State of Rhode Island and Providence Plantations
DEPARTMENT OF EDUCATION
Shepard Building
255 Westminster Street
Providence, Rhode Island 02903-3400

Peter McWalters
Commissioner

June 11, 2003

Dear Colleagues:

In June 2002, Article 18 of Rhode Island General Law, charged the Rhode Island Department of Education with the task of creating rigorous criteria for the identification of students with speech and language impairments. The Rhode Island Department of Education (RIDE) Office of Special Needs organized a workgroup that included service providers, parents, administrators and others involved with the education of children with disabilities. This group utilized information from the Public /Private School Committee of the Rhode Island Speech-Language-Hearing Association (RISHA) which in 1999 had developed "Entry and Exit Criteria For Speech/Language Impairments Within the Rhode Island Educational Setting" for it's membership. The workgroup also reviewed materials from other states that had already addressed this very important area. The purpose was to develop written guidance to bring clarity and consistency across the state regarding the identification of students with speech and language disability conditions.

An **initial draft** of the document, entitled Students with Speech and Language Impairments: Meeting their Needs. A Guide for Schools and Families has been completed and will be available for your review on the RITAP website at:

www.ritap.org

Your feedback and questions are welcome. Please take the time to read this information and forward your completed product review form, questions and comments to:

Kim Carson, Educational Specialist
RIDE Office of Special Needs
255 Westminster St.
Providence, RI 02903
rid03265@ride.ri.net

Public comment will be gathered through September 2003. Informational sessions will be conducted over the summer as noted in the enclosed flyer. Please forward the 'Save the Date' information to the speech and language pathologists and others who may be interested in your district. Additional professional development will be offered in Fall 2003. School departments who are interested in serving as pilot sites for this document may contact Kim Carson at the Rhode Island Department of Education to gain further information.

Your input on this document is appreciated. The committee is looking forward to hearing from you.

Sincerely,

Thomas P. DiPaola, Ph.D.
Director, RIDE, Office of Special Needs

TD/KC/sb

State of Rhode Island and Providence Plantations
DEPARTMENT OF EDUCATION
Shepard Building
255 Westminster Street
Providence, Rhode Island 02903-3400

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Save These Dates!!!

The Rhode Island Department of Education presents
The working DRAFT of the guidebook

Students with Speech and Language Impairments Meeting Their Needs: A Guide for Schools and Families.

Session 1:
Tuesday, July 29, 2003
Where: *East Bay Collaborative*
East Providence, Rhode Island
When: *9:00 am to 11:00 am*
(maximum capacity-30)
RSVP by July 15, 2003

Session 2:
Tuesday, July 29, 2003
Where: *Rhode Island Department of Education*
Shepard Building, Room 405
Providence, Rhode Island
When: *3:00 pm to 5:00 pm*
(maximum capacity-15)
RSVP by July 15, 2003

Session 3:
August 13, 2003
Where: TBA
When: *9:00 am-11:00 am*
(maximum capacity- TBA)
RSVP by August 1, 2003

Session 4:
August 14, 2003
Where: *Southern RI Collaborative*
North Kingstown, RI
When: *9:00 am- 11:00 am*
(maximum capacity – 20)
RSVP by August 1, 2003

Fall 2003 Dates To Be Announced!!

As seating is limited please RSVP to Sheila Beliveau at 222-4600 x2305 or by email at rid23939@ride.ri.net

Telephone (401)222-4600 **Fax** (401)222-6178 **TTY** 800-745-5555 **Voice** 800-745-6575

PRODUCT REVIEW FORM

Students with Speech and Language Impairments
Meeting Their Needs
A Guide for Schools and Families

Directions: Please read the draft and respond to these questions. The review form has been divided into the following sections to replicate the manual's format: overview, introduction, chapters, appendices and general use.

A. Overview and Introduction

1. Is the purpose of the manual clearly stated in the overview and introduction?

   ( ) Yes ( ) Somewhat ( ) No

   Comments:

2. Are the basic premises rationale of this document stated clearly?

   ( ) Yes ( ) Somewhat ( ) No

   Comments:

3. Is the information provided in the Alternatives in General Education Assistance helpful to you?

   ( ) Yes ( ) Somewhat ( ) No

   Comments:

If you have any other comments on this section, please add them here:

B. Chapter Drafts

Please consider the drafts of the three chapters (Preschool, School Age, Special Populations) as you respond to these questions. For any reason, if you believe one chapter is more successful than another, please give a separate response for the appropriate chapter and be very specific in your comments.

1. Is the material well organized? Is the format clear and successful?

   ( ) Yes ( ) Somewhat ( ) No

   Comments:

2. Is the tone appropriate?

   ( ) Yes ( ) Somewhat ( ) No

   Comments:

3. Is the inclusion of teacher input forms helpful?

   ( ) Yes ( ) Somewhat ( ) No

   Comments:

4. Is the inclusion of forms re: criteria helpful?

   ( ) Yes ( ) Somewhat ( ) No

   Comments:

5. Are the state and federal regulation references useful for understanding and/or clarifying the evaluative process?

( ) Yes ( ) Somewhat ( ) No

Comments:

C. Appendices

1. Is the inclusion of suggested forms and/or documents helpful?

( ) Yes ( ) Somewhat ( ) No

2. Is the resource appendix helpful?

( ) Yes ( )Somewhat ( ) No

Additional resources to be added:

D. General Use

1. Do you feel that the manual will be useful to you personally?

( ) Yes ( ) Somewhat ( ) No

Comments:

2. If so, how would you use it?

3. If you have **ADDITIONAL COMMENTS** regarding this manual please add them here:

4. Please indicate your current position: _____

Mail to Kim Carson at RIDE, Office of Special Needs, 255 Westminster St., Providence, RI 02903, or email rid03265@ride.ri.net

RHODE ISLAND
BOARD OF REGENTS
FOR
ELEMENTARY AND SECONDARY EDUCATION

DRAFT

STUDENTS WITH SPEECH AND LANGUAGE IMPAIRMENTS MEETING THEIR NEEDS A GUIDE FOR SCHOOLS AND FAMILIES

June 2003

State of Rhode Island and Providence Plantations
Department of Elementary and Secondary Education

255 Westminster St.
Providence, RI 02903-3400
www.ridoe.net

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
Donald L. Carcieri, Governor

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RHODE ISLAND DEPARTMENT OF ELEMENTARY AND SECONDARY EDUCATION

Peter McWalters, Commissioner

Thomas P. DiPaola, Ph.D. Director
Office of Special Needs

CHILDREN WITH SPEECH AND LANGUAGE IMPAIRMENTS
MEETING THEIR NEEDS
A GUIDE FOR SCHOOLS AND FAMILIES
TABLE OF CONTENTS

page

OVERVIEW

OVERVIEW

This guidebook is the product of much hard work and dedication. It is based on Article 18 in Rhode Island General Law which charged the Rhode Island Department of Education with the task of creating rigorous criteria and procedures for identifying students with speech/language impairments. A committee comprised of practitioners, parents, administrators, higher education and state personnel worked over the course of a year reviewing materials and drafting this manual. Much of this document is reflective of the Connecticut Department of Education Guidebook for speech and language disorders. The committee is extremely grateful for the use of many parts of the guidebook. Documents from the American Speech-Language-Hearing Association (ASHA) were also used as guidance.

In 1999, the Rhode Island Speech/Hearing Association (RISHA) Public/Private Schools Committee wrote a document for RISHA entitled: " Entry and Exit Criteria for Speech/Language Impairment within the Rhode Island Educational Setting." This document and the continued hard work of many people greatly enhanced the following text. The RI Department of Education (RIDE) would like to thank the original RISHA committee who included:

Dora Arsenault, M.S.,CCC-SLP
Patricia Iafrate Bellini, M.S., CCC-SLP
Elizabeth Cavanagh, M.S.,CCC-SLP
Ellen Connery, M.S., CCC-SLP
Nancy Pariseault Cordy, M.S., SLP
Pamela Nelson Erskine, M.S., CCC-SLP
Terry Kahn, M.S., CCC-SLP
Kathleen T. Lake, M.S., CCC-SLP
Marlene Spiegel, M.S., CCC-SLP
Gail Van Gorden, M.Ed., SLP

The 2002-2003 Speech and Language Manual Committee for the RI Department of Education members were:

Patricia Iafrate Bellini, M.S., CCC-SLP, Central Falls School Department
Ellen Connery, M.S., CCC-SLP, South Kingstown School Department
Elizabeth Connors, M.S., CCC-SLP University of Rhode Island
Nancy Pariseault Cordy, M.S., SLP, South Kingstown School Department
Anne DeFanti, M.Ed, Director of Special Education, Barrington School Department
Thomas DiPaola, Ph.D., Director, Office of Special Needs, RI Department of Education
Kimberly R. Rothwell-Carson, M.Ed., RI Department of Education
Debbie Spaziano, RIPIN, Intake Coordinator, RI Parent Information Network
Susan Wood, Ph.D., RI Department of Education

They are to be commended for their hard work and dedication.

INTRODUCTION

INTRODUCTION

The development of competent speech and language skills is an important part of a child's life including the educational program of the child. Before we learn to read and write, we learn to communicate. The importance of speech and language skills cannot be understated in the ability of a child to access the general curriculum and other aspects of his or her educational setting. This guide is an attempt to provide clarity in the provision of appropriate services to these children enabling them to have access to the general education curriculum through the development of speech and language skills. This guide is created for school personnel and families. It defines educationally significant speech/language impairments, eligibility, and exit criteria. It does not provide a list of commercial tests.

This document is a guide to factors that need to be considered before making any eligibility determinations for children in the educational setting. This guide is intended to provide information for school personnel and parents about appropriate referrals, assessment, identification, and dismissal. The intent is to provide more uniform standards relative to the identification of and the provision of services to children who present with educationally significant speech and language impairments. It is not intended to supercede state, federal or district policy or procedure. Although, this guide is closely linked to state and federal regulations governing special education, it goes beyond these, to include best practices. Clinical judgment may necessitate modifications to these guidelines for specific child circumstances. The guide should also be seen as a way to enhance communication among members of the evaluation team and parents. It provides clarity and continuity among school-based speech and language pathologists across the state.

This guide addresses preschool population, school-age population, and special considerations for certain children. The core of the document which is the school-age population section is divided into four types of communicating disorders. Each piece has a definition, eligibility criteria and associated forms. An appendix of supplemental resources is found at the end of the document.

This guidebook does not provide any formula for rating the severity of communication impairments, determining the length or frequency of intervention sessions for children with particular communication assessment profiles, or selecting the type(s) of service delivery model(s). A variety of factors, such as the child's age, type of communication impairment, attention span, as well as the intervention goals, presence of other impairments and the availability of other support systems influence those decisions.

Adapted from Guidelines for Speech and Language Programs. Volume II
Determining Eligibility for Special Education Speech and Language Services, Working Draft. Connecticut State Department of Education 1999.

Basic Premises and Rationale

Implementation of the eligibility criteria is based on the following premises. These were developed from current professional writings and experience, to address the concerns described in the introduction.

1. When communication concerns have been raised about a child, it is vital for the Speech and Language Pathologist (SLP) to be directly involved in the Teacher Support Team (TST) process, the Evaluation Team (ET) meeting and the eligibility ET meeting. This is recommended in order to prevent inappropriate referrals for special education speech-language evaluations, inappropriate recommendations about the content of these evaluations and inappropriate eligibility decisions.

2. In-depth case history information is crucial to the development of an individualized assessment battery, and the valid interpretation of assessment results. If existing information does not address all areas or is not sufficiently recent, supplemental information that is current must be assembled. Useful information may come from a variety of sources or records available from the school, family or community service providers.

3. **Communication is a complex process and communicative competence may vary across time, settings and communication partners. Therefore, eligibility for speech and language services should be determined based on information gathered about a child's communication strengths and weaknesses over time and from a variety of sources and/or settings. Avoiding inappropriate special education classification requires administrative support for time in the Speech and Language Pathologist (SLP) schedule to complete comprehensive evaluations in a timely manner.**

4. Individuals with Disabilities Act (IDEA) requires that children be evaluated in all areas related to a suspected disability. As a result of a speech and language evaluation, the SLP should be able to make statements about the child's comprehension and production in all areas of communication. However, this does not mean that every area has to be tested. On the other hand, the evaluation should be sufficiently focused to fully address the concerns that prompted the referral for evaluation. A focused evaluation is important in the cost-effective use of personnel.

5. **No child should be considered eligible for speech and language services solely on the basis of standardized test results.** Standardized tests tend to examine discrete skills in a decontextualized manner (i.e., away from natural communicative environments). Furthermore, not all children are suitable candidates for standardized tests. Appropriate standardized tests may not be available to tap all areas of concern about communication. Test norms may not be suitable for particular populations, such as children acquiring English as a second language. A comprehensive assessment should include an appropriate balance of formal and descriptive assessment instruments and procedures to identify areas of strength and weakness and to examine how the child functions communicatively in the environments in which he or she participates.

6. A number of factors, such as environmental support, attitudes and motivation, may mitigate the impact of a communication impairment. Therefore, **if a child scores poorly on standardized tests, but meets communicative expectations on**

functional measures (e.g., descriptive instruments such as a speech and/or language sample, discourse and/or narrative analysis, curriculum-based assessments, observations in natural settings, grade level, district wide or state performance standards), **the child's difficulties cannot be said to be adversely affecting educational performance. A child with such a profile is not eligible for speech and language services as special education or a related service**. This child's communication development and educational performance should be monitored or non-special education intervention provided. Conversely, **if a child performs poorly on functional measures, but scores well on standardized tests, the child may be eligible for speech and language services as special education or a related service.** Such a child may not be able to apply the specific communication skills demonstrated on the standardized measures outside the test environment. However before an eligibility determination is made, the reasons for the poorer functional performance must be carefully probed.

7. The relationship between cognitive and communication development is complex. Some children exhibit communication skills that either exceed or are below what would be expected based on cognitive measures. **Eligibility for special education and related services may not be determined on the basis of a predetermined discrepancy between language and intellectual scores. However, appropriate cognitive measures may be used to support the findings of the speech-language evaluation.**

8. **The speech-language evaluation report** should be concise, yet sufficiently comprehensive to facilitate eligibility decision making and to plan an appropriate intervention program if the child needs services. It ***must*** **address the presence or absence of any adverse impact of the child's communication impairment(s) on his or her educational performance**. If an adverse effect is determined, it must be described in sufficient detail to enable the ET to justify a decision about eligibility for special education services.

9. **Determining that a child is eligible for special education speech and language services does not automatically mean that the SLP must be the sole, or even the primary, provider of direct services to that child**. The school SLP may direct or provide consultative/indirect speech and language services. However, the SLP has an ethical responsibility for overseeing the design, implementation and supervision of such speech and language services.

Adapted from Guidelines for Speech and Language Program, Volume II
Determining Eligibility for Special Education Speech and Language Services Working Draft.
Connecticut State Department of Education 1999.

Alternatives in General Education Assistance

Rhode Island general law, Article 28, requires that alternative procedures and programs in regular education be explored and implemented, where appropriate, and can be prior to a child being referred to special education. Activities undertaken to address this law have been referred to as the Teacher Support Team or TST. Misunderstandings about the purpose and value of this phase have often resulted in it being no more than a short stop on the way to a special education referral, but should be viewed as an early intervention process. Since the TST process is critical in distinguishing children who may benefit from regular education interventions from children who may need speech and language services as special education or a related service, it should be carried out with careful planning.

Many communication problems can be resolved or sufficiently mitigated without a referral to special education when appropriate educational accommodations, modifications in curriculum and instruction, socio-communicative behavioral plans, or regular education remedial programs are implemented. When effectively executed, the early intervention has three important outcomes. First, and most important, children who need additional support promptly get it. Second, unnecessary referrals to special education, which result in inefficient use of personnel time and paperwork burdens that translate into dollars, are avoided. Third, when a child truly needs to be evaluated for special education eligibility, information gathered by the TST assists the ET in planning and conducting a more focused evaluation. This makes it easier to complete the evaluation within or before mandated deadlines, reducing pressure on personnel and facilitating the prompt implementation of necessary programs and services.

When a referral to special education is made, it is important to determine whether:

(a) the referring party is seeking some attention to a child's communication development that should be addressed by the TST (e.g., mild articulation difficulties, occasionally hesitant speech);or
(b) the child in question has an already identified condition (e.g., Down Syndrome, autism, traumatic brain injury) that has a strong likelihood of resulting in determination of the presence of a disability requiring speech and language services as special education or as a related service.

School personnel should be aware that not all children with conditions such as cerebral palsy, hearing impairment or central auditory processing problems need special education and related services to address their educational needs. Section 504 of the Rehabilitation Act or other regular education services may be appropriate.

In order for TST communication strategies to be effectively implemented, the SLP needs to be involved in their development and monitoring. Although the TST process is a regular education initiative, the team must ensure the involvement of the SLP and others with knowledge about children's communication development. School personnel need to develop an understanding of the dual roles the SLPs play and routinely consider their involvement in the TST process. At the same time, SLPs need to be conscientious about assisting the TST in clarifying teachers' concerns and identifying and monitoring the effectiveness of early intervention strategies. For children from culturally and linguistically diverse backgrounds, English as a Second Language (ESL) teachers should be part of the team. Early childhood educators can also be helpful in addressing concerns about preschool and early elementary grade children.

The building principal plays a significant role in ensuring that sufficient time is available for the SLP, teachers and families to collaborate effectively. Regularly scheduled TST meetings or grade/team meetings facilitate this process. The SLP will also need time in his/her schedule to observe or converse with the child in order to help monitor the effectiveness of particular strategies.

Recommended Procedures

The following procedures are recommended for implementing the TST process when there are concerns about a child's communication development. Addressing communication issues is not just the province of teachers and SLPs. Other school professionals, such as teachers in general education classrooms, early childhood, Title1, bilingual or ESL and remedial instruction programs, as well as school counselors, school nurse teachers, psychologists and social workers, will often have important roles to play in addressing communication concerns about a child (e.g., observing learning styles, recommending learning strategies, gathering case history information, coordinating class schedule changes, coordinating referrals to other professionals or agencies).

SLPs and school personnel are often under the impression that the implementation of the TST process is vastly different for children from culturally and linguistically diverse backgrounds. In fact, the basic procedures used for these children require only some modifications of those used in addressing the needs of children who are native English speakers. Those modifications are highlighted in italics.

1. Help the teacher clarify the nature of his/her concerns about the child's communication abilities and the impact of perceived communication deficits in the classroom and other relevant settings.

   Collect preliminary information about language dominance and proficiency by reviewing the results of the Home Language Survey and related language proficiency testing in listening, speaking, reading and writing in the child's native language (L1) and English. The status of L1 should be clarified in collaboration with trained personnel in the field of English as a Second Language (ESL) or Bilingual Education.

2. Review with the teacher his/her efforts to adapt curriculum instruction or activities for the child and the effects of those efforts (e.g., using portfolios, progress reports, performance on district or statewide tests and anecdotal information).

3. Seek information from parents to determine what, if any, concerns they have about their child, whether they share the teacher's concerns. Gather relevant background information about the child's family and developmental, communication, social, educational and health-related experiences.

4. Seek comparisons from the teacher and parents about the child's communication abilities relative to peers of the same age who have had similar experiences.
   Seek comparisons from the teacher and parents about the child's communication abilities relative to peers of the same age and language/dialect group who have had similar experiences.

5. Gather information about the child's receptive and expressive language proficiency in a variety of settings with a variety of communication partners. Determine in which communication domain (listening, speaking, reading, writing) the child exhibits communication difficulties.

