronic low grade fever
- □ Pneumonia (current or history)
- □ Chronic, copious, clear secretions
- □ Questionable nutritional intake

To ensure safe and adequate nutrition and hydration during school we suggest the following:

- □ Special Diet:____
- □ Clinical "Bedside" Swallowing Evaluation
- □ Modified Barium Swallow/Videofluoroscopy

Comments:

Sincerely:

______________________	______________________	______________________
Speech-Language Pathologist	Occupational Therapist	Nurse
______________________	______________________	______________________
Phone #	Phone #	Phone #

I recommend the following:

- □ Modified Barium Swallow/Videofluoroscopy
- □ Interdisciplinary Swallowing Evaluation
- □ Special Diet:____
- □ Other:____
- □ Impressions:____
- □ No recommendations at this time.

Physician's Signature:_______________________________***Date:***_________________

APPENDIX G
ASSESSMENTS USED BY SPEECH-LANGUAGE PATHOLOGISTS

The following list represents the assessment protocols used by Virginia speech-language pathologists, as reported by a survey of speech-language pathology coordinators in October, 2003.

Articulation and Apraxia

Standardized Tests

Arizona Articulation Proficiency Scale-3
Bankson-Bernthal Test of Phonology (BBTOP)
Comprehensive Test of Phonological Processes (CTOPP)
GFTA2: Goldman-Fristoe Test of Articulation 2
Kaufman Test of Apraxia
Khan-Lewis Phonological Analysis
Phonological Awareness Test
Photo Articulation Test
Templin-Darley Test of Articulation
The Apraxia Profile
Weiss Comprehensive Articulation Test

Non-Standardized Measures

APP-R: Assessment of Phonological Processes
Intelligibility Measure: Checklist: 100 Word
Intelligibility Measure :Contextual Knowledge vs. Non-Contextual Knowledge
Intelligibility: Percent of Intelligible Utterances in a Speech Sample
McDonald Deep Test of Articulation

Language

Standardized Tests

Comprehensive Assessment of Spoken Language (CASL)
Clinical Evaluation of Language Fundamentals-Preschool (CELF-P)
Clinical Evaluation of Language Fundamentals: 3 and 4 (CELF-3, CELF-4)
Comprehensive Receptive-Expressive Vocabulary Test (CREVT-R)
Expressive Language Test
Expressive One Word Picture Vocabulary Test (3rd edition)
Expressive Vocabulary Test

Functional Communication Profile-R
Language Processing Test-Revised
Oral and Written Language Scales (OWLS)
Peabody Picture Vocabulary Test-3 (PPVT-3)
Preschool Language Assessment Instrument-2 (PLAI-2)
Preschool Language Scale-3 and 4
Receptive One Word Picture Vocabulary Test
SICD: Sequenced Inventory of Communication Development
Test of Auditory Comprehension of Language-3 (TACL-3)
Test of Early Language Development-3 (TELD-3)
Test of Word Finding-Revised (TWF-R)
The HELP Elementary
The Listening Test
The Word Test-Revised
Test of Language Development Intermediate: 3 (TOLD:I-3)
Test of Language Development Primary-3 (TOLD:P-3)
Test of Problem Solving-Revised (TOPS-R)
Utah Test of Language Development - Revised

Non-Standardized Measures

Boehm Test of Basic Concepts-3
Evaluating Acquired Skills in Communication-Revised (EASIC-R)
Language Sampling, including calculation of Mean Length of Utterance
Receptive-Expressive Emergent Language (REEL-2)

Voice

Buffalo Voice Profile
Wilson Checklist for Voice

Fluency

Shine Checklist for Fluency
Stocker Probe for Fluency
Stuttered Words per Minute
Stuttering Prediction Instrument
Stuttering Severity Instrument-3

Oral Motor Examination

Oral Speech Mechanism Screening Examination 3rd Edition (OSMSE-3)

APPENDIX H
FAIRFAX COUNTY PUBLIC SCHOOLS' APPROVED SPEECH-LANGUAGE ASSESSMENT MEASURES [18]

Fairfax County Public Schools has a policy of administering only those tests that have been approved by the Fairfax County Public Schools Test Approval Committee. The committee's purpose is to determine which assessment instruments are appropriate for determining strengths and weaknesses. The committee reviews tests for statistical soundness (reliability, validity, and composition of the norming sample.) Only those tests that meet the strictest criteria and meet a unique need are placed on the approved list. The Committee also determines which tests are the primary tests used for eligibility and which may be used for supplemental tests. The test review committee is comprised of representative professionals from psychology, special education, speech and language pathology, and occupational and physical therapy.

Primary List

Assessment of Phonological Process - Revised	APP-R
Boehm Test of Basic Concepts-R	Boehm-R
Boone Voice Evaluation and Observation	
Bracken Basic Concept Scale-Revised	BBCS-R
Clinical Evaluation of Language Fundamentals-Preschool	CELF-PS
Clinical Evaluation of Language Fundamentals-3	CELF-3
Comprehensive Assessment of Spoken Language	CASL
Comprehensive Test of Phonological Processing	CTOPP
Developmental Assessment for Severely Handicapped	DASH
Expressive Vocabulary Test	EVT
Fisher-Logemann Test of Articulation Competence	Fisher-Log
Goldman Fristoe Test of Articulation - 2	
Kaufman Survey of Early Academic and Language Skills	K-SEALS
Khan-Lewis Phonological Analysis-Second Edition	KLPA-2
Oral and Written Language Scales	OWLS
Peabody Picture Vocabulary Test - Third Edition	PPVT-III
Photo Articulation Test - Third Edition	PAT-3
Preschool Language Scale - 4	PLS-4
Preschool Language Scale - 4 - Spanish	PLS-4 Spanish
Sequenced Inventory of Communication Development	SICD
Templin Darley Diagnostic Test of Articulation - 2nd	Templin Dar
Test of Adolescent/Adult Word Finding	
Test of Articulation Competence	

[18] Current as of September 2004

Test of Auditory Comprehension of Language - R	TACL-R
Test of Language Competence-Expanded Edition	TLC-E
Test of Language Development - Intermediate:3	TOLD-I:3
Test of Language Development - Primary:3	TOLD-P:3
Test of Vocabulario en Imagenes Peabody	TVIP
Test of Word Knowledge	TOWK
The Word-R Test	
Utah Test of Language Development - 3	
Weiss Comprehensive Articulation Test	WCAT

Supplemental Use Only

Adolescent Test of Problem Solving	
Adolescent Word Test	
Communication Abilities Diagnostic Test	CADET
Developmental Sentence Scoring	
Evaluating Acquired Skills in Communication - R	EASIC-R
FCPS Fluency Worksheets	
Fluharty Preschool Speech & Language Screening - 2	
Interactive Checklist for Augmentative Communication	INCH
MacArthur Communicative Development Inventory	
McCarthy Scales of Children's Abilities	
McDonald Deep Test of Articulation (and screening)	
Phonological Awareness Literacy Screening for Kindergarten	PALS-K
Rice Wexler Test of Early Grammatical Impairment	
School Function Assessment	
Screening Deep Test of Articulation	
Screening Test for Developmental Apraxia of Speech	ASTAS
Stuttering Severity Index - 3	SSI-3
Stuttering Standard Interview Procedure & Recording Form	
Test of Word Finding - Second Edition	TWF-2
Wepman Auditory Discrimination Test - 2nd Edition	
Wilson Voice Profile	Wilson

APPENDIX I
ASSISTIVE TECHNOLOGY

STRATEGIES, MODIFICATIONS, ACCOMMODATIONS, AND SOLUTIONS FOR SPECIFIC ACADEMIC AND COMMUNICATION AREAS

For Persons with Hearing or Listening Difficulties

STRATEGIES, MODIFICATIONS, OR ACCOMMODATIONS OF TASKS	ASSISTIVE TECHNOLOGY SOLUTIONS
• Pen/pencil and paper • Picture communication • Sign language (for students fluent in sign language; may include using an interpreter • Dry erase board • Always face the student (do not talk while writing on the board) • Gain the students attention before speaking • Speak slowly, naturally, and clearly (do not exaggerate your lip movements) • Avoid standing where a light source can cause glare • Keep your hands away from your face when speaking • Break up long, complex sentences into simpler, shorter sentences • Repeat new vocabulary frequently, in multiple contexts • Relate topics to previously learned information • Use written announcements for assignments, due dates, exam dates, changes in schedule, special events, etc. • Provide a written outline of the lesson in advance • Use captioned films • Maximize use of visual media • Permit use of a note-taker • Use visual aids (picture symbols, diagrams, maps) to illustrate key points • Seat near the speaker • Avoid seating near heavy traffic areas • Eliminate/reduce background noises (air conditioning, audio visual equipment, outside noise)	• Flashing light for signaling phone, doorbell, fire alarm • Carbonless paper for note taking • Vibrating alert/alarms • Phone amplification • TDD/TYY phone • Closed captioning television • Hearing aid • Personal auditory trainer • Classroom sound-field auditory training • Real-time captioning of live classroom activities (lecture, discussion) • Portable word processor • Computer-aided note taking • Computer screen flash for alert signal • Voice recognition software (speech to text) for converting teacher lecture to text • Smart Board/White board, to transfer teacher written notes to student computer for viewing and printing