   Gather information about the child's receptive and expressive language/dialect dominance and proficiency in both the native language/dialect and English in a variety of settings with a variety of communication partners. Determine in which communication domain (listening, speaking, reading, writing) and in which language(s)/dialect(s) the child exhibits communication difficulties. Determine the influence of normal second language/dialect acquisition processes on the child's native and English receptive and expressive language/dialect proficiency.

6. Review attendance and health records for information related to hearing and vision screening and any medical conditions that could affect communication development.

7. Review other educational records, (e.g., preschool, cumulative) to document any previous educational concerns related to communication development.

8. Generate possible early interventions, including any referrals to other professionals or agencies (e.g., ENT for hoarseness of two weeks duration).

9. Prioritize suggested early interventions.

10. Select early intervention(s).

11. Monitor the effectiveness of the selected early intervention(s).

12. Revise early intervention(s) or select additional or alternative early intervention(s).

13. Monitor the effectiveness of revised/new early interventions.

14. Compare the child's progress to that of other children of the same age, *language/dialect group* and background.

15. If, after systematically applied interventions in regular education, the child's communication problem(s) resolve, discontinue the early intervention process.

16. If, after systematically applied interventions in regular education, the child continues to exhibit communication problems that are unrelated to normal characteristics of language acquisition, initiate a referral to special education.

    If, after systematically applied interventions in general education, the child continues to exhibit communication problems in both the native language/dialect and English that are unrelated to normal characteristics of second language/dialect acquisition, a referral to special education may e indicated.

Adapted from Guidelines for Speech and Language Programs, Volume II. Determining Eligibility for Special Education Speech and Language Services, Working Draft, Connecticut State Department of Education 1999.

PRESCHOOL REFERRAL, IDENTIFICATION, AND EXIT PROCEDURES

This chapter addresses the preschool age population. Research confirms that language has an essential impact on the rapid brain development that occurs during the first years of life. It is important that young children have opportunities to learn and practice communication skills and to acquire language skills in order to obtain information and express themselves in a variety of ways and settings (RI Early Leaning Standards-Final Draft).

It is important for the SLP to participate at the referral meeting when a determination as to the need for evaluation is made.

A hearing screening should be completed prior to an evaluation, due to the high incidence of fluctuating or permanent hearing loss secondary to conditions such as otitis media, in this population.

A thorough medical and family history should be obtained including home and classroom performance, as well as the results of any prior assessments or early interventions.

There are several standardized preschool speech and language assessments and scales that can be administered as part of the evaluation process. The evaluation should include a language sample and observation of how the child communicates in various environments including observation of social or interpersonal communication.

In addition to the 13 eligibility categories, children in this age group may qualify under the developmental delay category. This developmental delay can exist in several areas of development including communication, which includes receptive and expressive language. To be eligible as a developmentally delayed the child must be between the ages of three-five years and must have a 25% delay and/or a score equal to or greater than 2 standard deviations below the mean in one area of development or a score greater than 1.5 standard deviations below the mean in 2 areas of development. (RI Regulations 300.)(b)(1))

Determination of eligibility due to speech production problems can be complicated with preschoolers because of age-appropriate speech errors. When deciding if a child is in need of services for speech production, the team should consider the following factors:

- One or more consistent nondevelopmental phonemic errors or phonological processes;
- Unintelligibility to significant members of the child's home and/or school environment;
- Articulation or phonological processes/patterns that cause significant concerns to the child, which may limit social, emotional, or academic functioning.

Refer to the Rhode Island Regulations Governing the Education of Children with Disabilities (Dec.2000) for further clarification of evaluation procedures. Another excellent source of information is the draft Rhode Island Early Learning Standards, Final Draft.

SCHOOL AGE REFERRAL AND IDENTIFICATION PROCEDURES

This chapter addresses the school age population of ages 5-21. Initial evaluation procedures are regulatory and therefore have certain requirements. Within 10 days of the receipt of a referral for special education services, the Evaluation Team including the parent must meet to determine if a special education evaluation is needed. The initial evaluation shall commence no later than 10 school days after the receipt of parental consent to conduct the evaluation. Within 45 school days of consent to evaluate, the child must be evaluated and a written report of the evaluation team is written.

The Eligibility Evaluation

The outcome of the initial Evaluation Team meeting does not always have to be a special education speech and language evaluation. Prior to determining whether such an evaluation is warranted, the team needs to:

- Ensure the presence of the SLP at the meeting and;
- Discuss the concerns that prompted the referral,

If the SLP was not involved in the general education TST process, the Evaluation Team (ET) should determine whether further attempts to resolve the problem might be more successful with such involvement.

Purpose of the Evaluation

The purpose of the evaluation is to describe the child's communication behavior, including the nature and scope of any speech-language impairment and any adverse effect on educational performance, in order to determine his/her eligibility for special education and related services. A child must be evaluated in all areas of the suspected disability, which for speech, language or hearing disorder includes an audiological assessment administered by a licensed audiologist and/or a speech and language assessment administered by a speech/language pathologist.

IDEA '97 specifies the following circumstances that require an evaluation of a child:

1. prior to the initial provision of special education and related services [20 U.S.C.§ (a)(1)(A)];
2. at least every three years, or if conditions warrant a reevaluation, or if the teacher or parents request a reevaluation [20 U.S.C. § (a)(2)(A)]; and
3. before determining that a child no longer has a disability [20 U.S.C. § ©(5)], except when termination of eligibility is due to graduation with a regular high school diploma or the child exceeding age eligibility for a free appropriate public education. [34 CFR § 300.534 ©(2)]

The decision that a child in an educational setting is in need of speech and language services is a decision under the Individuals with Disabilities Act (IDEA 1997). This service can either be a special education service or a related service. The IDEA includes speech and language impairments which adversely affect educational performance as one of the types of disabilities requiring special education and related services [20 USC., Sec. 1401(a)(1): 34 CFE, 300.7(a)(1) and 34 CFR, 300.7(b)(11)]. For purposes of IDEA eligibility, speech and language impairments qualify as a disability when:

1. that impairment has an adverse effect on educational performance [34 CFE, 300.7©(11)],

and

2. a child's communication skills are so impaired that he/she requires specially designed instruction to address his or her educationally related communication needs. [20 USC, 1402(3)(A) and 1402(25)].

If the child has difficulties that do not "adversely impact the child's educational performance," the child does not qualify for services under IDEA. IDEA stipulates that provision of services under IDEA is to help children progress in the general education curriculum.

The Rhode Island Regulations Governing the Education of Children with Disabilities (Dec. 14, 2000) defines speech and language impairment as a communication disorder, such as stuttering, impaired articulation, language impairment or a voice impairment, that adversely affects a child's educational performance [300.7(11)]. Speech and Language services can be a related service or a special education service under the current Rhode Island regulations. If determined eligible, an IEP meeting is conducted within 15 days of eligibility. Refer to Rhode Island Regulations Governing the Education of Children with Disabilities (December 2000) for further information.

Language and Cognition

IDEA requires local education agencies to "use technically sound instruments that may assess the relative contribution of cognitive and behavioral factors, in addition to physical or developmental factors' in conducting the eligibility evaluation. Further it requires that a child be assessed "in all areas related to a suspected disability, including, if appropriate, health, vision, hearing, social and emotional status, *general intelligence* (italics added for emphasis), academic performance, communicative status, and motor abilities."
The practice of excluding a child from eligibility for speech and language services when language and cognitive scores are commensurate has come under intensive scrutiny in recent years for a number of reasons, including the following:

1. "Language problems co-occur with weaknesses in other symbolic skills too frequently to be coincidental but with insufficient predictability for cognitive factors to be considered central to the disorder" (Nelson, 1993,p.97).
2. The stability of the language-cognitive relationship varies over time. Cole et al's study (1992) of 125 preschool children over four years found "substantial changes" in the relationship, as well as great fluctuations on children's eligibility for service when it was based on a discrepancy model (p.131).
3. While the constructs measured on language and intelligence tests share variance in the verbal domain, the extent of that relationship varies greatly from test to test (Secord, 1992). The closer the match between the tasks on the tests being compared, the higher will be their correlation.
4. The confounding role of language is presumed by some to be controlled for by using performance or nonverbal measures of intelligence. However, Sattler (1988) notes that "the Verbal Scale subtests involve visualization or other nonverbal processes" (p. 172) and "the Performance Scale subtests involve language activity in the form of overt verbal responses or mediating symbolic activity" (p. 173). He concludes that "there are no *pure tests* of either verbal or nonverbal ability on the WISC-R and other Wechsler scales" (p.173). Studies have shown that children with language impairment exhibit difficulty with tasks on nonverbal intelligence related to spatial rotation that require anticipatory imagery, nonverbal analogies, and manual-motor skills which could affect their nonverbal IQ scores. (See Swisher et al, 1994 for a review.)
5. Intelligence measures are not a meaningful gauge of whether or not a child may benefit from language services. Cole et al (1990) found that children whose cognitive levels were commensurate with their language levels, as well as children whose cognitive levels exceeded their language levels, benefited from language intervention.

Decisions to make direct comparisons between language and cognitive performance when interpreting assessment results stem from: (1) a misunderstanding of the requirements of IDEA for identifying a child with a speech-language disability, and (2) the misapplication of IDEA requirements for the identification of a specific learning disability to children with communication impairments. **IDEA does not require determination of a significant discrepancy to be identified with a speech-language disability**. In fact, the following statements were included in a response by the Office of Special Education Programs to an inquiry:

"…any guideline or other policy which, as written or implemented, acts as a categorical denial of related services to all children whose language or motoric skills are as delayed as their general developmental level, would be inconsistent with the requirements of the IDEA.

Such a categorical limitation on services would conflict with the IDEA requirement that the services to be included in each child's IEP be determined on an individual basis." [Rainforth, 17 EHLR 222]

It is the position of the guidebook that **determining eligibility for special education speech and language services should not be made solely on the basis of a discrepancy between language and cognitive measures. However, appropriate cognitive assessment may be used to supplement or support the findings of the speech-language evaluation.** Collaboration between the school psychologist and the SLP in planning and implementing appropriate communication and cognitive assessments and interpreting their results will facilitate decisions about eligibility for speech and language services as special education or related services.

Recommended Procedures

The sections in this chapter address various speech and language disorders by categories: The worksheets on the following pages are designed to assist SLPs in summarizing their evaluation findings in a way that facilitates providing information to the ET for eligibility determination. There are forms for language, phonology, fluency and voice. These forms are not mandated. However, it is hoped that they will become useful in organizing information to clarify the eligibility decision. Districts are encouraged to experiment with these forms and provide feedback to RIDE on how they are using them and/or how they have adapted them.

Upon completion of the assessment:

1. Fill out the relevant worksheets in this section. They may be completed using the codes provided, or some alternate system that is convenient. However, if a different method is used for recording information, it should be consistent across the district. A written description of the alternate system should be prepared so that all SLPs in the district follow the same system for entering information and so that school personnel in a district to which a child transfers can interpret the information.

2. Attach the worksheets to the special education evaluation team report.

3. Present the information on the evaluation summary worksheet(s) and the Special Education Speech-Language Evaluation to the Evaluation Team. The Evaluation Team is responsible for making the eligibility determination.

A. Articulation/Phonology

An articulation or phonological disorder is, "the atypical production of speech sounds characterized by substitutions, omissions, additions or distortions that may interfere with intelligibility" (ASHA, 1993a, p. 40). Children with phonological disorders exhibit error patterns in the application of phonological rules for speech (ASHA, 1997e).

Accurate production of speech sounds relies on the interplay of phonemic, phonological, and oral-motor systems.

PHONEMIC	PHONOLOGICAL	ORAL-MOTOR
Speech sounds. Categorized by vowels and by manner, place, and voicing.	The rules for the sound system of the language, including the set of phonemes with allowable combination and pattern modifications.	Oral motor range, strength, and mobility. Planning, sequencing, and co-articulation of speech movements.

Oral-Motor Considerations

Eligibility criteria regarding speech sound production typically consider the age of mastery of various speech sounds. This basically puts the /l/ sound at first grade, and /s/, /z/, /sh/, /ch/, /j/ and /r/ at second grade or even third grade, so that children displaying these may not be eligible for services until then. Children with these age-appropriate errors may have motor-based speech disorders. Unfortunately, waiting for them to reach an age beyond the developmental level for these sounds can lead to a denial of needed services.

When there is a motor-based speech disorder, the child should be eligible at any age to receive services, regardless of the developmental level of speech sound production. The decision should be based on an oral-motor exam that assesses the structure and function of the speech system, intelligibility of speech, and the impact on educational performance.

ELIGIBILITY CRITERIA

A child must meet one or more of the following criteria to be eligible for Speech Therapy:

1. One or more consistent non-developmental sound errors.
2. The child is unintelligible to significant members of his/her environment.
3. The child's articulation patterns cause significant concern to himself/herself, which may limit social, emotional or academic functioning.

Children who are English Language Learners (ELL) will be considered on an individual basis. Individuals whose phonological patterns reflect cultural or regional dialects are not considered to have communication disorders and thus are not candidates for therapy. For an ELL child to be deemed speech impaired he or she must exhibit an articulation disorder in both the first and second languages.

Some articulation/phonology considerations when evaluating ELL children are:

- Dialect variations within language groups (e.g., Mexican, Puerto Rican, Cuban dialects of Spanish);
- Absence of sounds of native language in English or in the same position in English and vice versa (e.g., deletion of final consonants in English related to only five consonants appearing in word final position in Spanish; deletion of final consonant clusters in English as a function of their absence in Japanese);
- Effect on sound discrimination of meaningful sound differences in one language not being meaningful in another;
- Influence of articulation features of native language sounds on production of English sounds;
- Influence of dialectical variations on physical parameters of sounds (e.g., lengthening or nasalizing of vowel preceding a final consonant in African American English when the consonant is deleted);
- Historical linguistic influences on development of African American phonology; and
- The child's possible embarrassment about how he/she sounds in English.

The following pages are a guide to help systematically observe, gather and record information to assess a child and determine eligibility for services. These forms are not mandated; however, it is hoped that they will help organize information to present to the Evaluation Team including the parent.

DETERMINING INTELLIGIBILITY

A speech/language sample not only allows the SLP to assess rate of speech, it also allows the SLP to determine a child's intelligibility. Calculating overall intelligibility is necessary when considering the need for treatment, identifying factors that contribute to poor intelligibility, selecting treatment goals, recording baseline information, and monitoring the effects to treatment over time.

The speech/language sample used to calculate intelligibility must be an adequate, representative sample of the child's speech. You may want to audiotape or videotape the sample for analysis and future comparison. For some children, you may want to obtain representative samples from several different environments (classroom, home, recess, etc.).

As you assess the child's speech-language sample, realize that there are many factors that can negatively influence intelligibility. These factors include:

- The number of sound errors. Generally, the greater the number of sound errors, the poorer the intelligibility.
- The type of sound errors. For example, omissions and additions sometimes result in poorer intelligibility than substitutions or distortions.
- Inconsistency of errors
- Vowel errors
- The rate of speech, especially if it is excessively slow or fast.
- Atypical prosodic characteristics of speech, such as abnormal intonation or stress.
- The length and linguistic complexity of the words and utterances used.
- Insufficient vocal intensity.
- Dysfluencies, particularly severe dysfluencies that disrupt the context.
- The lack of gestures or other paralinguistic cues that assist understanding.
- The testing environment (such as at home versus in the clinic).
- The child's anxiety about the testing situation
- The child's lack of familiarity with the stimulus materials.
- The child's level of fatigue. Fatigue particularly affects very young children or children with neurological disorders.
- The SLPs ability to understand "less intelligible" speech.
- The SLPs familiarity with the child and the speaking context.

In most cases, there are many factors: child related, SLP related and/or, environment related that influence overall intelligibility. This requires the SLP to:

- Identify factors that affect intelligibility.
- View the intelligibility rating as being approximate.
- Take more than one speech-language sample in different environments.
- Obtain a representative sample of speech.

SLPs should:

- Use a high quality tape, and a tape recorder with an external microphone.
- Avoid stimulus items that tend to elicit play rather than talk (blocks, doll house).
- Use open-ended stimuli ("Tell me about the car.")
- Consider reporting intelligibility in ranges, especially when it varies.
- Compare intelligibility on word-by-word and utterance-by-utterance basis. For some children, the results will be similar. For others, results may be considerably different. (i.e A child whose loudness and articulation deteriorate in longer utterances may have many intelligible words, but the end of utterances may be unintelligible.)

Shipley, K.G. and McAfee, J.G. Assessment in Speech-Language Pathology: A Resource Manual. SanDiego: Singular Publishing Group, 1992, pp. 109-111.

Scoring Guide for Summary of Evaluation Finding
CRITERIA FOR ARTICULATION/PHONOLOGY DISABILITY

Impairment code: + = yes; - = no; N/A = Not applicable

Evidence code: 1 = speech sample, 2 = contextual probe, 3 = structured observation, 4 = classroom work samples, 5 = other curriculum/ academic results, 6 = standardized test(s)* 7 = teacher report/interview, 8 = child report/interview, 9 = parent report/interview

NOTE: #'s 7, 8, and 9 are not sufficient evidence by themselves, of a weakness or impairment. They must be supported by objective data.

**When standardized tests are used the threshold of impairment is 1.5 SD below the mean of the test. The threshold for other procedures will vary according to the procedure selected.*

Adverse Effect on Educational Performance Code:

1 = oral participation, 2 = classroom listening, 3= oral reading, 4 = spelling, 5 = content subjects, 6 = social-emotional adjustment or behavior, 7 = reaction of self, peers, teachers, parents.

NOTE: #'s 6 and 7 are sufficient evidence, by themselves, of an adverse educational impact.

ELIGIBILITY: The child exhibits impairments in connected speech** in both of the following areas, with accompanying adverse effects on educational performance in each area.

(1) SOUND PRODUCTION (articulation/phonological processes)
(2) OVERALL INTELLLIGIBILITY

**If the child does not use connected speech, judge intelligibility at the typical length of utterance.

The impairment(s) must not be related primarily to limited exposure to communication building experiences, the normal process of acquiring English as a second language, or dialect usage.

Guidelines for Speech and Language Programs, Volume II (pg. 44)
Determining Eligibility for Special Education Speech and Language Services, Working Draft.
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[Insert School District Name]

Summary of Evaluation Findings
Phonology

NOTE: *When completed, this worksheet becomes part of the child's education record.*

Date _____ SLP _____

Child _____ DOB _____

School _____ Grade _____

Teacher _____

Record areas assessed. The assessment should reflect areas of concern described in the referral and those that arise during the evaluation. Areas not assessed should be marked NA. Remember that eligibility may not be determined solely on the basis of standardized tests.

Phonology Area	Impairment	Evidence	Adverse Effect on Educational Performance
SOUND PRODUCTION			
Articulation			
Isolation			
Syllables*			
Words*			
Spontaneous speech* (including babbling, jargon, as appropriate)			
Oral Reading in initial, medial, final positions, blends, vowels			

* *in initial, medial, final positions, blends, vowels*

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[Insert School District Name]

Child _____ Date _____

Phonology Area	Impairment	Evidence	Adverse Effect on Educational Performance
Phonological Processes			
Final Consonant Deletion			
Cluster Reduction			
Weak Syllable Deletion			
Glottal Replacement			
Labial Assimilation			
Alveolar Assimilation			
Velar Assimilation			
Prevocalic Voicing			
Final Consonant Devoicing			
Affrication			
Fronting			
Gliding of Fricatives			
Gliding of Liquids			
Vocalization			
Stopping			
Other			
STIMULABILITY			
Sounds			
Syllables			
Words			
Spontaneous Speech			

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[Insert School District Name]

Child _____ Date _____

Phonology Area	Impairment	Evidence	Adverse Effect on Educational Performance
OVERALL INTELLIGIBILITY			
Messages Understood by Familiar Partners			
Messages Understood By Unfamiliar Partners			
Messages Understood In Context			
Messages Understood Out of Context			
Manner of Production Distracts from Content			
AUDITORY DISCRIMINATION			
ORAL MECHANISM			
Structure			
Function			

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Teacher Input: Articulation

Child:_____ Date: _____

Teacher:_____Grade/Program:_____

Your observations of the above child's speech will help determine if he or she has an articulation problem which adversely affects educational performance. Please answer all questions and return this form to _____.