For Persons with Reading Difficulties
(including difficulties holding reading materials)

STRATEGIES, MODIFICATIONS, OR ACCOMMODATIONS OF TASKS	ASSISTIVE TECHNOLOGY SOLUTIONS
• Peer/adult reading assistance • High interest, low reading level materials • Increased time for completing reading assignments • Decreased length of assignment • Simplify complexity of text • Color coding (highlighting) to emphasize key points • Custom vocabulary list • Increase print size (via photocopying, computer font)	• Adapt books for page turning (e.g., page fluffers, 3-ring binders) • Slant board and book holders for positioning • Picture/symbols with text (e.g., Picture It, Writing with Symbols 2000, Pix Writer) • Color overlays • Tracking strategies (e.g., reading window, bar magnifiers) • Change text size, spacing, color, background color • Reading Pen (e.g., Quicktionary) • Audio-taped books (commercial and from Recording for the Blind and Dyslexic) • Electronic books • Talking word processing software (e.g., Write OutLoud) • Graphic word processor software(e.g., Writing with Symbols) • Text reading software (e.g., ReadPlease, Talk-to-Me, JAAWS, Kurazweil 1000, WYNN) • Software to convert text to Braille

For Persons with Writing Difficulties

(including persons with difficulties with the mechanics of writing)

STRATEGIES, MODIFICATIONS, OR ACCOMMODATIONS OF TASKS	ASSISTIVE TECHNOLOGY SOLUTIONS
• Extended time for writing tasks • Reduce length of writing assignments • Provide alternative assignment • Ensure seating position is 90° x 90° x 90° • Peer or adult scribe for note taking or dictation • Adapted desk (e.g., wheelchair accessible, tilt table, lip on side of desk, large table, standing desk, study carrel) • Reduce clutter at work space	• Pencil/pen with adaptive grip • Straps/splints, "T" holder for pencils • Name/number/date stamps • Magnetic letters and metal board (or cookie sheet) • Tactile letters • Cover parts of worksheet • Word/sentence windows • Pictures, drawings, photos • Adapted paper (e.g., raised line, highlighted lines) • Slant board • Personal dry erase board • Non-slip writing surface (e.g., dyceum) • Tape recorder for dictated responses and note taking • Use of prewritten words/phrases in the computer (can be developed by the student) • Templates • Word processing software with spelling and grammar checks • Outlining/webbing software (e.g., Inspiration, Kidspiration, Draft Builder) • Talking word processing software (e.g., Write OutLoud, IntelliTalk) • Word-prediction software (e.g., Co:Writer) • Graphic-based word processor (e.g., Writing with Symbols) • Scanner to create electronic worksheets • Adaptive computer input and output (e.g., keyguard, keyboard utilities, enlarged keyboard, touchscreen, on-screen keyboard, trackball, switch access devices, voice dictation software; screen enlargement, text or screen reading software, mouthsticks, headsticks)

For Persons with Spelling Difficulties

STRATEGIES, MODIFICATIONS, OR ACCOMMODATIONS OF TASKS	ASSISTIVE TECHNOLOGY SOLUTIONS
• Peer/adult assistance for difficult-to-spell words • Dictionary • Personal or custom dictionary • Problem word list • Reduced number of spelling words • Increased time for assignments	• Personal dry erase board for practice • Manipulative letters • Tape recorder with difficult-to-spell words recorded • Handheld spellchecker, with or without audio output • Portable word processor with built-in spellchecker (e.g.,AlphaSmart) • Word processing software with spell check feature (e.g., Microsoft Word) • Word processor with software that includes spoken spell check (e.g., Write OutLoud) • Word processor with word prediction software (e.g., Co:Writer)

For Persons with Math Difficulties

(including persons with difficulties with the mechanics of writing)

STRATEGIES, MODIFICATIONS, OR ACCOMMODATIONS OF TASKS	ASSISTIVE TECHNOLOGY SOLUTIONS
• Change format of assignment (e.g., write answers only) • Peer/adult support (e.g., reading assistance, reading aloud, scribing of the answer) • Reduce the number of problems assigned • Provide additional spacing between problems • Provide additional time to complete tasks • Increase size of print • Organize problems by complexity (e.g., separate problems by operation required)	• Abacus/math line • Enlarged worksheet • Modified paper (e.g., black line, enlarged, raised line, graph paper) • Math "Smart Chart" • Money calculator • Tactile/voice output measuring devices • Calculator, including those with spoken or written output • Calculator with large keys, large display • Calculator with special features (e.g., fraction translation) • On-screen calculator • Alternative keyboard (e.g., Intellikeys) • Software with cueing for math computation • Electronic worksheet software with adaptive input and output as needed (e.g., MathPad, Access to Math, Study Works) • Adapted measuring devices (e.g., devices with speech output, large print display, or tactile output)

APPENDIX J
SPEECH-LANGUAGE PATHOLOGY QUALIFICATION REQUIREMENTS[19]

Board of Audiology and Speech-Language Pathology

This Board licenses all speech-language pathologists who work in any setting other than public schools. Only speech-language pathologists working for state or local government (i.e., public schools) are exempted from this requirement (18VAC30-20-170. Requirements for licensure).

A “The board may grant a license to an applicant who:

1. Holds a current and unrestricted Certificate of Clinical Competence in the area in which he seeks licensure issued by the American Speech-Language-Hearing Association, certification issued by the American Board of Audiology or any other accrediting body recognized by the board. Verification of currency shall be in the form of a certified letter from a recognized accrediting body issued within six months prior to licensure; and
2. Has passed the qualifying examination from an accrediting body recognized by the board within three years preceding the date of applying for licensure, or has been actively engaged in the respective profession for which he seeks licensure for one of the past three consecutive years preceding the date of application; or

B The board may grant a license to an applicant who:

1. Holds a master's degree or its equivalent as determined by the board or a doctoral degree from a college or university whose audiology and speech-language program is regionally accredited by the American Speech-Language-Hearing Association or an equivalent accrediting body; and
2. Has passed a qualifying examination from an accrediting body recognized by the board within three years preceding the date of applying for licensure in Virginia or has been actively engaged in the respective profession for which he seeks licensure for one of the past three consecutive years preceding the date of application.

[19] These qualification requirements are current as of September 2004.

C The board may grant a license to an applicant as a school speech-language pathologist who:

1 Holds a master's degree in speech-language-pathology; and

2 Holds an endorsement in speech-language pathology from the Virginia Department of Education."

Board of Education

The Board of Education promulgates the *Regulations for Teacher Licensure*, which establish the qualification requirements for education personnel. All persons licensed must take and pass Praxis I in Virginia (basic reading and math). The following are the specific requirements for licensure in speech-language disorders:

Endorsement requirements. "The candidate must have:

1. An earned master's degree in speech-language pathology from an accredited institution; or
2. A current license in speech pathology issued by the Virginia Board of Examiners for Audiology and Speech Pathology." 8 VAC 20-80-21-450

Department of Medical Assistance Services (Medicaid)

The Department of Medical Assistance Services specifies the requirements to bill Medicaid for speech-language pathology services. These requirements must meet the standards of the Center for Medicare and Medicaid (CMS) and are included in each state's Medicaid State Plan. The following is Virginia's standard:

"(1) speech-language pathologist who has

(a) a Certificate of Clinical Competence (CCC's) from ASHA;

(b) completed the equivalent educational requirements and work experience necessary for the certificate;

(c) completed the academics program and is acquiring supervised work experience (CFY) to qualify for the certificate; OR

(2) speech-language pathologist with a current license in speech pathology issued by the Board of Audiology and Speech-Language Pathology (BASLP); OR

(3) speech-language pathologist licensed by Board of Education with an endorsement in speech-language impairments preK-12 and a Master's degree in speech-language pathology. These persons also have a license without examination from the BASLP; OR

(4) speech-language pathologist who does not meet criteria for (1), (2) or (3) above and is directly supervised by an speech-language pathologist who does meet the criteria in (1) (a) and (b), (2) or (3). The speech-language pathologist must be licensed by the Board of Education with an endorsement in speech-

language impairments preK-12, but does not hold a Master's degree in speech-language pathology."

Speech Language Assistants (Bachelor's level or Master's level speech-language pathologist without licensure) must be under the direct supervision of a licensed CCC/SLP or speech-language pathologist. The identity of the unlicensed assistant shall be disclosed to the recipient prior to treatment, and this disclosure shall be documented and made a part of the recipient's file.

Note – Board of Education Provisional or Conditional licenses do not meet provider qualifications requirements.