	Yes	No
1. Is this child's intelligibility reduced (due to articulation errors) to the extent that you find it difficult to understand what she or he says at times?	___	___
If yes, check appropriate description:		
(a) _____ occasional difficulty		
(b) _____ frequent difficulty		
(c) _____ considerable difficulty		
2. Does this child make errors in writing (spelling) on the same sound symbols that he or she misarticulates?	___	___
3. Does this child misarticulate the same sounds when reading aloud as when speaking?	___	___
4. Does the child appear frustrated when speaking because of his or her articulation errors?	___	___
5. Does the child appear to avoid speaking in class because of his or her articulation errors?	___	___
6. Does the child have problems reading or with readiness activities because of articulation errors?	___	___
7. Is the child having problems discriminating sounds?		
8. Do the articulation errors seem to interfere with his or her social interactions?	___	___
9. Has the child ever indicated that he or she is having problems producing sounds when speaking or shown concern about his or her sound production?	___	___
10. Has this child ever corrected any of his or her own articulation errors?	___	___
11. Does this child's speech problem distract listeners from what he or she is saying?	___	___

Additional observations/comments: _____

It is my opinion that these behaviors:

___ Do not interfere with the child's participation in the educational setting.

___ Do interfere with the child's participation in the Educational setting.

_____ Date

_____ Classroom Teacher's Signature

Adapted from Speech and Language Services in Michigan: Suggestions for Identification, Delivery or Services and Exit Criteria, Edited by Elizabeth Loring Lockwood and Kathleen Pistano. East Lansing: The Michigan Speech-Language-Hearing Association, 1991. Used with permission.

B. Voice

"A voice disorder is characterized by the abnormal production and/or absence of vocal quality, pitch, loudness, resonance, or duration, which is inappropriate for an individual's age and/or sex" (ASHA, 1993a, p.40). A voice disorder interferes with communication; draws unfavorable attention; adversely affects the speaker or the listener; or is inappropriate to the age, sex or culture of the individual. Voice quality may be affected by either organic or functional factors. Intervention for children with voice disorders is conducted to achieve improved voice production, coordination of respiration and laryngeal valving to allow for functional oral communication (Andrews, 1991; ASHA, 1997e).

All children with voice disorders must be examined by a physician, preferably in a specialty appropriate to the presenting complaint. The examination may occur before or after the voice evaluation by the speech-language pathologist (ASHA, 1997e).

Children affected by resonance and airflow deficits are treated to achieve functional communication. Structural deficits related to these deficits include congenital palatal insufficiency and/or velopharyngeal insufficiency or incompetence. Other resonance and airflow deficits include neuromuscular disorders, faulty learning, or sound specific velopharyngeal incompetence.

Consideration must be given to age, gender, home environment, and perception of the problem by the child, parents, speech-language pathologist, and other school personnel or medical specialists.

A child is not eligible for special education and related services when vocal characteristics:

1. are the result of temporary physical factors such as allergies, colds, abnormal tonsils or adenoids, short-term vocal abuse or misuse.

2. are the result of regional, dialectic or cultural differences.

3. do not adversely effect the individual's ability to communicate in school learning and/or other social situations.

Eligibility Criteria

With appropriate medical/Ear Nose Throat (ENT) doctor's recommendations and:

1. A child who presents mild vocal deviations will be considered on an individual basis. The child's chronological/mental age, gender, overall impact on communication, motivation, family support, and previous therapeutic or medical experiences should be considered. This may include voice difference including hoarseness, nasality denasality or intensity which is inappropriate for the child's age and is of essential concern.

2. A child who demonstrates moderate-severe abnormal voice characteristics, which interfere with social, emotional, academic and/or vocational functioning and are not related to second language acquisition. The voice is not appropriate for the

age or sex of the child. It is distracting to most listeners and is of educational concern. The child would be eligible for direct speech therapy.

3. A child who presents with a voice difference which is of concern to the parent, teacher or child would qualify for direct speech therapy if the voice is distinctly abnormal for the age and sex of the child and

4. effective verbal communication is limited and interferes with the child's participation in the educational setting.

5. A child who presents with speech that is largely unintelligible due to aphonia or severe hypernasality or there is an extreme effort in the production of speech. The child has no effective vocal/verbal communication would be eligible for speech therapy.

Children who are English Language Learners will be considered on an individual basis. Some voice considerations are:

- Influence of vocal characteristics of native language on voice resonance in English (e.g., tone languages);
- Cultural variations in acceptable voice quality (e.g., pitch, loudness);
- Possible role of insecurity about speaking English on volume of voice in English; and
- Possible role of stress from adapting to a new culture on vocal tension affecting voice quality.

The following pages are a guide to help systematically observe, gather and record information to assess a child and determine eligibility for services. These forms are not mandated; however, it is hoped that they will help organize information to present to the Evaluation Team including the parent.

Scoring Guide for Summary of Evaluation Findings
Criteria for Voice Disability

Impairment Code:	+ = Yes; - = No; N/A =Not Applicable

Evidence Code	1 = voice measurement(s); 2 = attitude/self-perception measures; 3 = speech sample(s); 4= structured observation; 5 = oral classroom participation; 6 = other curriculum/academic results; 7 = teacher report/interview; 8 = child report/interview; 9 = parent report/interview Note: #7, 8 and 9 are not sufficient evidence, by themselves, of an impairment. They must be supported by objective data.

Adverse Effect on Educational Performance Code:	1 = oral participation; 2 = oral reading; 3 = social-emotional adjustment/behavior; 4 = reaction of self, peers, teachers, parents. Note: #4, reaction of self, peers, teachers, parents is not sufficient evidence, by itself, of an adverse educational impact.

Eligibility: The child exhibits chronic/persistent (2 weeks duration) impairment(s) in connected speech **in at least one of the following areas**, with accompanying adverse effect on educational performance in each area.

1. Phonation
2. Resonance
3. Prosody

The impairment(s) must not be related primarily to limited exposure to communication building experiences, the normal process of acquiring English as a second language, dialect usage, or lack of instruction in reading or mathematics. In addition, the impairment(s) must not be related to unresolved upper respiratory infection or allergies that are not being actively treated by a physician.

Note: No child should be enrolled for voice therapy without prior ENT examination. However, the presence of a medical condition (e.g., vocal nodules) does not always necessitate the provision of voice therapy as speech-language services as special education or a related service. Nor does a prescription for voice therapy from a physician.

Adapted from: Guidelines for Speech and Language Programs, Volume II: Determining Eligibility for Special Education Speech and Language Services, Working Draft. Connecticut State Department of Education, 1999. Reprinted by permission.

[Insert School District Name]
Summary of Evaluation Findings
Voice

NOTE: *When completed, this worksheet becomes part of the child's education record.*

Date _____ SLP _____

Child _____ DOB_____

School _____ Grade_____

Teacher _____

Record areas assessed. The assessment should reflect areas of concern described in the referral and those that arise during the evaluation. Areas not assessed should be marked N/A.

Voice Area	Impairment	Evidence	Adverse Effect on Educational Performance
PHONATION			
Isolation			
Total Pitch Range			
Optimum Pitch			
Pitch Appropriateness for Age			
Pitch Appropriateness for Sex			
Loudness Range			
Aphonia			
Breathiness			
Diplophonia			
Glottal Fry			
Hoarseness			
Harshness			
Tremor			

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[Insert School District Name]

Child _____ Date _____

Voice Area	Impairment	Evidence	Adverse Effect on Educational Performance
PHONATION *(cont'd)*			
Connected Speech			
Voice Onset			
Voiceless To Voiced			
Appropriateness of Loudness			
Pitch Breaks			
Pitch Range			
Habitual Pitch			
Aphonia			
Breathiness			
Diplophonia			
Glottal Fry			
Hoarseness			
Harshness			
Tremor			
RESONANCE IN CONNECTED SPEECH			
Hypernasality			
Hyponasality			
Throatiness/Cul De Sac			
Nasal Emission			
Assimilation Nasality			

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[Insert School District Name]

Child _____ Date_____

Voice Area	Impairment	Evidence	Adverse Effect on Educational Performance
PROSODY IN CONNECTED SPEECH			
Stress			
Intonation			
RESPIRATION			
Type of Breathing Pattern			
At Rest			
In Connected Speech			
Breath Support for Speech			
Posture			
Tension			
ASSOCIATED FACTORS			
Vocal Abuse Behaviors			
Personality Factors			
ORAL MECHANISM			
Structure			
Function/Tension			
OTL EXAMINATION RESULTS			

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Teacher Input: Voice

Child: _____ Date: _____

Teacher: _____Grade/Program: _____

Your observations of the above child's speech will help determine if he or she has a voice problem which adversely affects educational performance. Please answer all questions and return this form to _____.

		Yes	No
1.	Is this child able to project loudly enough to be adequately heard in classroom during recitations?	_____	_____
2.	Does this child avoid reading out loud in class?	_____	_____
3.	Does this child generally appear to avoid talking in your classroom?	_____	_____
4.	Does this child ever lose his or her voice by the end of the school day?	_____	_____
5.	Does this child use an unusually loud voice or shout a great deal in your classroom?	_____	_____
6.	Does this child engage in an excessive amount of throat clearing or coughing? If so, which?_____	_____	_____
	If so, how does it appear to disturb the other children, (e.g., their concentration, listening)?_____	_____	_____
7.	Is this child's voice quality worse during any particular time of the day? If so, when?_____	_____	_____
8.	Does this child's voice quality make it difficult to understand the content of his or her speech?	_____	_____
9.	Does this child's voice quality in itself distract you from what he or she is saying?	_____	_____
10.	Has this child ever mentioned to you that he or she thinks he or she has a voice problem?	_____	_____
11.	Have you ever heard any of his or her peers mention that his or her voice problem?	_____	_____
12.	If this child has a pitch that is too low or too high does his or her pitch make it difficult to identify him or her as male or female just by listening?	_____	_____
13	During speaking, does this child's voice break up or down in pitch to the extent that he or she appears to be embarrassed by this?	_____	_____

Additional observations/comments: _____

It is my opinion that these behaviors:

_____ Do not interfere with the child's participation in the educational setting.

_____ Do interfere with the child's participation in the educational setting.

_____ Date

_____ Classroom Teacher's Signature

Adapted from Speech and Language Services in Michigan: Suggestions for Identification, Delivery of Service and Exit Criteria, edited by Elizabeth Loring Lockwood and Kathleen Pistano. East Lansing: The Michigan Speech-Language Hearing Association, 1991. Used with permission.

C. Fluency

"A fluency disorder is an interruption in the flow of speaking characterized by atypical rate, rhythm, and repetitions in sounds, syllables, words, and phrases. This may be accompanied by excessive tension, struggle behavior, and secondary mannerisms" (ASHA, 1993a, p. 40). Stuttering may be viewed as a syndrome characterized by abnormal dysfluencies accompanied by observable affective behavioral, and cognitive patterns (Cooper & Cooper, 1998).

ASHA's *Preferred Practice Patterns for the Profession of Speech-Language Pathology* (1997e) contains information regarding the roles of the school-based speech-language pathologist in the assessment of children who stutter. ASHA's *Guidelines for Practice in Stuttering Treatment* (1995b) provide additional information concerning the assessment and treatment of stuttering.

Responsibilities for children with fluency disorders include planning and implementing intervention to:

- reduce the frequency of stuttering
- reduce severity, duration, and abnormality of stuttering behaviors
- reduce defensive behaviors
- remove or reduce factors which create, exacerbate, or maintain stuttering behaviors
- reduce emotional reactions to specific stimuli when they increase stuttering behavior
- transfer and maintain these and other fluency producing processes (ASHA, 1995b)

Affective	Behavioral	Cognitive
Feeling about speaking	Respiration	Language/linguistic competencies
Self-esteem	Articulation	Accuracy of perceptions
Feelings in response to environmental and situational influences	Phonation	Attitudes about speaking
Feeling of fluency control	Rate of speaking	Attitudes regarding fluency
	Concomitant factors	

American Speech-Language-Hearing Association. (in press). Roles and responsibilities of speech-language pathologist with respect to reading and writing in children and adolescents: Position statement, guidelines and technical report. Rockville, MD: Author.

Fluency Definitions

Easy dysfluencies

Revision: starting, stopping and starting over again.
Example: " I went-I mean, I rode to the store. My mom, no no, my grandma, met me there.

Interjection: adding an extra sound or words while you're thinking.
Example: *"My Brother went-un-to the movie, but he-ah-didn't have-ah-you know-money to get in."*

Whole-word repetition of fewer than four times: Repetition is effortless and generally rhythmic.
Example: "I-I-I can't remember what his name is but, but I know you know him.

Phrase repetition: repeating two or three words at a time
Example: "And then, and then, the man came over and started talking to my, to my dad."

Hesitation: short pauses between words
Example: "We called my mom and asked her to bring (pause) my lunch. I left (pause) in the car."

Stuttering

Part-word repetition: saying a part of a word over and over again
Example: "Wh-wh-wh-wh-what happened to the ba-ba-ba-baby?

Multiple whole-word repetition: repeating a word many times
Example: "I-I-I-I-I-I-I can't."

Prolongation: holding out a sound
Example: "Let mmmmme sssssssee!"

Silent Block: pushing, but nothing comes out-different from a pause or hesitation because the person is tense while he/she is trying to talk. When a person pauses he/she is relaxed and just thinking or catching a breath.
Example: "Can you (silent block) see the clock?

Adapted from:Source: Easy Does It Fluency Activities for School-Age Stutterers

Barbara A. Heinze and Karin L. Johnson

Covert Stuttering Behaviors

There are six measurable major types of covert stuttering behaviors: (1) emotional reactions, (2) avoidance, (3) expectation of stuttering, (4) expectation of fluency, (5) motivation, and (6) self-perception. All types are related to the stutterer's belief system, and none are observable. To quantify them, diagnosticians must rely on the stutterer's self-assessment. This lack of verifiable data is viewed by some as introducing an unnecessary amount of subjectivity into the study of stuttering (Ingham, 1990). Others believe, however, that even though measuring covert behaviors is not as easily accomplished or objective as overt behaviors, understanding the stutterer's belief system is essential for understanding how to proceed in therapy (Perkins, 1990a: Cooper and Cooper. 1985).

Emotional Reaction. Each stutterer's reaction to both fluent and dysfluent speech is unpredictable. The fear of fluency may be as great as the fear of stuttering. Children may become withdrawn, aggressive, passive, hostile, or depressed by their manner of speech. SLPs need a window into these feelings to help construct an effective therapy plan.

Avoidance. Stutterers may tend to avoid production of not only feared sounds or words, but also situations and encounters with specific people. Regardless of the type of therapy the stutterer is involved with, SLPs will almost always ask the stutterer to engage in feared situations. By having an understanding of what is currently being avoided, SLPs can design therapy that can eventually confront these avoidances.

Expectation of Stuttering. To a large extent, we are a product of our past experiences. Stutterers who expect to stutter may be engaging in a self-defeating exercise, regardless of the therapeutic techniques taught to them by the SLPs. By understanding the extent to which a stutterer believes that control and normal communication are impossible, SLPs can begin addressing the problem in therapy.

Motivation. Changes in long-term behaviors can be difficult to accomplish, whether they involve behaviors such as smoking, procrastination, or stuttering. Assessments of motivation are less likely to involve general questions of whether the individual would like to develop fluency, and more likely to examine the extent of commitment and effort an individual is willing to make to effect behavioral change.

Self-Perception. How an individual sees him or herself is important in the structuring of intervention protocols. For example, different treatment protocols may be developed for two individuals who have similar covert behaviors but who differ dramatically on the degree of severity each perceives.

Measurement Procedures

The two most common ways of getting information about how a stutterer's beliefs can affect speech are through the interview and use of questionnaires. Questionnaires may require either forced-choice answers or rating scale evaluations. Examples of forced-choice questions are ones that can be answered with "yes" or "no" answers, or those that require the stutterer to choose between self-descriptive statements, such as "a mild stutterer" or "severe

stutterer". A rating question asks the stutterer to describe his or her perceptions through the use of a scale with end points such as "calm" and "anxious", "mild" and "severe", or

"strongly agree" and "strongly disagree." It is important to realize that the answers derived from these test instruments do not necessarily provide a picture of reality, but rather they describe how stutterers view themselves within their world.

Adapted from: Culatta. R. and Goldberg. S. *Stuttering Therapy An Integrated Approach to Treatment and Practice. Needham Heights, MA: Allyn and Bacon, 1995, 84-88*.

ELIGIBILITY CRITERIA

1. Children who present with mild stuttering behavior as outlined in a fluency rating scale will be considered on an individual basis. The child's age, frequency, cultural background and/or type of stuttering behaviors, motivation, previous therapy experience, and the overall impact on communication should be considered.
2. The child who demonstrates moderate to severe behaviors as outlined in a fluency rating scale would be eligible for direct Speech Therapy. Secondary characteristics may or may not be present.
3. Children who present with stuttering behaviors as outlined on the following pages in absence of a fluency rating scale will be considered on an individual basis to determine the overall impact on communication.
4. In the case of ELL children, the dysfluent behavior must be evident in both the first and second languages.

Some fluency considerations for ELL children are:

- Apparent universality of sound repetitions, sound prolongations and associated behaviors such as eyeblinks and facial, limb and other body movements in stuttering across cultures;
- Influence of normal development of English language proficiency on occurrence of dysfluencies (e.g., revisions, hesitations, pauses);
- Cultural behavior that may be misinterpreted as avoidance behaviors (e.g., eye contact);
- Cultural variations on fluency enhancers or disrupters;
- Misinterpretation of mannerisms used to cover up limited English proficiency as secondary characteristics of dysfluency;
- The relationship of locus of stuttering to phonemic, semantic, syntactic and pragmatic features of the native language and English; and
- Possible influence of foreign accent on accuracy of measurement of speech rate and judgments of speech naturalness.

Guidelines for Speech and Language Programs, Volume II: Determining Eligibility for Special Education Speech and Language Services, Working Draft. Connecticut State Department of Education, 1999. Reprinted by permission.

Criteria for Fluency Disability

Impairment Code: + = Yes; - = No; N/A = Not Applicable

Evidence Code: 1 = fluency measurement(s); 2 = attitude/self-perception measure; 3 = speech sample(s); 4 = structured observation; 5 = oral classroom participation; 6 = other curriculum/academic results; 7 = teacher report/interview; 8 = child report/interview; 9 = parent report/interview.

Note: #s 7, 8 and 9 are not sufficient evidence, by themselves, of an impairment.
They must be supported by objective data.

Adverse Effect on Educational Performance Code:

1 = oral participation; 2 = oral reading;
3 = social-emotional adjustment/behavior;
4 = reaction of self, peers, teachers, parents.

Note: #4, reaction of self, peers, teachers, parents is not sufficient evidence, by itself, of an adverse educational impact.

Eligibility: The child exhibits dysfluencies during connected speech in at least one of the following areas, with accompanying adverse effect on educational performance.

1. Frequency and/or Durational Measurements of Dysfluencies (based on a speech sample of 200 syllables, 200 words or 10 minutes) in 1 or more Settings.

   (a) more than 2% atypical dysfluencies, with or without the presence of struggle behaviors, covert stuttering behaviors, or coping mechanisms; OR
   (b) more than 5% typical dysfluencies, with or without the presence of struggle behaviors, covert stuttering behaviors, or coping mechanisms, or with the presence of one or more risk factors.

2. Rate of speech at least $\pm$ 1.5 standard deviations from the mean.

3. Speech naturalness outside the normal range of 3.0 for children and 2.23-2.39 for adolescents/adults on a 9-point naturalness rating scale.

The impairment(s) must not be related primarily to limited exposure to communication building experiences, the normal process of acquiring English as a second language, dialect usage, or lack of instruction in reading or mathematics.

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[Insert School District Name]

Summary of Evaluation Findings
Fluency

NOTE: *When completed, this worksheet becomes part of the child's education record.*

Date _____ SLP _____

Child _____ DOB _____

School _____ Grade _____

Teacher _____

Record areas assessed. The assessment should reflect areas of concern described in the referral and those that arise during the evaluation. Areas not assessed should be marked N/A.

Fluency Area	Impairment	Evidence	Adverse Effect on Educational Performance
FREQUENCY			
Type of Disfluencies			
Hesitations			
Interjections			
Revisions			
Unfinished Words			
Sound Repetitions			
Syllable Repetitions			
Word Repetitions			
Phrase Repetitions			
Prolongations			
Blocks			

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[Insert School District Name]

Child _____ Date_____

Fluency Area	Impairment	Evidence	Adverse Effect on Educational Performance
FREQUENCY *(cont'd)*			
Struggle Behaviors			
Visible Tension			
Head			
Neck			
Shoulders			
Eyes			
Lips			
Tongue			
Jaw			
Larynx			
Inhalation			
Other			
Audible Tension			
Uneven Stress			
Pitch Changes			
Neutralized Vowels			
Increased Rate			
Inhalation			
Exhalation			
Other			
DURATION OF DISFLUENT EPISODES			

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[Insert School District Name]

Child _____ Date_____

Fluency Area	Impairment	Evidence	Adverse Effect on Educational Performance
RATE OF SPEECH			
SPEECH NATURALNESS			
COPING MECHANISMS			
Awkward Phrases			
Distorted Grammatical Forms			
Circumlocutions			
Starter Devices			
Postponement Tactics			
Avoidance (to disguise stuttering)			
COVERT STUTTERING BEHAVIORS			
Emotional Reaction			
Avoidance (of feared sounds, words, situations or people)			
Expectation of Stuttering			
Expectation of Fluency			
LANGUAGE			
Receptive			
Vocabulary			
Expressive			
Word Retrieval			
Sentence Formulation			
ARTICULATION			

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Teacher Input: Fluency

Child:_____ Date: _____

Teacher: _____Grade/Program: _____

Your observations of the above child's speech will help determine if he or she has a fluency problem which adversely affects educational performance. Please answer all questions and return this form to _____.

		Yes	No
1.	Does this child have a reduced verbal output?	___	___
2.	Does this child appear to avoid talking in class?	___	___
3.	Does this child appear to have problems with language skills?	___	___
4.	Does this child use significantly more one-word responses (e.g., twice as many) than the other children in your class?	___	___
5.	Does this child appear to dislike reading out loud?	___	___
6.	Does this child correct or revise his or her speech more often than the other children in your class?	___	___
7.	Does the child speak more rapidly than other children?	___	___
8.	Do you think this child knows that he or she is having problems when he or she speaks?	___	___
9.	Has this child ever talked to you about his or her speech problem?	___	___
10.	Do classmates make fun of this child because of his or her fluency problems?	___	___
11.	Have you heard anyone call him or her a stutterer?	___	___
12.	Does this child's fluency problem distract you sometimes from what he or she is saying?	___	___

Additional observations/comments: _____

It is my opinion that these behaviors:

___ Do not interfere with the child's participation in the educational setting.

___Do interfere with the child's participation in the educational setting.

_____ Date

_____ Classroom Teacher's Signature

Adapted from Speech and Language Services in Michigan: Suggestions for Identification, Delivery of Service and Exit Criteria, edited by Elizabeth Loring Lockwood and Kathleen Pistano. East Lansing: The Michigan Speech-Language-Hearing Association, 1991. Used with permission.

D. Language Disorder

"An educationally significant language disorder is impaired comprehension and/or use of spoken, written, and/or other symbol systems. The disorder may involve (1) the form of language (phonology, morphology, syntax), (2) the content of language (semantics), and/or (3) the function of language in communication (pragmatics) in any combination" (ASHA, 1993a,p.40). Intervention is conducted to achieve improved, altered, augmented, or compensated language behaviors for listening, speaking, reading, and writing (ASHA, 1996c).

Oral and written receptive and expressive language factors.

	LISTENING Receptive	SPEAKING Expressive	READING Receptive	WRITING Expressive
FORM	Applies phonological, morphological, and syntactic rules for comprehension or oral language	Uses words and sentences correctly in discourse according to phonological, morphological, and syntactic rules	Applies graphophonemic, morphological, and syntactic rules for comprehension of text	Uses words and sentences correctly in writing according to spelling, morphological, and syntactic rules
CONTENT	Comprehends the meaning of words and spoken language	Selects words and uses oral language to convey meaning Formulates thoughts into oral language Uses literal and figurative language	Comprehends the meaning of words and text	Selects words and uses written language to convey meaning Formulates thoughts into written language Uses precise and descriptive vocabulary Uses literal and figurative language
FUNCTION	Follows directions Understands social meanings	Uses appropriate language for the social context Takes turns in listener/speaker role	Understands mood, tone, style, and context of text	Follows rules of discourse Uses various styles and genres of writing
COGNITIVE COMMUNICATION COMPONENTS				Attention, long-and short-term memory, problem solving, and related components

American Speech-Language-Hearing Association. (in press). Roles and responsibilities of speech-language pathologists with respect to reading and writing in children and adolescents: Position statement, guidelines and technical report. Rockville, MD: Author.

ENTRANCE CRITERIA

1. Those children who receive a mild rating should be considered on an individual basis ranging from no service to direct service. Classroom performance and other evaluation results such as informal testing, language portfolios, etc. should also be considered when determining eligibility.
2. Children who present mild-moderate through severe ratings would be candidates for direct service as it would impact educational progress.

English Language Learners should be considered on an individual basis. Some language considerations are:

- Stage of English acquisition
- Interference from native language that may cause English errors (e.g. Spanish "la casa grande" literally means "the house big");
- Fossilization (i.e. persistence) of errors in English even when English proficiency is generally good;
- Inconsistent errors that vary as the child experiments with English (inter-language);
- Switching back and forth between native language/dialect and English (code switching) words or language forms to fill in gaps in English language knowledge or competence (child may have concept, but not word; indicates awareness of the need to "fill a lot" to keep the communication going);
- Language loss in native language as English proficiency improves (may account for poor performance in native language);
- Legitimacy of vocabulary and language forms of African American English related to historical linguistic influences;
- Absence of precise native language vocabulary equivalents for English words;
- Influence of normal limitations in English vocabulary development on difficulties with multiple meaning words;
- Influence of normal difficulties in English language expression on ability to demonstrate comprehension (e.g., respond to question);
- Absence in English of native language forms (e.g., Spanish "tu" and "usted(es)" vs English "you");
- Restrictions or absence of certain uses of language due to cultural values (e.g., prediction in Native American cultures);
- Influence of culture on nonverbal language (e.g., gesturing, eye contact);
- Influence of culture on discourse rules (e.g. acceptability of more interruptions among Hispanics);
- Influence of culture on proxemics (e.g., acceptability of greater proximity between listener and speaker among Hispanics); and
- Influence of absence of written language forms in native language on English writing (e.g. capitalization, punctuation, paragraph structure in Chinese).

Adapted from: Guidelines for Speech and Language Programs, Volume II: Determining Eligibility for Special Education Speech and Language Services, Working Draft. Connecticut State Department of Education, 1999.

Scoring Guide for Summary of Evaluation Findings
Criteria for Language Disability

Evidence Codes: **1** = language sample; **2** =contextual probe; **3** = structured observation;
4 = classroom work samples; **5** = other curriculum/academic results;
6 = standardized test(s);*** 7** = teacher report/interview;
8 = child report/interview; **9** = parent report/interview.
Note: #'s 7, 8 and 9 are not sufficient evidence by themselves. They must be supported by objective data.

**When standardized tests are used the threshold of impairment is 1.5 SD below the mean of the test. The threshold for other procedures will vary according to the procedure selected.*

Extent of Adverse Educational Effect:

A **Independent Performance:**
The child performs effectively all or most of the time with little, if any, assistance. He/she knows what to do and how.

B **Minimal Support:**
The child needs more cues, models, explanations, checks on progress or assistance than the typical child in his/her class. He/she may need some general education curriculum/program adjustments and/or remedial instruction.

C **Maximum Support:**
The child does not perform effectively most of the time, despite the provision of general education modifications and supports, e.g., prompts, cues, modeling, curriculum/program adjustments, remedial instruction.

Eligibility: *The child must be at level C in two areas of educational concern on the Educational Effect Worksheet, with evidence that the problems are language based, according to the information from the language evaluation.*

The impairments must not be related primarily to limited exposure to communication building experiences, the normal process of acquiring English as a second language, dialect usage, or lack of instruction in reading or mathematics.

Adapted from: Guidelines for Speech and Language Programs, Volume II: Determining Eligibility for Special Education Speech and Language Services, Working Draft. Connecticut State Department of Education, 1999.

[Insert School District Name]

Educational Effect Worksheet: Language

NOTE: *When completed, this worksheet becomes part of the child's education record.*

Child _____ Date _____

Area of Educational Concern	Evidence of a Language-Based Problem	Extent of Adverse Educational Effect	Comments
Attending Behaviors			
Following Classroom Routines			
Listening Comprehension			
Oral Participation			
Reading			
Written Language			
Content Subjects			
Social-Emotional Adjustment/Behavior			
Effectiveness of Communication			
Additional Areas for Pre-K students			
Play			
Peer Interactions			

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[Insert School District Name]

Summary of Evaluation Findings: Language Worksheet

NOTE: *When completed, this worksheet becomes part of the child's education record.*

Date _____ SLP _____

Child _____ DOB _____

School _____ Grade _____

Teacher _____

Record areas assessed. The assessment should reflect areas of concern described in the referral and those that arise during the evaluation. Areas not assessed should be marked NA. Remember that eligibility may not be determined solely on the basis of standardized tests.

Evidence Codes: 1 = language sample; 2 =contexnual probe; 3 = structured observation;
4 = classroom work samples; 5 = other curriculum/academic results;
6 = standardized test(s)*; 7 = teacher report/interview;
8 = child report/interview; 9 = parent report/interview.

Note: #s 7, 8 and 9 are not sufficient evidence, by themselves, of a weakness or impairment. They must be supported by objective data.

* *When standardized tests are used the threshold of impairment is 1.5 SD below the mean of the test. The threshold for other procedures will vary according to the procedure selected.*

Language Area	Evidence of Strength/Competency	Evidence of Weakness/Impairment
CONTENT		
Vocabulary		
Concepts		
Classification and Categorization		
Semantic Relationships		
Comprehension of Questions		

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[Insert School District Name]

Child _____ Date _____

Language Area	Evidence of Strength/Competency	Evidence of Weakness/Impairment
Following Directions		
Understanding Stories and Text		
Word finding		
Accurate and Semantically Appropriate Production		
FORM		
Grammar		
Morphology		
Variety of Constructions		
Word Order		
Length		
Complexity		
Variety of Genres (e.g., narrative, expository, persuasive)		
Cohesion		
USE		
Variety of verbal and nonverbal functions (e.g., greeting, protesting, requesting, commenting)		
Discourse rules e.g., joint attention/ referencing, initiating, turn taking, topic relevance, topic maintenance, closing, proxemics		

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[Insert School District Name]

Child _____ Date _____

Language Area	Evidence of Strength/Competency	Evidence of Weakness/Impairment
USE *(cont'd)*		
Prosodic Features		
METALINGUISTICS		
Phonological Awareness		
Phonemic Awareness		
Error awareness/ correction		
Figurative Language (e.g., idioms, metaphors, similies, absurdities)		
Language of Thinking (e.g., predicting, drawing conclusions, analogies, problem solving)		
METAPRAGMATICS		
Role Of Context		
Perspective Taking		

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Teacher Input: Language

Child: _____ Date: _____

Teacher: _____ Grade/Program: _____

Your observations of the above child will help determine if he or she has a language problem which adversely affects educational performance. Please answer all questions and return this form to _____.

	Yes	No
1. Does the child speak in complete sentences?	___	___
2. Is the child's vocabulary appropriate for his or her age?	___	___
3. Is the child's grammar adequate for his or her age?	___	___
4. Is the child's syntax adequate for his or her age?	___	___
5 Does the child express himself effectively (organized, sequential thoughts)?	___	___
6. Does the child contribute appropriately to class discussions?	___	___
7. Is the child able to listen to a story and interpret the meaning?	___	___
8. Is the child usually able to follow your oral directions?	___	___
9. Does the child remember names, dates, times, places?	___	___
10. Is the child's reading comprehension appropriate?	___	___
11. Does the child comprehend math/science/social studies concepts?	___	___
12. Does the child comprehend questions?	___	___
13. Is the child able to problem solve?	___	___
14. Is the child able to sequence pictures?	___	___
15. Is the child able to recall names of know items?	___	___
16. Is the child able to understand proverbs, idioms and humor?	___	___
17. Is the child able to use language relevant to the situation?	___	___
18. Is the child able to establish and maintain eye contact?	___	___
19. Is the child able to initiate and maintain appropriate conversation?	___	___
20. Does the child use a speech system rather than a gesture system?	___	___
21. Does the child use speech rather than relying on others to communicate for him?	___	___
22. Is the child able to cope with distracting noises?	___	___
23. Is the child's written language appropriate for his or her age?	___	___

Additional observations/comments: _____

It is my opinion that these behaviors:

___ Do not interfere with the child's participation the in the educational setting.

___ Do interfere with the child's participation in educational setting.

_____ Date

_____ Classroom Teacher's Signature

Adapted from Speech and Language Services in Michigan: Suggestions for Identification, Delivery of Service and Exit Criteria, edited by Elizabeth Loring Lockwood and Kathleen Pistano. East Lansing: The Michigan Speech-Language-Hearing Association, 1991. Used with permission.

E. Exit Criteria

IDEA '97 specifies that "before determining that a child no longer has a disability [20 U.S.C.§ ©(5), except when termination of eligibility is due to graduation with a regular high school diploma or the child exceeding age eligibility for a free and appropriate public education the child must be reevaluated [34CFR§300.534(i)(2)]. Rhode Island regulations require the same in that the local education agency (LEA) must reevaluate a child with disability in accordance to the regulation before determining that the child is no longer a child with a disability. The reevaluation is like other reevaluations subject to the decision of the individualized education plan (IEP) team in regards to evaluation requirements. The IEP team may decide that no additional data is needed, or that additional assessment data is needed to determine continued eligibility during the reevaluation process.

Children who continue to have a primary disability which qualifies them to receive special education and related services may be exited from speech and language services provided that one or more of the following criteria is met.

1. The child has met all objectives in the areas of speech or language and assessment data indicates no additional needs. The IEP team determines that the child can make progress in the general education setting without the support of speech and/or language services.
2. At the request of the parent, or of the child, if age appropriate, only as part of an IEP team decision as to whether assessment data indicates that the child can make progress in the general education setting without the support of speech and language services. If the parental request for termination of services would result in a determination of continued eligibility that the child is a child with a disability, the IEP team must reevaluate the child in accordance to the regulation.
3. A medical evaluation in conjunction with the review of the IEP team recommends temporary or permanent discontinuation of services.
4. Appropriate evaluations indicate that the child has learned sufficient compensation strategies to function academically and is no longer in need of speech and/or language services as determined by the IEP team.
5. The child no longer needs special education or related services to participate in the general education setting as determined through the evaluation and IEP process.

ADDITIONAL CONSIDERATIONS FOR SPECIAL POPULATIONS

Special Consideration

This chapter addresses the unique needs of some children in our schools. These children present with unique learning issues due to the process of learning English, the specialized needs of their disability or special medical issues. They may display communication disorders that were clearly defined in the chapter on eligibility criteria. In those cases when the child does not meet the criteria in that chapter, the child should be considered on an individual basis.

Not all children with conditions such as cerebral palsy, learning impairment, or CAP-D need special education and/or related services to address their educational needs. Section 504 or other general education services may be appropriate. Each child is unique.

A. Considerations in Evaluating English Language Learners (ELL)

With our growing knowledge base, the focus of speech-language evaluations has expanded beyond assessment of isolated linguistic skills on standardized tests to examination of communicative competence in various contexts using descriptive approaches. An important result of this change in professional practice is the recognition that components of an assessment of children who are native English speakers and those who are acquiring English as a second language/dialect are not substantively different. The challenge is having enough information to determine the language(s)/dialect(s) in which the assessment should be conducted and the personnel resources to conduct the assessment in both the child's native language and English when that is required to distinguish a communication difference from a communication impairment.

Cultural Knowledge

Taylor and Payne (1983) suggest the following topics about which the SLP should seek information for particular cultures:

- cultural values;
- preferred modes of communication;
- nonverbal communication rules;
- rules of communication interaction (who communicates with whom? when? under what conditions? for what purposes?);
- child-rearing practices, rituals and traditions, perceptions of punishment and reward;
- what is play? fun? humorous?
- social stratification and homogeneity of the culture;
- rules of interaction with nonmembers of the culture (preferred form of address, preferred teaching and learning styles);
- definitions of disabled and communicatively disabled; and
- taboo topics and activities, insults, and offensive behavior

The Center for Applied Linguistics in Washington, D.C. (202-362-0700 or www.cal.org) is useful resource about other languages and cultures, as is the National Clearing House for Bilingual Education (202-467-0867 or http://www.ncbe.gwu.edu). Local and state cultural organizations may also be able to provide information.

Determining the Language(s) to be Assessed

"Both Title VI and Part B [IDEA '97] require that a public agency ensure that children with limited English proficiency are not evaluated on the basis of criteria that essentially measure English language skills." [34CFR, Attachment 1, p. 12633].

Pat Chamberlain and Patricia Mederios Landurand (in Hamayan and Damico, 1991), note that the purpose of the evaluation and the skills of the child (e.g., social vs. academic language skills) are important considerations in selecting the language(s) to be used. They point out that, when more than one language is to be used, the evaluator needs to consider whether they will be used separately or simultaneously. Chamberlain and Landurand suggest using each language separately in assessment "for children who are young and come from primarily monolingual homes, have been enrolled in a quality bilingual program where

academic instruction has been consistently delivered in the first language and who are recent arrivals in the United States." (p.134) They cite the work of M.D. Pollack, who found that when the languages are used separately, the stronger language should be used first, in order

to obtain optimum performance. Chamberlain and Landurand also report the use of both languages simultaneously as being most effective with children whose control of both languages is limited, whose native language combines the two languages and who are young and having difficulty separating the languages (p.135).

When no one on staff in the school district is able to administer a test or other evaluation in the child's native language, 34 CFR Attachment 1 (p.12634) offers the following suggestions:

- identify an individual in the surrounding area who is able to administer a test or other evaluation in the child's native language; and/or
- contact neighboring school district, local universities, and professional organizations.

Additional options that may be considered include using a trained interpreter or translator. Other school district personnel (such as teachers of foreign languages, mainstream regular education, bilingual education or English as a Second Language; paraprofessionals/aides; or pupil services personnel) may either serve as resources or may have contacts outside the district that they may access. Various cultural or religious groups or teachers at commercial language schools may also be able to help.

ASHA (1996) has published information regarding the use of Speech-Language Pathologist Assistants. Matties and Omark (1984, chapter 3) discuss the advantages and pitfalls of using bilingual paraprofessionals to help with assessment. They stress the importance of substantial training of these individuals in order to avoid compromising the assessment.

Modifications of Testing Procedures

Test modifications allow the evaluator to observe how the child performs under various conditions. While changing the standards of test administration may be necessary for children from culturally and linguistically diverse backgrounds they may also be helpful with native English speakers and for youngsters with severe disabilities. Common test modifications include: restating or repeating directions, allowing additional response time, allowing native language responses or code-switching, providing extra practice items before the test, substituting culturally relevant stimulus items. (For additional information on this subject, see Erikson & Iglesias, 1986, Kayser, 1989 and Paul, 1995). When tests are modified, modifications must be reported and test norms cannot be applied.

Adapted from: Guidelines for Speech and Language Programs, Volume II: Determining Eligibility for Special Education Speech and Language Services, Working Draft. Connecticut State Department of Education, 1999.

B. Considerations when evaluating Severe and Profoundly Disabled Children

Eligibility policies and practices often preclude children with severe disabilities from accessing needed communication services and supports. The National Joint Committee for the Communication Needs of Persons with Severe Disabilities has developed a draft position statement on eligibility stating that eligibility for services and supports should be based on *individual communication needs* and *not* on a prior criteria such as:

- discrepancies between cognitive and communication functioning;
- chronological age;
- a particular diagnosis;
- absence of cognitive or other skills purported to be prerequisites; or
- restrictive definitions of educational, vocational, and/or medical necessity.

Categorical denial without consideration of the child's unique needs and potential to benefit violates federal and state statute, regulation, and policy. Expected outcomes of communication services and supports may include increased access to learning, ability to direct one's own care, and greater independence and participation in home, school work and community life. Communication services and supports encompass interventions that include assistive technology, environmental modifications, and instruction of communication partners. An interdisciplinary team should offer these services and supports. Composition of the team should be based on individual communication needs. The specialized expertise in language content, form, and function provided by a speech-language pathologist is essential to the team. Limited funds, personnel, or resources should not drive decisions about eligibility or service delivery model (e.g., pull-out, collaborative consultation, classroom-or home-based).

SWALLOWING/DYSPHAGIA

There has been an increase in the number of children with severe disabilities in school settings since the passage of PL94-142 (1975). It is not uncommon to see medically fragile children with multiple disabilities, feeding tubes, and tracheostomies, etc. in the same educational setting as their typically developing peers.

ASHA has developed documents reflecting the trends concerning dysphagia intervention in schools. The *Guidelines for the Roles and Responsibilities of the School-Based Speech-Language Pathologist* (ASHA 1999) and the ASHA *Scope of Practice in Speech-Language Pathology* (ASA 1996). Both documents note that not every speech-language pathologist is an expert in dysphagia and decisions to intervene in cases must be made in conjunction with the ASHA Code of Ethics and within the individual's knowledge and experience.

The ASHA Code of Ethics states, "Individuals shall engage in only those aspects of the professions that within the scope of their competence, considering their level of education, training, and experience" (ASHA 1994). According to ASHA's Rules of Ethics, "Individuals shall use every resource, including referral when appropriate to ensure that high quality service is provided" (ASHA 1994).

The primary concern is for the health and safety of all children in order to allow them to access education to their fullest potential. Some important points to consider regarding dysphagia intervention include the following:

- **Medical clearance including a physician's order**
- **Outside diagnostic evaluation or results of medical feeding assessment**
- **Parental information and feedback regarding nutritional risks**
- **Safety issues and precautions of feeding in a school setting**
- **Special safety guidelines for daily feeding and/or emergency situations.**
- **Speech-language pathologist trained in dysphagia (competent and confident)**
- **Team-based approach regarding diagnosis and intervention**

Owre,D. (2002) Dysphagia Intervention in Schools: An Ethical Dilemma? *ASHA Div 16 Newsletter Vol. 2 Number 1 October 2001 Pgs. 21-23*

C. Considerations when evaluating children with mental retardation

Each child with mental retardation is unique. Functional communication abilities need to be closely examined. These should be assessed as they relate to the individual's cognitive potential, physical status and communication environment. A criterion referenced assessment tool regarding school function may be helpful.

It is necessary to document a need for speech and language services for children who have developmental disabilities. Current approaches to educational programming for persons having developmental disabilities emphasize the acquisition of **functional skills** that enable children to participate as fully as possible in all life domains. Communication intervention targets the communication skills needed to interact and participate in home, school, community, and vocational and adult living environments. Documenting the need for speech and language services involves assessing the child's current communication skills and determining whether those skills enable the child to **participate maximally** in his/her life experiences. If the assessment reveals a mismatch between the skills the child possesses and the skills he/she needs, communication intervention may be needed. For practitioners and programs following a developmental approach for determining the need for speech and language services, the **Language Rating Scale for the Cognitively Impaired** (page 61-64) may be used. This scale has been found to be useful for children with moderate/severe disabilities, and for some children classified as Multiply Impaired. A **"functional"** approach is becoming more widely accepted and employed in programs for persons with developmental disabilities and involves taking a language sample. With more severely impaired children, particularly those who have not acquired language or have very limited expressive output, it is difficult to obtain valid standard scores on language measures. A traditional **"language"** sample cannot be elicited.

D. Considerations when evaluating children with Traumatic Brain Injury (TBI)

Each child with **TBI** is **unique** due to pre-injury cognitive ability, personality, learning style, the extent of damage and the time elapsed since the trauma. TBI generates a broad spectrum of neuropsychological and communicative deficits ranging from mild to profound. Communication is frequently impaired in the areas of attention, memory, orientation, knowledge of general information, abstract reasoning, problem solving, sequencing, organization and pragmatic language skills. TBI children often appear confused and behave inappropriately. Typically, these children have **diffuse** rather than **focal damage**. Many areas of the brain are damaged in varying degrees with some areas unaffected.

It will probably not be possible to use either the Language Rating Scale or the Cognitively Impaired Rating Scale exactly as written to determine eligibility of TBI children to receive speech/language services. The discrepancy between expected achievement and present performance may not be documentable using standard deviations. Evaluation team **consensus** may be the determinant of the mild, moderate or severe rating.

Eligibility for services should be **documented** with appropriate **formal** assessments, **informal** tests, **observations** of educational performance and **professional judgment**. This should be accomplished in conjunction with additional input from members of the ET.

As a child with TBI is recovering, it is expected that cognitive abilities will improve. For this reason, it is necessary for **frequent** reassessment of both **cognitive functioning** and **language abilities** to update and revise intervention. The SLP may assume a **major role** in developing a program for cognitive retraining, managing memory problems and compensatory strategies in addition to implementing standard language intervention strategies.

Instructions for Cognitively Impaired Language Rating Scale

The model is based on a comparison of the child's own level of language functioning with the expected level of language functioning for others of comparable cognitive ability.

1. On the rating scale, circle the appropriate scores for each of three categories: **formal assessment, informal assessment** and **effect on educational performance**. Circle the number in the box which represents the most **extreme** deficit.
2. The **formal** assessment portion of the rating scale includes **two** sections: an **alternative** assessment for children who cannot begin with "a standardized assessment option"; and **standardized** assessment section for children who can be given tests that yield a language development age from participation in formal testing. **Choose only one method**.
3. The determination of the rating for **informal** assessment depends heavily on **professional judgment**. Factors to consider include results obtained from **teacher made tests** and **classroom observation**. To score **informal assessment**, circle the number in the appropriate box and **check** area(s) of impairment.
4. To assess the **adverse effect** on educational performance, utilize the **Teacher Input: Cognitively Impaired form**. The Speech/Language Pathologist gives the form to the teacher to complete. The teacher input is used to assist in the final determination of severity of the adverse effect on educational performance.
5. **Add** the **three** scores and circle the total score on the rating scale. Comments may include statements regarding discrepancies among individual tests, subtests, and/or classroom performance.

INTERPRETATION OF SCORES ON TEACHER INPUT

Less than 1 = No interference with child's performance in educational setting.
1 = Minimal impact on the child's performance in educational setting.
2 = Interferes with child's performance in educational setting.
3 = Seriously limits child's performance in educational setting.

SCORING TEACHER INPUT

To score the teacher input form, total the score and divide by the number of statements that received a rating of 1,2, or 3. Do NOT count any statements that received a rating of 0.

Eligibility and Dismissal for School Population by Scarevel and Filak, Allegany Intermediate Unit 1-Speech and Language Program, September 1998, Pittsburgh, Pennsylvania

Child _____ Date: _____
School: _____ SLP: _____

LANGUAGE RATING SCALE FOR COGNITIVELY IMPAIRED

Formal Assessment:	**Normal/Adequate**	**Mild**	**Moderate**	**Severe**
A. Standardized Assessment	0 Scores **less than 9 months** below expected language performance. ___Form/structure ___Content/semantics ___Use/pragmatics	2 Scores **between 9 months and 1.5 years** Below expected language performance. ___Form/structure ___Content/semantics ___Use/Pragmatics	3 Scores **between 1.5-2.0 years** below expected language performance. ___Form/structure ___Content/semantics ___Use/pragmatics	4 Scores **2.0 or more years** below expected performance. ___Form/structure ___Content/semantics ___Use/pragmatics
B. Alternative Assessment Option	0 **Preintentional Stage** (0-8 months) or Representational thought or above with equal language & social skills.	2 **Intentional Level** Thought (8-18 months) and Reception and expression less than cognitive and Social interaction less than language	3 **Representational** Thought or above (18-24 months) and Expressive or receptive Less than cognitive and Social interaction equal to language.	4 **Preoperational** level of cognition typically allows for formal test. Use formal assessment procedure.
Informal Assessment/ Language Sample	0 Language skills **within** expected range. ___Form/structure ___Content/semantics ___Use/pragmatics	2 Language skills **mildly** impaired. ___Form/structure ___Content/semantics ___Use/pragmatics	3 Language skills **moderately** impaired. ___Form/structure ___Content/semantics ___Use/pragmatics	4 Language skills **severely** impaired. ___Form/structure ___Content/semantics ___Use/pragmatics
Effect on Educational Performance: Social Emotional Academic Vocational	0 **No** interference with child's participation in educational setting.	4 **Minimal** impact on the child's participation in educational setting.	6 **Does** interfere with child's participation in educational setting.	8 **Seriously** limits child's participation in educational setting.
Total Score	**0 2 3 4 5 6**	**7 8 9**	**10 11 12 13**	**14 15 16**
Rating Scales	**Normal/Adequate**	**Mild**	**Moderate**	**Severe**

COMMENTS: _____

Eligibility and Dismissal for School population by Scarevel and Filak, Allegany Intermediate Unit-1Speech and Language Program, September 1998, Pittsburgh, Pennsylvania

TEACHER INPUT: COGNITIVELY IMPAIRED SPEECH/LANGUAGE IMPAIRED

Child:_____ Date of Birth: _____

Teacher_____School:_____

Teacher Instructions:

Observe the child in your class and compare him/her to his/her cognitive peers. Please answer the following questions using the rating scale listed below and then return the form to the Speech/Language Pathologist. Thank you for your cooperation.

NOTE: It is important to consider the child's cognitive development level when rating performance.

For example, a child functioning at a 6 month cognitive level would not be able to formulate expressive language and participate in conversation. Therefore, this child would receive a score of NA, as the item is not appropriate to this child's developmental level.

Key: **3 = almost never occurs**
2 = seldom occurs
1 = inconsistently occurs
0 = frequently occurs
NA = not applicable

NON-VERBAL COMMUNICATION

_____ Responds to adult attention.

_____ Expresses discomfort.

_____ Uses eye gaze and/or smile to initiate and maintain interaction.

_____ Attends/responds to adult speaker.

_____ Attends to objects/events involved in an interaction.

_____ Comprehends communicative gestures such as pointing.

_____ Uses a specific action to communicate needs.

_____ Participates in simple turn-taking activities.

_____ Uses adult or environmental object as tool to obtain desired item or event.

VERBAL COMMUNICATION

_____ Imitates vocalizations.

_____ Uses a single word to communicate a complete message.

_____ Uses language for a variety of purposes. (e.g. naming, requesting, rejection, greeting, answering, possession. Locating)

_____ Participates in conversational situations.

_____ Gives appropriate responses to questions.

_____ Gives appropriate responses to questions, commands or directions.

_____ Recalls information given verbally (auditory processing and memory).

_____ Uses appropriate sentence structure.

_____ Generates meaningful communication.

GENERAL OBSERVATIONS

_____ Communicates in class.

_____ Communicates without frustration.

_____ Communication is easily understood.

_____ Communicates within a reasonable amount of time.

_____ Communication is adequate for expressing basic needs, feelings or sharing information.

_____ Communication is sufficient for pre-vocational training.

_____ Communication is sufficient for competitive employment.

These behaviors: _____ Do not interfere with child's participation in the educational setting.

_____ Do interfere with the child's participation in the educational setting.

Total Score _____ ÷ _____ = _____
Score

_____ _____
Date Classroom Teacher's Signature

Eligibility and Dismissal for School Population by Scarevel and Filak, Allegany Intermediate Unit 1-Speech and Language Program, September 1998, Pittsburgh, Pennsylvania

E. Considerations when evaluating a child with Central Auditory Processing Disorder

A Central Auditory Processing Disorder (CAPD) is an observed deficiency in sound localization and lateralization, auditory discrimination, auditory pattern recognition, temporal aspects of audition, use of auditory skills with competing acoustic signals, and use of auditory skills with any degradation of the acoustic signal. CAPD may be the result of dysfunction of processes and mechanisms dedicated to audition, general dysfunction such as attention deficit or neural timing deficit, or co-existing dysfunctions of both sorts (ASHA, 1995).

Some of the common difficulties and complaints that may be identified in children with CAPD include:

- short attention span;
- poor listening skills (auditory association, auditory reception, and/or auditory sequencing);
- distractibility;
- difficulty following verbal directions;
- apparent language problems;
- factors in the classroom interfere with the ability to attend;
- says "huh" or "what" frequently;
- often misunderstands what is said;
- slow or delayed responses to verbal stimuli;
- behavior problems;
- difficulty distinguishing background and foreground; and
- emotional labiality

Some of the concurrent educational problems of children with CAPD include:

- problems processing speech in a noisy background when combined with deficits in auditory memory, which has a major impact on scholastic achievements;
- difficulties with attention and distractibility and easily distracted by extraneous auditory or visual stimuli;
- problems with the integration of auditory information with other sensory information, which results in problems with reading and spelling;
- difficulties with auditory sequencing of information, which results in problems following verbal directions;
- problems with auditory memory that are related to deficits in reading comprehension and learning new concepts; and

Central auditory processing disorder assessment is indicated when individuals have symptoms and/or complaints of hearing difficulty with documented normal peripheral auditory function; have central nervous system disorder potentially affecting the central auditory system; assessment should be conducted with other audiologic, speech and language as well as neuropsychological tests to evaluate the overall communication behavior, including spoken language processing and production, and educational achievement of individuals (ASHA, p. 47).

Because CAPD can affect individuals differently, an individual approach must be taken to the selection of assessment measures and the interpretation of their results. A team approach is best, with collaboration, including an audiologist and a speech-language pathologist. Typically, audiologists have the theoretical and practical knowledge to administer and interpret the central auditory test battery; speech-language pathologists contribute information regarding receptive language, phonemic processing, and observed auditory processing behaviors (ASHA, 1995,1999). ASHA has established preferred practice patterns in CAPD assessment and treatment for both professions (ASA, 1997a, 1997b). Additional information is described in Central Auditory Processing: Current status of Research and Implications for Clinical Practice (ASHA, 1995).

Once a CAPD evaluation has been completed, the ET (including the classroom teacher and parent) should review all data and determine eligibility for service based on the educational significance of the CAPD. Services should be decided on an individual basis. Intervention by a speech-language pathologist may consist of either direct or nondirect (consultative) services. The speech-language pathologist can function as an important liaison between the classroom teacher, the parent, and the audiologist in determining and implementing the most appropriate intervention plan within the school and home settings.

It is important to note the CAPD is not a disability category under RI Regulations. The child must qualify for services based on meeting eligibility criteria for one of the disability categories within the state regulations.

Adapted from the ASHA:
IDEA and Your Caseload: A Template for Eligibility and Dismissal Criteria for Childs Ages 3 to 21

The Role of the School Speech Language Pathologist and the Child with Autism

Speech language pathologists (SLPs) sometimes wonder what role they should perform when asked to provide services for a child with autism. Parents may equally wonder what types of services they should request or approve for their son or daughter. Since individuals with autism vary across the many dimensions of communication, such as ability to talk, to communicate basic needs, or to engage in conversation, a single answer is not possible. Instead, it is feasible to review a menu of options and related ideas that may impact the selection of a delivery of services to meet individual needs.

QUALITATIVE COMMUNICATION IMPAIRMENT-BY DEFINITION

As a starting point, it may be appropriate to begin with a set of questions:

- Does the child with autism have a communication problem?
- Does he or she need the services of a school speech language pathologist?
- Does this need for special services also apply to the child who is high functioning, i.e., a child who has average or above average cognitive abilities?

The answer to all three questions is an unequivocal "yes." The degree of certainty emanates from what is known about the disability itself. A qualitative impairment in communication skills is considered to be a characteristic of autism. Typically the services of the speech language pathologist are needed by the child with autism and by his or her educational team, including the school staff and the family.

SERVICES MAY BE NECESSARY BUT DIRECT SERVICES ARE NOT ALWAYS MANDATORY

Having a qualitative communication impairment does not mean that each individual with autism automatically requires direct or personally administered service by a speech language pathologist (SLP). Instead, it should mean that the SLP is familiar with each child and that the SLP works with each family and the school staff to plan and to customize a communication program which meets each child's needs.

Consultation Model

- Consultation can include a variety of activities. A team discussion with clarification of roles and expectations regarding the consultant's services might be necessary before an Individualized Education Program (IEP) is completed.
- Sometimes consultation services have a major collaborative or partnership component.
- In some situations, a consultant used an expert service delivery model.

    - Someone has a problem and the SLP is requested to observe, evaluate the child, and provide suggestions to the teacher.

- Consultation also can be used in a proactive manner. For example, and SLP may observe the effectiveness of a teacher's discourse or oral communication with a class during group instruction. The SLP might

- make suggestions that could improve the attending behavior or verbal comprehension of the child with autism.

- Consultation services also may represent a means of monitoring a child's generalization of skills into everyday situations.

- SLP consultation services may be combined on the IEP with other service delivery options or roles, or instructional goals.

Collaboration Model

- Collaboration involves team planning and team implementation of a communication plan. The SLP, classroom teachers, and teaching assistants meet to plan specific activities. The SLP may or may not be in the classroom or community when activities occur.
- Collaboration may also vary and need definition as it pertains to a particular child.
- Collaborative planning allows communication goals to be practiced throughout the school day. Potentially, more pract5ice will occur each day than would occur if only a pull out model (services in a therapy room) were used to teach a given skill. Data keeping is needed to insure that sufficient communication teaching or practice occurs during activities each day.
- A collaborative model has the potential to insure that communication is learned in functional or daily situations. Collaborative planning also must include adequate training and support of all persons who implement daily or weekly instruction.

Advocacy Role

- Advocacy might be needed in order to gain support for an intervention method such as Augmentative/Alternative Communication (AAC), to identify additional opportunities for the child to contribute to the classroom discussion, or to achieve better staff understanding of a child's special needs. For example, the SLP might help other staff understand that acting out behavior will continue unless the use of better communication skills is taught and supported.
- Advocacy could take the form of soliciting funding for an electronic communication device.
- Advocacy also could involve the solicitation of a specific service for a child (e.g., an occupational therapy evaluation because the child has difficulty producing written communication).

F. Considerations when evaluating a child with Nonverbal Learning Disorder

A Nonverbal Learning Disorder (NLD) is "a neurological condition believed to result from damage to the white matter connections in the right-hemisphere, which are important for intermodel integration. Three major categories of dysfunction present themselves:

1.) Motoric (lack of coordination, severe balance problems, and difficulties with fine graphomotor skills)
2.) Visual-spatial-organizational (lack of image, poor visual recall, faulty spatial perceptions, and difficulty with spatial relations)
3.) Social (lack of ability to comprehend nonverbal communication*, difficulties adjusting to transitions and novel situations, and deficits in social judgment and social interaction)."

*Nonverbal communication is "any communication that doesn't express language directly, but often augments it, including, facial expressions, gestures, body posture, and speaking distance."

ASSESSMENT

"The assessment of individuals suspected to have NLD should be conducted by an interdisciplinary team and focused toward developing an appropriate intervention plan. There is no single test, there are no clusters of tests, there is no cut-off score on an individual test that, in and of itself, will signal the presence of NLD."

It is important for the child's parents to be closely involved in the evaluation process. "The most crucial consideration when retaining professionals for an evaluation of your child is that they be knowledgeable of NLD and that they know how to distinguish it from other disorders with the same or similar symptoms."

APPENDIX A

ARTICULATION AND PHONOLOGY

The following pages offer a sample of several developmental norm tables regarding phoneme and phonological process development. These are as a resource only and are not the sole viewpoint of this document.

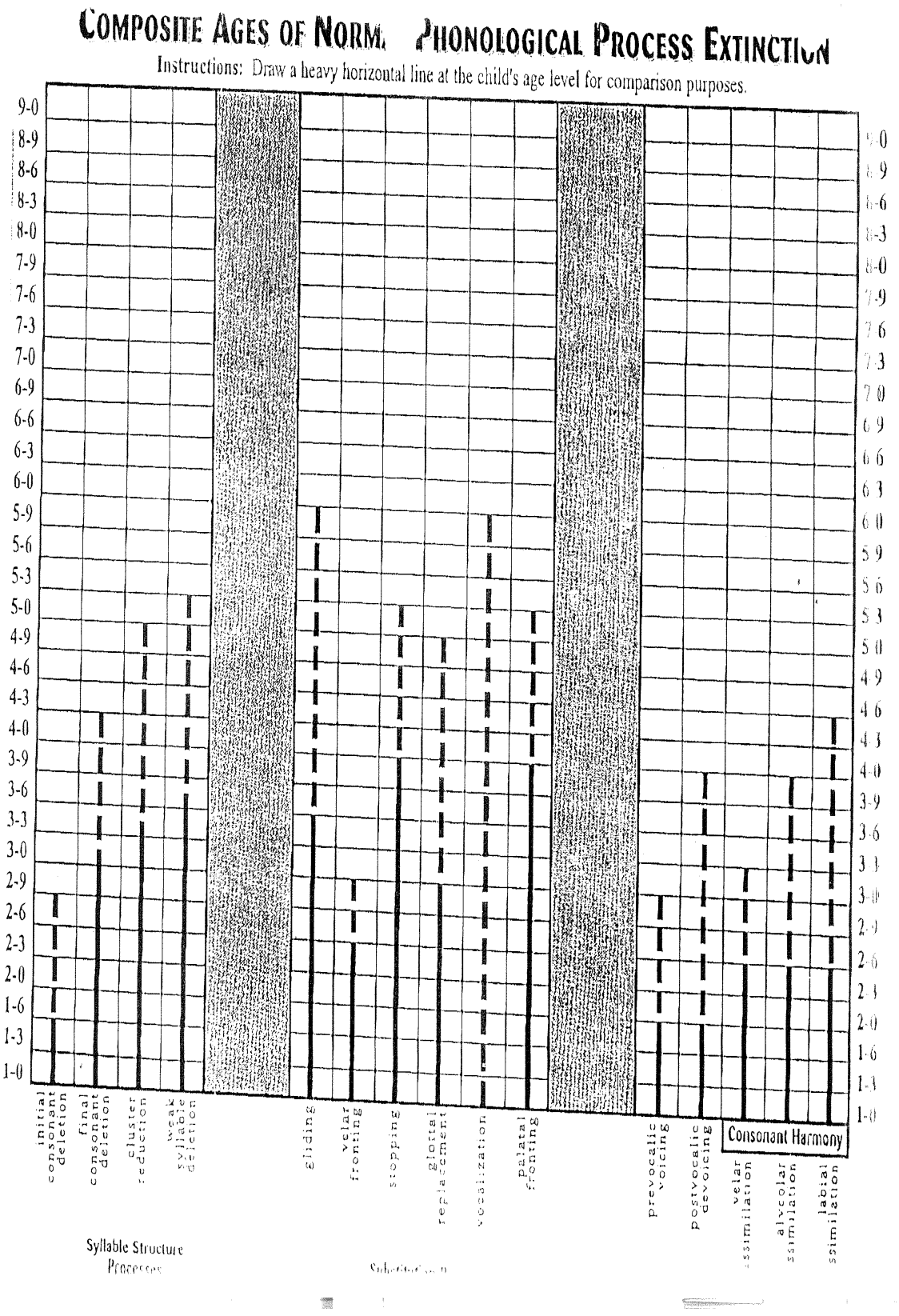
Table 5-2. Five Commonly Cited Norms for Consonant Development

Consonant	Wellman et al. (1931)	Poole (1934)	Templin (1957)	Sander (1972)	Prather et al. (1975)
m	3	3½	3	before 2	2
n	3	4½	3	before 2	2
h	3	3½	3	before 2	2
p	4	3½	3	before 2	2
f	3	5½	3	3	2–4
w	3	3½	3	before 2	2–8
b	3	3½	4	before 2	2–8
ŋ		4½	3	2	2
j	4	4½	3½	3	2–4
k	4	4½	4	2	2–4
g	4	4½	4	2	2–4
l	4	6½	6	3	3–4
d	5	4½	4	2	2–4
t	5	4½	6	2	2–8
s	5	7½	4½	3	3
r	5	7½	4	3	3–4
tʃ	5		4½	4	3–8
v	5	6½	6	4	4
z	5	7½	7	4	4
ʒ	6	6½	7	6	4
θ		7½	6	5	4
dʒ			7	4	4
ʃ		6½	4½	4	3–8
ð		6½	7	5	4

Source: Reprinted with the permission of Merrill, an imprint of Macmillan Publishing Company from *Assessment and Remediation of Articulatory and Phonological Disorders*, Second Edition by Nancy A. Creaghead, Parley W. Newman, and Wayne A. Secord. Copyright © 1985 by Merrill Publishing Company. (p. 47)

www.beyond-words.org/articulation_developmental_norms.htm

Articulation Developmental Norms Chart			
Age of Development	**Sounds**	**Phonological Process & Examples**	**Therapy Indicated If Not Acquired By:**
< 3 years	p, b, m, t, d, n,w, h, and vowels	Final consonant deletion (e.g., The dog has a bone > The da ha a bo) Initial consonant deletion (e.g., The dog has a bone > uh og as a one) Medial consonant deletion (e.g., The puppy enjoys biscuits > The pu-ee enoys bi-its) Backing (e.g., The dog has two bones > The gog has koo gones)	3 years
3 - 3 ½ years	k, g, ing, f, y	Voicing (e.g., The dog has a bone > The tok has a pone. OR puppy > bubby) Fronting (e.g., I can give the dog a goodie > I tan tive the dod a doodie) Stopping (e.g., It's fun to see the puppies eat > It tun to tee da puppiet eat)	3 ½ years
3 ½ - 4 years	s, z	Stridency Deletion (e.g., Sit down and see the sunset > It down and ee the unet)	4 years
4 - 4 ½ years	sh, l, l-blends, s-blends	Gliding (e.g., I like to lick lemons > I wike to wick wemons OR I yike to yick yemons) Cluster Reduction (e.g., I played with the sparkly star > I payed with the parkly tar)	4 ½ years
4 ½ - 5 years	ch, j, and lateral lisps	Deaffrication (e.g., I cheered for juice and cheese > I teered for duice and teese) Lateralization = slushy sounds (e.g., I said so > I shaid sho)	5 years
5 < years	r and r-blends, v, th and frontal lisps		not indicated
Recommendations: Sounds should not be worked on prior to therapy date unless: • The sounds significantly impair intelligibility • The sounds have unusual error patterns/substitutions			



Developmental Articulation and Phonology Profile: Dennis Tanner, William Culbertson, and Wayne Secord

Normal Speech Development

Anyone who has been around children who are under 5 years of age will know that their speech sounds are not pronounced correctly all the time. In fact small children's speech can be quite difficult to understand because their sound system is not yet organised like adult speech.

INTELLIGIBILITY

Table 1 provides a rough rule of thumb for how clearly your child should be speaking. If you are in doubt about your own child's speech sound development an assessment by a speech-language pathologist will quickly tell you if your child is 'on track' and making the right combination of correct sounds and 'errors' for their age.

TABLE 1: How well words can be understood by parents

By 18 months a child's speech is normally 25% intelligible
By 24 months a child's speech is normally 50 -75% intelligible
By 36 months a child's speech is normally 75-100% intelligible

PHONOLOGICAL DEVELOPMENT

The gradual process of acquiring adult speech patterns is called phonological development.

PHONOLOGICAL PROCESSES

All children make predictable pronunciation errors (not really 'errors' at all, when you stop to think about it) when they are learning to talk like adults. These 'errors' are called phonological processes, or phonological deviations. In Table 2 are the common phonological processes found in children's speech while they are learning the adult sound-system of English.

TABLE 2: Phonological Processes in Normal Speech Development

PHONOLOGICAL PROCESS (Phonological Deviation)	EXAMPLE	DESCRIPTION
Context sensitive voicing	"Pig" is pronounced and "big" "Car" is pronounced as "gar"	A voiceless sound is replaced by a voiced sound. In the examples given, /p/ is replaced by /b/, and /k/ is replaced by /g/. Other examples might include /t/ being replaced by /d/, or /f/ being replaced by /v/.
Word-final devoicing	"Red" is pronounced as "ret" "Bag" is pronounced as "bak"	A final voiced consonant in a word is replaced by a voiceless consonant. Here, /d/ has been replaced by /t/ and /g/ has been replaced by /k/.
Final consonant deletion	"Home" is pronounced a "hoe" "Calf" is pronounced as "car"	The final consonant in the word is omitted. In these examples, /m/ is omitted (or deleted) from "home" and /f/ is omitted from "calf".
Velar fronting	"Kiss" is pronounced as "tiss" "Give" is pronounced as "div" "Wing" is pronounced as "win"	A velar consonant, that is a sound that is normally made with the middle of the tongue in contact with the palate towards the back of the mouth, is replaced with consonant produced at the front of the mouth. Hence /k/ is replaced by /t/, /g/ is replaced by /d/, and 'ng' is replaced by /n/.
Palatal fronting	"Ship" is pronounced as "sip" "Measure" is pronounced as "mezza"	The fricative consonants 'sh' and 'zh' are replaced by fricatives that are made further forward on the palate, towards the front teeth. 'sh' is replaced by /s/, and 'zh' is replaced by /z/.
Consonant harmony	"Cupboard" is pronounced as	The pronunciation of the

Consonant harmony	"pubbed" "dog" is pronounced as "gog"	whole word is influenced by the presence of a particular sound in the word. In these examples: (1) the /b/ in "cupboard" causes the /k/ to be replaced /p/, which is the voiceless cognate of /b/, and (2) the /g/ in "dog" causes /d/ to be replaced by /g/.
Weak syllable deletion	Telephone is pronounced as "teffone" "Tidying" is pronounced as "tying"	Syllables are either stressed or unstressed. In "telephone" and "tidying" the second syllable is "weak" or unstressed. In this phonological process, weak syllables are omitted when the child says the word.
Cluster reduction	"Spider" is pronounced as "pider" "Ant" is pronounced as "at"	Consonant clusters occur when two or three consonants occur in a sequence in a word. In cluster reduction part of the cluster is omitted. In these examples /s/ has been deleted form "spider" and /n/ from "ant".
Gliding of liquids	"Real" is pronounced as "weal" "Leg" is pronounced as "yeg"	The liquid consonants /l/ and /r/ are replaced by /w/ or 'y'. In these examples, /r/ in "real" is replaced by /w/, and /l/ in "leg" is replaced by 'y'.
Stopping	"Funny" is pronounced as "punny" "Jump" is pronounced as "dump"	A fricative consonant (/f/ /v/ /s/ /z/, 'sh', 'zh', 'th' or /h/), or an affricate consonant ('ch' or /j/) is replaced by a stop consonant (/p/ /b/ /t/ /d/ /k/ or /g/). In these examples, /f/ in "funny" is replaced by /p/, and /ʤ/ in "jump" is replaced by /d/.

ELIMINATION OF PHONOLOGICAL PROCESSES

Phonological processes have usually 'gone' by the time a child is five years of age, though there is individual variation between children. Table 3 lists the ages by which each of the processes are normally eliminated. Ages are expressed as years;months. For example, 3;6 means 3 years 6 months.

TABLE 3: Ages by which Phonological Processes are Eliminated

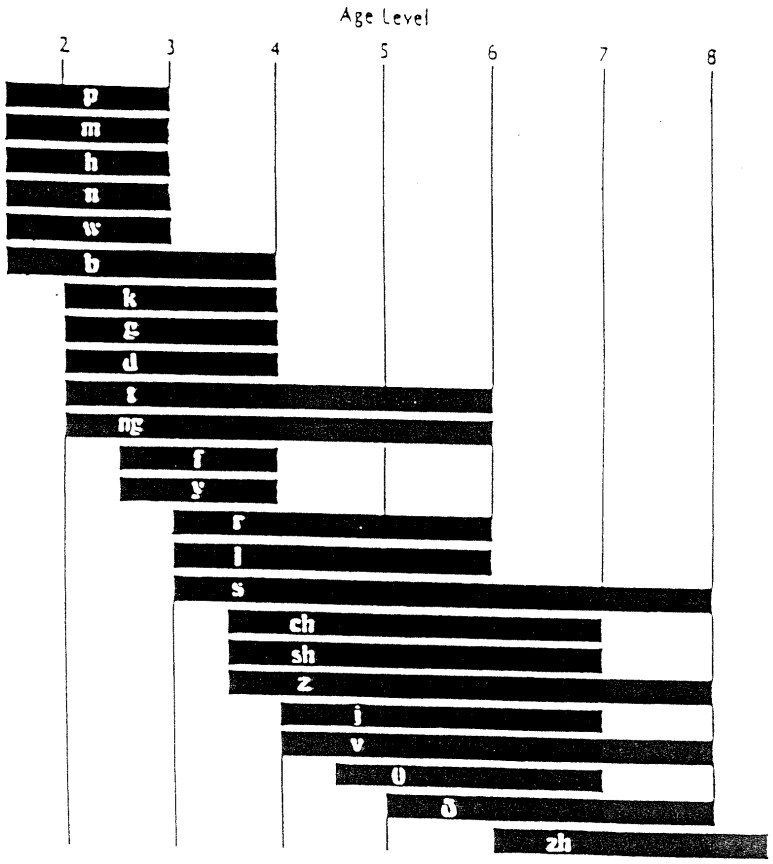
PHONOLOGICAL PROCESS	EXAMPLE	GONE BY APPROXIMATELY
Context sensitive voicing	pig = big	3;0
Word-final de-voicing	pig = pick	3;0
Final consonant deletion	comb = coe	3;3
Fronting	car = tar ship = sip	3;6
Consonant harmony	mine = mime kittycat = tittytat	3;9
Weak syllable deletion	elephant = efant potato = tato television =tevision banana = nana	4;0
Cluster reduction	spoon = poon train = chain clean = keen	4;0
Gliding of liquids	run = one leg = weg leg = yeg	5;0
Stopping /f/	fish = tish	3;0
Stopping /s/	soap = dope	3;0
Stopping /v/	very = berry	3;6
Stopping /z/	zoo = doo	3;6
Stopping 'sh'	shop = dop	4;6
Stopping 'j'	jump = dump	4;6
Stopping 'ch'	chair = tare	4;6
Stopping voiceless 'th'	thing = ting	5;0
Stopping voiced 'th'	them = dem	5;0

Table 4 outlines the ages by which children use individual consonants with 75% accuracy during conversation. These norms were established for a population of Australian children by Kilminister and Laird (1978). In column 3, the term 'voiced' refers to the vibration of the vocal cords while the sound is being made. The term 'voiceless' is applied to sounds that are made without vocal cord vibration.

Table 4: Normal phonetic development

Column 1 Average age by which the speech sound listed is 75% 'correct' when a child speaks	Column 2 Speech sounds	Column 3 The manner in which the speech sounds are produced
3 years	h as in he	Voiceless fricative
	zh as in measure	Voiced fricative
	y as in yes	Voiced glide
	w as in we	Voiced glide
	ng as in sing	Voiced nasal
	m as in me	Voiced nasal
	n as in no	Voiced nasal
	p as in up	Voiceless stop
	k as in car	Voiceless stop
	t as in to	Voiceless stop
	b as in be	Voiced stop
	g as in go	Voiced stop
	d as in do	Voiced stop
3 years 6 months	f as in if	Voiceless fricative
4 years	l as in lay	Voiced liquid
	sh as in she	Voiceless fricative
	ch as in chew	Voiceless affricate
4 years 6 months	j as in jaw	Voiced affricate
	s as in so	Voiceless fricative
	z as in is	Voiced fricative
5 years	r as in red	Voiced liquid
6 years	v as in Vegemite	Voiced fricative

Phonological Development



"When Are Speech Sounds Learned?" by E.K. Sander, 1972 Journal of Speech and Hearing Disorders, 37, p 62, Copyright 1972 by the American Speech-Language and Hearing Association, Rockville, Maryland.

Developmental Speech-Sound Norms

Recommended Ages of Acquisition: Singletons

Recommended ages of acquisition for phonemes, based generally on 90% levels of acquisition

	Recommended age of Acquisition (years; months)	
Phoneme	**Females**	**Males**
m	3;0	3;0
n	3;0	3;6
- = “ing”	7;0-9;0	7;0-9;0
h-	3;0	3;0
w-	3;0	3;0
j- = “y”	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, f-	3;6	3;6
-f	5;6	5;6
v	5;6	5;6
0 = “th” voiceless	6;0	8;0
o - = “th” voiced	4;6	7;0
s	7;0-9;0	7;0-9;0
z	7;0-9;0	7;0-9;0
= “sh”	6;0	7;0
t = “ch”	6;0	7;0
d = “j”	6;0	7;0
l, l-	5;0	6;0
-l	6;0	7;0
r, r-	8;0	8;0
- vocalic r	8;0	8;0

Taken from: Smit.a.,B., Hand, L., Freilinger, J.J., Bernthal, J.E. & Bird. A. (1990) The Iowa articulation norms project an its Nebraska replication. *Journal of Speech and Hearing Disorders*, 55, 779-798.

Developmental Speech-Sound Norms

Recommended Ages of Acquisition: Clusters

Recommended ages of acquisition for initial clusters, based generally on 90% levels of acquisition

	Recommended age of Acquisition (years; months)	
Phoneme	**Females**	**Males**
tw, kw	4;0	5;6
sp, st, sk	7;0-9;0	7;0-0;0
sm, sn	7;0-9;0	7;0-9;0
sw	7;0-9;0	7;0-9;0
sl	7;0-9;0	7;0-9;0
pl, bl, kl, gl, fl	5;6	6;0
pr, br, tr, dr, kr, gr, fr	8;0	8;0
0r = thr	9;0	9;0
skw	7;0-9;0	7;0-9;0
spl	7;0-9;0	7;0-9;0
spr, str, skr	7;0-9;0	7;0-9;0

Taken from: Smit, A.B. Hand, L. Freilinger, J.J. Bernthal, J.E., & Bird. A. (1990). The Iowa articulation norms project at its Nebraska replication. *Journal of Speech and Hearing Disorders*, 55, 779-798.

VOICE

Sample Letter to ENT

Date:_____

Dear Dr._____

Your patient, _____(DOB)____/____/____ has received a Speech and Language Evaluation, and the following voice characteristics were present:

Pitch: _____

Quality: _____

Intensity: _____

Voice therapy may be appropriate depending on the integrity of the physiology of the speech mechanism, including, the vocal cords and the nasopharynx. Following your evaluation please complete, sign, and return the form found at the bottom of this letter. Thank you for your assistance with this child.
Please feel free to call me at (___)_____if you have any questions.

Sincerely,
Speech/Language Pathologist

Child's Name_____Date of Evaluation_____

Code: 0 No Defects **C** Corrected
1. Deviation, no treatment required **TR** Under Treatment
2. Defect, requires attention

Please circle the appropriate description:

NECK 0 1 2 C TR		ORAL CAVITY 0 1 2 C TR	
EARS 0 1 2 C TR		NASOPHARYNX 0 1 2 C TR	
NOSE 0 1 2 C TR		LARYNX 0 1 2 C TR	

Voice Disorder is organically based and **DOES/DOES NOT** require therapy.
Voice Disorder has no organic basis and therapy **IS/IS NOT** appropriate.
Physician's Signature _____
Physician's Name ***(please print)*** _____
Address _____

(Adapted from North Smithfield Special Education forms)

APPENDIX A

VOCAL SELF-PERCEPTION: ATTITUDINAL QUESTIONNAIRE

1. DO YOU EVER THINK ABOUT YOUR VOICE? YES NO NO OPINION

2. HAVE YOU EVER HEARD YOUR VOICE ON TAPE PLAYBACK (e.g. on cassette recorder, answering machine)? YES NO NO OPINION

3. DID YOU LIKE YOUR VOICE ON TAPE PLAYBACK? YES NO NO OPINION
   IF YES OR NO, WHAT DID YOU LIKE OR DISLIKE ABOUT YOUR VOICE? _____

4. HAS ANYONE EVER COMMENTED ON YOUR VOICE? YES NO NO OPINION
   IF YES, WHAT WAS SAID? _____

5. DO YOU THINK YOUR VOICE REPRESENTS YOUR IMAGE OF YOURSELF (MASCULINE, FEMININE, INTELLIGENT, EDUCATED,FRIENDLY, ETC.)? YES NO NO OPINION
   IF YES OR NO, IN WHAT WAY? _____

6. DO ANY OF YOUR FRIENDS, MALE OR FEMALE, HAVE VOICES THAT YOU ESPECIALLY LIKE? YES NO NO OPINION
   IF YES, EXPLAIN. _____

7. DO ANY OF YOUR FRIENDS, MALE OR FEMALE, HAVE VOICES THAT YOU ESPECIALLY DISLIKE? YES NO NO OPINION
   IF YES, EXPLAIN. _____

8. DOES YOUR VOICE SOUND LIKE THAT OF ANY OTHER MEMBER OF YOUR FAMILY? YES NO NO OPINION
   IF YES, EXPLAIN. _____

9. CIRCLE ANY WORDS BELOW THAT DESCRIBE YOUR VOICE AND THE WAY YOU SPEAK IN GENERAL (EITHER ON TAPE REPLAY OR WHILE ACTUALLY TALKING).

PLEASANT	SEXY	RASPY	HOARSE	HARSH	SHRILL
SQUEAKY	MONOTONOUS	NASAL	MUMBLE	TOO LOUD	TOO SOFT
HIGH-PITCHED	LOW-PITCHED	GROWL	TOO FAST	TOO SLOW	WEAK
BREATHY	HUSKY	CLEAR	STRONG	THIN	WHINY
INTERESTING	RESONANT	MASCULINE	FEMININE	EXPRESSIVE	AVERAGE

(ADD ANY OTHER TERMS THAT MAY DESCRIBE YOUR VOICE). _____

Source: Haskell, J. Adjusting Adolescents Vocal Self-Perception *Language, Speech, and Hearing Services in Schools* 1991: 22 (3), p.171. *Reprinted with permission of ASHA and Author, Haskell, J: Vocal Self-Perception.*

APPENDIX

VOICE CONSERVATION INDEX FOR CHILDREN*

CHILD'S INITIALS: _____ AGE: _____ SEX: _____ RACE: _____

Please circle the answer that is best.

1. When I get a cold, my voice gets hoarse.
   All the time | Most of the time | Half the time | Once in a while | Never
2. After cheering at a ball game, I get hoarse.
   All the time | Most of the time | Half the time | Once in a while | Never
3. When I'm in a noisy situation, I stop talking because I think I won't be heard.
   All the time | Most of the time | Half the time | Once in a while | Never
4. When I am in a noisy situation, I speak very loudly.
   All the time | Most of the time | Half the time | Once in a while | Never
5. At home or at school I spend a lot of time talking every day.
   All the time | Most of the time | Half the time | Once in a while | Never
6. Outside I like to talk to people who are far away from me.
   All the time | Most of the time | Half the time | Once in a while | Never
7. When I play outside with my friends, I yell a lot.
   All the time | Most of the time | Half the time | Once in a while | Never
8. I lose my voice when I don't have a cold.
   All the time | Most of the time | Half the time | Once in a while | Never
9. People tell me I talk too loudly.
   All the time | Most of the time | Half the time | Once in a while | Never
10. People tell me I never stop talking.
    All the time | Most of the time | Half the time | Once in a while | Never
11. I like to talk.
    All the time | Most of the time | Half the time | Once in a while | Never
12. I talk on the phone.
    All the time | Most of the time | Half the time | Once in a while | Never
13. At home, I talk to people who are in another room.
    All the time | Most of the time | Half the time | Once in a while | Never
14. I like to make car or other noises when I play.
    All the time | Most of the time | Half the time | Once in a while | Never
15. I like to sing.
    All the time | Most of the time | Half the time | Once in a while | Never
16. People don't listen to me unless I talk loudly.
    All the time | Most of the time | Half the time | Once in a while | Never

*Saniga and Carlin (1991).

Source: Saniga, R.D. and Carlin, M.F. "Vocal Abuse Behaviors in Young Children". Language, Speech, and Hearing Services in Schools, 1993: 24 (2), p.33. Reprinted with permission of ASHA and the authors.

FLUENCY

DIAGNOSIS

Table 4 – 1.
Observable Characteristics of Stuttering

Behavior	Definition	Example
Hesitation	Any nontense break in the forward flow of speech	I___ am going home.
Broken words	With unacceptable within-word hesitations	Partially uttered words: I am g___oing home.
Repetition	Repeated utterances of parts of words (PWR), words (WR), and phrases (PR)	I am g going.(PWR) I am am going.(WR) I am I am going (PR)
Interjections	Use of sounds, syllables, and words that are independent of context of utterance	I er er am uh going.
Prolonged sounds	Unacceptably prolonged sounds, usually at the start of a word	I am ssss-so late.
Dysrythmic phonation	Distortion of the prosodic elements within a word, with improper stress, timing, or accenting	I am going (rising inflection) home.
Tension	Audible manifestation of abnormal breathing or muscular tightening between words, parts of words, or interjections	I am (forced breathing) going home.
Revisions, modifications	Grammatical or content	I am, I was going
Incomplete phrases	Failure to complete an initiated unit of speech	I am ---but not today

Adapted from Williams, D.E., Darley, F. L. & Spriesterbach, D.D. (1978). *Diagnostic Methods in Speech Pathology*. New York: Harper & Row. Reprinted with permission.

From Culatta, R. and Goldberg, S., *Stuttering Therapy: An Integrated Approach to Theory and Practice* Needham Heights, MA : Allyn and Bacon, 1995, p.70.

Fluency Measurement Common Procedures

1. To analyze *frequency of stuttering*, use the following procedures to measure the types of dysfluencies:

Collect and transcribe a 200-syllable spontaneous communication sample in each of a variety of settings, using audio or videotape. Videotape is preferable for analyzing secondary characteristics and struggle behaviors. The 200 syllables should only represent the intended message. Do not count repetitions as syllables. Revisions are counted as part of the 200 syllable sample. The transcription should also include the instances of stuttering.

Count the number of occurrences of dysfluencies, such as hesitations, interjections, revisions, prolongations, visible/audible tensions, etc. Count the number of instances of each type of stuttering and struggle behavior (audible/visible tension). Divide this number by the total number of syllables (200), and multiply by 100 to obtain the percentage of types of dysfluencies (Campbell and Hill, 1992). Subtract this number from 100 to obtain the percentage of fluent speech.

Note: A frequency analysis may also be accomplished by collecting and analyzing the number of stuttered words in a speech sample of 150 words (Riley, 1980). However, this method may penalize a speaker who uses multisyllabic words (Peter and Guitar, 1991).

2. To analyze duration of stuttering, use the following durational measurements:

Collect a 10-to 15- minute speech sample of the child's conversational speech using video or audio tape. Videotape is preferable for analyzing secondary characteristics and struggle behaviors.

Use a stopwatch to time 5 minutes (300 seconds) of the <u>child's</u> talking time.

Review the sample and use a stopwatch to obtain the total number of seconds of dysfluencies. Divide the total number of seconds of dysfluencies by the total number of seconds in the speech sample and multiply by 100 to obtain the percentage of duration of dysfluent speech (Bacolini, P., Shames, G., and Pwell, L., 1993).

If using a video sample, watch the video one again, noting the types of dysfluencies and secondary characteristics listed on the Summary of Evaluation Findings: Fluency.

Note: Curlee and Perkins (1984) suggest the following other methods of analyzing duration within a speech sample*:

1. Use a stopwatch to time the length of 10 different stuttering moments at random within the sample. These moments of stuttering should be representative of the sample. To obtain the average duration of stuttering, divide the sum of the 10 stuttering moments by 10.
2. Choose the three longest stuttering occurrences and time each with a stopwatch. Record the results.

- Peters and Guitar (1991) prefer a 5-minute sample, rather than a 150-word sample suggested by Riley, to ensure a more complete sample for durational measures.

3. To analyze rate of speech, Curlee and Perkins (1994) use the following procedure:

Collect a 5-minute speech sample using speaking or oral reading. (You probably needs 10 minutes of taping to get the 5 minutes of the child's talking/oral reading time.) Count the number of syllables (or words) in the intended message. Then, divide the number of syllables (or words) by the total number of minutes of the child's speaking/oral reading time in the sample to obtain a syllable per minute rating-SPM (or a word per minute rating-WPM).

4. To analyze speech naturalness, use the following procedure:

Collect a 5-minute speech sample. Use a 9-point naturalness scale to determine whether speech has a natural sounding quality. To analyze speech quality, judgments of naturalness may be made by SLPs or naïve listeners (lay persons, graduate childs). Review the sample (watch/listen) and at 15 second intervals make subjective judgments about the speech to determine whether it sounds highly natural or highly unnatural, despite the percentage of fluency. A total of at least 10 such judgments should be made. To calculate naturalness, add the number assigned at each rating and then divide that number by 10. The Mean naturalness rating for adolescents/adults is 2.12 and 2.39 on the 9-point naturalness scale (Martin et al, 1984; Ingham et al, 1985). The Mean naturalness rating for children is 3.0 (J. Ingham, 1998).

For children, choose one of the following procedures, if appropriate.
For adolescents, you must choose one.

5. To assess coping mechanisms, Culatta and Goldberg (1995) recommend using the following methods:

Observations, checklists, rating scales and self-rating protocols

Reports by the child of how he/she manipulates speech in order to cope with stuttering.

Reports by the child of experiences of tension.

Reports by the child of vigilance necessary to achieve and maintain fluent speech.

6. **To assess covert stuttering behaviors, Culatta and Goldberg (1995) recommend using a variety of interview and questionnaire protocols.**

OR

A therapist may use a fluency severity rating scale procedure in lieu of the above options.

Adapted from:Guidelines for Speech and Language Programs, Volume II: Determining Eligibility for Special Education Speech and Language Services, Working Draft. Connecticut State Department of Education, 1999.

Fluency Checklist for Preschoolers

Student: _____ **Date:** _____

Teacher: _____ **Grade/Program:** _____

		Yes	No
1.	Does the student suffer more in certain situations?	___	___
	Describe _____		
	_____		
2.	Does the student repeat whole words or beginning sounds?	___	___
3.	Does the student's speech contain filler speech such as "um," "oh," etc.?	___	___
4.	Does the student appear frustrated when he/she communicates?	___	___
5.	Does the student exhibit excessive behaviors such as eye blinking, noticeable facial tension or extraneous body movements?	___	___
6.	Does the student have noticeable pitch variations?	___	___

Concerns: _____

_____

_____

_____ _____

Date Classroom Teacher's Signature

Source: Michigan Department of Education

Differential Diagnoses

Normal developmental disfluency and early signs of stuttering are often difficult to differentiate. Thus, diagnosis of a stuttering problem is made tentatively. It is based upon both direct observation of the child and information from parents about the child's speech in different situations and at different times. The following section and Tables 1 and 2 should help the physician distinguish between normal disfluency, mild stuttering, and severe stuttering, so that appropriate referral can be made.

Normal Disfluency

Between the ages of 18 months and 7 years, many children pass through stages of speech disfluency associated with their attempts to learn how to talk. Children with normal disfluencies between 18 months and 3 years will exhibit repetitions of sounds, syllables, and words, especially at the beginning of sentences. These occur usually about once in every ten sentences.

After 3 years of age, children with normal disfluencies are less likely to repeat sounds or syllables but will instead repeat whole words (I-I-I can't) and phrases (I want I want I want to go). They will also commonly use fillers such as "uh" or "um" and sometimes switch topics in the middle of a sentence, revising and leaving sentences unfinished.

Normal children may be disfluent at any time but are likely to increase their disfluencies when they are tired, excited, upset, or being rushed to speak. They also may be more disfluent when they ask questions or when someone asks them questions.

Their disfluencies may increase in frequency for several days or weeks and then be hardly noticeable for weeks or months, only to return again.

Typically, children with normal disfluencies appear to be unaware of them, showing no signs of surprise or frustration. Parents' reactions to normal disfluencies show a wider range of reactions than their children do. Most parents will not notice their child's disfluencies or will treat them as normal.

Some parents, however, may be extremely sensitive to speech development and will become unnecessarily concerned about normal disfluencies. These overly concerned parents often benefit from referral to a speech clinician for an evaluation and continued reassurance.

Mild Stuttering

Like normal disfluency, mild stuttering may become more noticeable when the child is beginning to talk in 2-word sentences. Children who stutter mildly may show the same sound, syllable, and word repetitions as children with normal disfluencies but may have a higher frequency of repetitions overall as well as more repetitions each time.

For example, instead of one or two repetitions of a syllable, they may repeat it four or five times, as in "Ca-ca-ca-ca-can I have that?"

They may also occasionally prolong sounds, as in "MMMMMMMommy, it's mmmmmy ball." In addition to these speech behaviors, children with mild stuttering may show signs of reacting to their disfluency.

For example, they may blink or close their eyes, look to the side, or tense their mouths when they stutter. Another sign of mild stuttering is the increasing persistence of disfluencies. As suggested earlier, normal disfluencies will appear for a few days and then disappear.

Mild stuttering, on the other hand, tends to appear more regularly. It may occur only in specific situations, but it is more likely to occur in these situations, day after day. A third sign associated with mild stuttering is that the child may not be deeply concerned about the problem, but may be temporarily embarrassed or frustrated by it. Children at this stage of the disorder may even ask their parents why they have so much trouble talking.

Parents' responses to mild stuttering will vary.[5] Most will be at least mildly concerned about it, and wonder what they should do and whether they have caused the problem. A few will truly not notice it; still others may be quite concerned, but deny their concern at first.

Severe Stuttering

Children with severe stuttering usually show signs of physical struggle, increased physical tension, and attempts to hide their stuttering and avoid speaking. Although severe stuttering is more common in older children, it can begin anytime between ages 1½ and 7 years. In some cases, it appears after children have been stuttering mildly for months or years. In other cases, severe stuttering may appear suddenly, without a period of mild stuttering preceding it.

Severe stuttering is characterized by speech disfluencies in practically every phrase or sentence; often moments of stuttering are one second or longer in duration. Prolongations of sounds and silent blockages of speech are common.

The severely stuttering child may, like the milder stutterer, have behaviors associated with stuttering: eye blinks, eye closing, looking away, or physical tension around the mouth and other parts of the face. Moreover, some of the struggle and tension may be heard in a rising pitch of the voice during repetitions and prolongations. The child with severe stuttering may also use extra sounds like "um," "uh," or "well" to begin a word on which he expects to stutter.

Severe stuttering is more likely to persist, especially in children who have been stuttering for 18 months or longer, although some of these children will recover spontaneously. The frustration and embarrassment associated with real difficulty in talking may create a fear of speaking. Children with severe stuttering often appear anxious or guarded in situations in which they expect to be asked to talk. While the child's stuttering will probably occur every day, it will probably be more apparent on some days than others.

Parents of children who stutter severely inevitably have some degree of concern about whether their child will always stutter and about how they can best help. Many parents also believe, mistakenly, that they have done something to cause the stuttering. In almost all cases, parents have not done anything to cause the stuttering. They have treated the child who stutters just like they treat their other children, yet they may still feel responsible for the problem.

They will benefit from reassurance that their child's stuttering is a result of many causes and not simply the effect of something they did or didn't do.

The distinctions among normal disfluency, mild stuttering, and severe stuttering are summarized in Table 1: Checklist for Referral.

[Previous] [Table of Contents] [Next Section]

Explanatory References to the Continuum of Disfluent Speech Behaviors

(1) Typical disfluencies that occur in preschool children's speech. Listed on the continuum in the general order of expected frequency (hesitations the most frequent). It is expected that these disfluencies will be relatively relaxed, as for example noted by repetitions being even in rhythm and stress. However, if any of these disfluencies (non-repetitious and repetitious) are noticeably tense, then they are considered atypical.

(2) Atypical disfluencies that are very infrequent in the speech of children. More characteristics of what listeners perceive as stuttering. If in a speech sample of 200 syllables or more, there is more than 2% atypical disfluency (stuttering), this should be a basis for concern, and especially so if air flow or phonation is disrupted between repetitions (one syllable word or part-word syllable) or if a schwa sounding vowel is substituted for the one ordinarily used in the repetition of a syllable (for example, "muhmuhmuhmama"). Of course, blocks and other signs of increased tension and fragmentation of the flow of speech should be a basis for immediate attention.

(3) Cross over behaviors. On the continuum, word repetition (usually one syllable) and part-word syllable repetition, considering such qualitative features as the number of repetitions per instance, the stress pattern involved, and the presence of tension represents behavior borderline between Typical and Atypical Disfluencies.

Total Disfluency. This is another element that enters into the decision making process. Several clinical writers now state that more than 10% total disfluency (non-repetitious and repetitious) should signal reason for concern. These children are very disfluent. Research indicates that highly disfluent children are likely to also show a higher frequency of atypical disfluency. Thus, using the continuum as a frame of reference they would be identified in this way. Still, it is important to the decision making process to consider the total frequency of disfluency. For one thing, a high frequency of disfluency is more likely to be noticed by a listener.

Summary Statement. On the continuum, although most Typical Disfluencies are characterized by the fragmentation of a sentence or a phrase unit; it should be noted that most children show some part-word syllable repetition. Cross-over behaviors include more fragmentation of the word, and finally, Atypical Disfluencies include more fragmentation of the syllable (the core unit of speech) and increased tension. Experience indicates that increased tension is the principle factor leading to more serious disruption of speech.

Source: Hugo Gregory, Ph.D., Professor Emeritus, and Diane Hill, M.A., Clinical Instructor, Northwestern University. From handbook for program, *Stuttering Therapy Workshop for Specialists*, July 6-17, 1992. Reprinted with permission.

Continuum of Disfluent Speech Behavior

More Usual

(1) Typical Disfluencies

Hesitations (silent pauses)
↓
Interjection of sounds, syllables or words
↓
Revisions of phrases or sentences
↓
Phrase repetitions
↓ - - - - - - - - - - - - - (3)
One syllable word repetitions
Two or less repetitions per instance,
even stress, no tension
↓

Part-word syllable repetitions
Two or less repetitions per instance
Even stress, no tension

Cross over Behaviors

Stuttering

(2) Atypical Disfluencies

One syllable word repetitions
Three or more repetitions per instance
or uneven stress
↓
Part-word syllable repetitions
Three or more repetitions per instance
or uneven stress
- - - - - - - - - - -
↓
Sound repetitions
↓
Prolongations
↓
Blocks
↓
Increased tension noted,
e.g. tremor of lips or jaw or vocal tension

More Unusual

Source: Hugo Gregory, Ph.D., Professor Emeritus, and Diane Hill, M.A., Clinical Instructor, Northwestern University. From handbook for program, *Stuttering Therapy Workshop for Specialists*, July 6-17, 1992. Reprinted with permission.

RATE OF SPEECH

Child Syllable Rates

Age (yr)	Mean Syllables/min (SPM)	Range	SD
3.0 - 3.11	157.21	96.84 - 198.36	26.28
4.0 - 4.11	168.72	141.70 - 215.66	19.71
5.0 - 5.11	158.84	98.33 - 206.85	27.21
6.0 - 6.11	169.38	114.16 - 217.58	27.78
7.0 - 7.11	172.57	117.02 - 213.15	24.83

From Culatta, R., Page, J.L. & Wilson, L (1987). Speech rates of normally communicative children. American Speech-Language and Hearing Association's Annual Convention, New Orleans, LA.

Peters and Guitar (1991) report normal speaking rates as follows, citing numerous studies.

Preschoolers (Pindzola, R., Jenkins, M., and Lokken, K. (1989)

Age	Range in Syllables per Minute
3 years	116 - 163
4 years	117 - 183
5 years	109 - 183

Peters, T.J., and Guitar, B. *Stuttering: An Integrated Approach to Its Nature and Treatment.* Baltimore: Williams and Wilkins, 1991.

Pindzola, R. and Jenkins, M. and Lokken, K.. "Speaking Rates of Young Children." *Language, Speech, and Hearing Services in Schools*, 1989: 20, 133-138.

There are no data available for words per minute for preschoolers. Peters and Guitar recommend collecting a 5 minute sample.

School Age Children

Collect two speech samples (speaking and reading). A 5 minute sample is preferred, but a 3 minute sample is acceptable.

Stuttering may interfere with rate of speech during speaking and/or reading. Peters and Guitar (1991) measured the rates of school age children in Vermont during conversation. Their expectation was that rates of children in other states would be similar. In their calculations, they included normal pauses, but excluded pauses for thought that were longer than 2 seconds. They provide the following range of speech rates:

Age	Range
6 years	140 – 175 syllables per minute
8 years	150 – 180 syllables per minute
10 years	165 – 215 syllables per minute
12 years	165 - 220 syllables per minute

Adolescents and Adults

Peters and Guitar (1991) recommend collecting a 5 minute sample of conversational speech and a 5 minute reading sample. Andrews and Ingham (1971) report the following normal speaking rates and Darley and Spriestersbach (1978) report the following normal reading rates.

Adolescent/Adult Speech Rates	(WPM) Words per Minute (Range)	(SPM) Syllables per Minute (Range)
Speaking Rates	115 - 165	162 – 230*
Reading Rates	150 - 190	210 - 265

*Mean = 196

Peters, T.J. and Guitar, B. *Stuttering: An Integrated Approach to Its Nature and Treatment.* Baltimore: Williams and Wilkins, 1991.

Andrews, G. and Ingham, R. "Stuttering Considerations in the Evaluation of Treatment." British Journal of Communication Disorders, 1971: 6, 129-138.

Johnson, W., Darley, F.L., and Spriestersbach, D.C., *Diagnostic Methods in Speech Pathology.* New York, Harper & Row, 1978.

FLUENCY SEVERITY RATING SCALE

MILD -1	MODERATE - 2
Stuttered word frequency is 1% to 4% or a Dysfluency Weighted Score of 1 to 4. Non-fluencies are primarily one type and have no impact on communicative, pre-academic, academic, vocational, and/or social functioning.	Stuttered word frequency is 5% to 11% or a Dysfluency Weighted Score of 5 to 8. A variety of non-fluent behaviors may be present. Student and/or significant others are becoming award of problem. Non-fluent behaviors interfere with communicative, pre-academic, academic, vocational, and/or social functioning.

SEVERE – 3	EXTREME – 4
Stuttered word frequency is 12% to 22% or a Dysfluency Weighted Score of 9-11. Struggle, avoidance, and/or other coping behaviors are observed at times. Student is aware of problem. Non-fluent behaviors limit communicative, pre-academic, academic, vocational, and/or social functioning.	Stuttered word frequency is 23% or more, or a Dysfluency Weighted Score of 12 or above. Struggle, avoidance, and/or other coping behaviors are predominant. Communication is an effort. Non-fluent behaviors limit communicative, pre-academic, academic, vocational, and/or social functioning.

NOTE: See Fluency Worksheet (South Carolina Department of Education) to calculate scores.

Source: Brevard County School District, Florida, in *A Resource Manual For The Development and Evaluation of Special Programs For Exceptional Students, Volume IV-I, A Training Resource Manual for the Implementation of State Eligibility Criteria for the Speech and Language Impaired*, Florida Department of Education, 1995.

FLUENCY WORKSHEET

I. Instructions for determining *Dysfluency Score.*

A. Use either Procedure 1 or 2.

1. *Dysfluency Score* using stuttered words per minute.

a. Obtain three 3-minute speech samples during reading (if appropriate), monologue and conversation.

b. Calculate stuttered words per minute (sw/m) during the speech samples by dividing the total number of stuttered words by the total number of minutes of talking time. Enter sw/m here..... _____

c. determine the *most severe* type of dysfluency observed during the speech sample. Determine the weighted value of this type of dysfluency from the chart below. Enter the highest value here..... X _____

d. Multiply this weighted value by the number of stuttered words per minute to obtain the Dysfluency Score.....= _____

Type of Dysfluency	*Weighted Value*
Whole word repetitions	1
Hesitations	1
Interjections	1
Broken words	1
Revisions	1
Incomplete phrases	1
Part-word repetitions	2
Prolongations	3
Struggle	4
Blocks	4
Severe struggles (lasting 3 or more seconds)	5
Severe blocks (lasting 3 or more seconds)	5

2. *Dysfluency Score* using percentage of dysfluency.

a. Obtain three-3minute speech samples during reading (if appropriate), monologue and conversation.

b. Determine the number of dysfluent words. Enter here..... _____

c. Determine the total number of words obtained during the speech samples. ÷_____

d. Divide the number of dysfluent words by the total number of words to obtain the Dysfluency Score..... = _____%

B. Determine severity based on *Dysfluency Score* and indicate with a check (√) below.

_____ developmental.....1 to 4 or 1% to 4%
_____ deviation (mild).....5 to 8 or 5% to 11%
_____ deviation (moderate).....9 to 11 or 12% to 22%
_____ disorder (severe).....12 or above or 23% or more

II. Other factors to be considered (check (√) as appropriate). These factors may be used to *raise or lower* severity by one level if necessary.

FACTORS	SELDOM (developmental)	OCCASIONALLY (deviation-mild)	FREQUENTLY (deviation-moderate)	ALMOST ALWAYS (disorder severe)
A. Dysfluent periods Occur				
B. Student is aware of or concerned about disfluencies				
C. Others (parents, teachers, peers) are aware of or concerned about dysfluencies				
D. Dysfluencies affect communication				
E. Struggle is observed				
F. Avoidance and/or secondary characteristics are observed				
G. Other (specify)				

III. Fluency Severity Rating (Check (√) below:

_____ 0 -- Normal Fluency
_____ 1-- Developmental
_____ 2 -- Deviation (Mild)
_____ 3 -- Deviation (Moderate)
_____ 4 -- Disorder (Severe)

Source: South Carolina Department of Education in *A Resource Manual For The Development and Evaluation of Special Programs For Exceptional Students, Volume IV-I, A Training Resource Manual for the Implementation of State Eligibility Criteria for the Speech and Language Impaired*, Florida Department of Education, 1995.

LANGUAGE

This is one example of developmental norms for language development

APPENDIX F

DEVELOPMENTAL MILESTONES FOR SPEECH AND LANGUAGE

AGE	LANGUAGE AND SPEECH BEHAVIORS
1 yr.	recognizes his or her name understands simple instructions initiates familiar words, gestures, and sounds uses "mama," "dada," and other common nouns
1 ½ yrs.	uses 10 to 20 words, including names recognizes pictures of familiar persons and objects combines two words, such as "all gone" uses words to make wants known, such as "more," "up" points and gestures to call attention to an event and to show wants follows simple commands imitates simple actions hums, may sing simple tunes distinguishes print from nonprint
2 yrs.	understands simple questions and commands identifies body parts carries on conversation with self and dolls asks "what" and "where" has sentence length of two to three words refers to self by name names pictures uses two-word negative phrases, such as "no want" forms some plurals by adding "s" has about a 300-word vocabulary asks for food and drink stays with one activity for six to seven minutes knows how to interact with books (right side up, page turning from left to right)
2 ½ yrs.	has about a 450-word vocabulary gives first name uses past tense and plurals; combines some nouns and verbs understands simple time concepts, such as "last night," "tomorrow" refers to self as "me" rather than name tries to get adult attention with "watch me" likes to hear same story repeated uses "no" or "not" in speech answers "where" questions uses short sentences, such as "me do it" holds up fingers to tell age talks to other children and adults plays with sounds of language

Appendix F (continued)

3 yrs.	matches primary colors; names one color knows night and day begins to understand prepositional phrases such as "put the block under the chair" practices by talking to self knows last name, sex, street name, and several nursery rhymes tells a story or relays an idea has sentence length of three to four words has vocabulary of nearly 1,000 words consistently uses m, n, ng, p, f, h, and w draws circle and vertical line sings songs stays with one activity for eight to nine minutes asks "what" questions
4 yrs.	points to red, blue, yellow, and green identifies crosses, triangles, circles, and squares knows "next month," "next year," and "noon" has sentence length of four to five words asks "who" and "why" begins to use complex sentences correctly uses m, n, ng, p, f, h, w, y, k, b, d, and g stays with activity for 11 to 12 minutes plays with language, e.g., word substitutions
5 yrs.	defines objects by their use and tells what they are made of knows address identifies penny, nickel, and dime has sentence length of five to six words has vocabulary of about 2,000 words uses speech sounds correctly, with the possible exceptions being y, th, j, s/z, zh, and r knows common opposites understands "same" and "different" counts ten objects uses future, present, and past tenses stays with one activity for 12 to 13 minutes questions for information identifies left and right hand on self uses all types of sentences shows interest and appreciation for print
6–7 yrs.	identifies most sounds phonetically forms most sound-letter associations segments sounds into smallest grammatical units begins to use semantic and syntactic cues in writing and reading begins to write simple sentences with vocabulary and spelling appropriate for age; uses these sentences in brief reports and creative short stories understands time and space concepts, such as before/after, second/third comprehends mathematical concepts, such as "few," "many," "all," and "except"
8, 9, 10, 11 yrs.	by second grade, accurately follows oral directions for action and thereby acquires new knowledge

Appendix F (continued)

., 12, 13, 14 yrs.	substitutes words in oral reading, sentence recall, and repetition; copying and writing dictation are minimal comprehends reading materials required for various subjects, including story problems and simple sentences by fourth grade, easily classifies words and identifies relationships, such as "cause and effect"; defines words (sentence context); introduces self appropriately; asks for assistance exchanges small talk with friends initiates telephone calls and takes messages gives directions for games; summarizes a television show or conversation begins to write effectively for a variety of purposes understands verbal humor
11, 12, 13, 14 yrs.	displays social and interpersonal communication appropriate for age forms appropriate peer relationships begins to define words at an adult level and talks about complex processes from an abstract point of view; uses figurative language organizes materials demonstrates good study skills follows lectures and outlines content through note taking paraphrases and asks questions appropriate to content
Adolescence and ing adult	interprets emotions, attitudes, and intentions communicated by others' facial expressions and body language takes role of other person effectively is aware of social space zones displays appropriate reactions to expressions of love, affection, and approval compares, contrasts, interprets, and analyzes new and abstract information communicates effectively and develops competence in oral and written modalities

Source: Ohio Statewide Language Task Force. (1990). Developmental milestones: Language behaviors. *In Ohio Handbook for the Identification, Evaluation and Placement of Children with Language Problems* (1991). Columbus: Ohio Department of Education. Reprinted by permission.

Editor's Note. These milestones are variable due to individual differences and variance in the amount of exposure to oral and written communication.

Expressive Language Chart			
Grammatical Structure		**Developmental Norm**	**Therapy Indicated If Not Acquired By:**
Nouns	plurals (e.g., two cookie***s*** or two watch***es***)	2 - 2 ½ years	3 ½ years
	possessives (e.g., girl***'s*** washroom)	2 - 2 ½ years	3 ½ years
Verbs	present progressive (ing) (e.g., She is wash***ing***)	2 ½ - 3 years	3 ½ years
	present singular (-s) (e.g., She wash***es*** the dishes OR She eat***s*** a lot)	2 ½ - 3 years	4 years
	aux/copula (is/are) - uncontracted (e.g., She ***is*** washing OR They ***are*** hungry)	2 ½ - 3 years	3 ½ years
	aux/copula - contracted (proper use of apostrophes) (e.g., **He's** tired or **She's** eating cookies)	2 ½ - 3 years	4 years
	regular past tense (e.g., She wash***ed*** the dishes)	2 ½ - 3 years	4 ½ years
	irregular past tense (e.g., She ***wrote*** a letter)	3 ½ - 4 years	5 years
	future tense (e.g., She ***is going to*** write a letter OR She ***will*** write a letter)	3 - 3 ½ years	5 years
Pronouns	first person (I, me, you) (e.g., I want ***you***)	2 - 2 ½ years	3 years
	gender (he, she, they) (e.g., ***She*** is happy)	2 ½ - 3 years	4 years
	possessive (his, hers, theirs) (e.g., That's ***his*** dog)	3 ½ - 4 years	4 ½ years
	object (him, her, them) (e.g., Go and see ***him***)	3 - 4 years	4 ½ years
Negatives		2 ½ - 3 years	3 ½ years
Questions	N-v inversion (e.g., ***Are you*** coming?)	3 ½ - 4 years	4 ½ years
	Wh? (e.g., ***When*** are you going?)	3 ½ - 4 years	4 ½ years
Prepositions	in, on, under (e.g., The dog put his bones ***under*** the table and ***in*** my shoe.)	2 ½ - 3 years	3 ½ years
	behind, infront, beside, between (e.g., It's ***beside*** you ***between*** the two chairs)	3 ½ - 4 years	4 ½ years

Student: _____ Date: _____

School: _____ SLP: _____

LANGUAGE SEVERITY RATING SCALE

	Normal/Adequate	Mild	Moderate	Severe
Description of Language	0 Language skills are within expected range but student may exhibit some inconsistent differences in language behavior. Dialectal differences may be present.	2 Language deficiencies are evident and language skills are mildly impaired.	3 Language deficiencies usually interfere with communication and language skills are moderately impaired.	4 Limited functional language skills make communication difficult and language skills are severely impaired.
Formal Diagnostic Assessment • Form/Structure • Content/Semantics • Use/Pragmatics	0 Student scores are within: • 1Sdbelow mean; • LQ or SS of 85 or above: and/or • 16 percentile or above in expected language performance.	2 Student scores are: • 1-1.5 SD below mean; • LQ of SS of 78-84; and/or • 7-15 percentile in expected language performance.	3 Student scores are: • 1-1.5-2 SD below mean; • LQ or SS of 70-77; and/or • 2-6 percentile.	4 Student scores more than: • 2 SD below the mean; • LQ or SS at or below 69: and/or • below 2nd percentile.
Effect on Communication	0 The student may experience inconsistent difficulty with comprehension and/or expression; the student's spoken message is understood by others.	2 The student may experience some difficulty with comprehension and/or expression; the student's spoken message is understood by others. Quantity of output is usually not affected.	3 The student has difficulty with comprehension and/or expression; the student's spoken message is understood by others most of the time when in context. Quantity of output may be diminished.	4 The student has limited functional comprehension and/or expression; often the student's spoken message is unintelligible & frequently accompanied by a phonology problem. Quantity of output is severely limited.
Effect on Educational Performance. Social Emotional Academic Vocational	0 No interference with child's participation in educational setting. Acquisition of basic cognitive and/or affective performance skills is not affected.	4 Minimal impact on the child's participation in educational setting. Acquisition of basic cognitive and/or affective performance skills may be affected.	6 Does interfere with child's participation in educational setting. Acquisition of basic cognitive and/or affective performance skills is usually affected.	8 Seriously limits child's participation in educational setting. Acquisition of basic cognitive and/or affective performance skills is impaired.
Total Score	0 2 3 4 5	6 7 8 9 10	11 12 13 14 15	16 17 18 19 20
Rating Score	Normal/Adequate	Mild	Moderate	Severe

COMMENTS: _____

Taken from: Scarvel, L. D., Filak, P. A., Intermediate Unit Speech/Language Program, Criteria for Case Selection, Continuance and Dismissal. September 17, 1998.

Allegheny Intermediate Unit
2001

SPECIAL POPULATIONS

Appendix A
Bilingual Language Screening Form

Child: _____ Date of Birth: _____

Place of Birth: _____ Examiner: _____

Language spoken by the child: _____

Language most often used in the home: _____

This form can be used in the initial screening of children who come from a background where a language other than English is used. Start by asking the child to name common objects in English and in the home language. Does the child name these objects with ease in a language other than English? If you speak the child' language, ask him/her to describe the function of these objects. Record a plus in the appropriate column for each correct response.

	Name	Function
1. table (mesa)	_____	_____
2. book (libro)	_____	_____
3. chair (silla)	_____	_____
4. shoe (sapato)	_____	_____
5. door (puerta)	_____	_____
6. window (ventana)	_____	_____
7. pencil (lapis)	_____	_____
8. money (dinero)	_____	_____
9. key (liave)	_____	_____
10. clock (reloj)	_____	_____
11. paper (papel)	_____	_____
12. window (ventana)	_____	_____

Answer the following questions. Record a plus to indicate yes and a minus to indicate no.

	English	Other Language
Does the child initiate interactions?	_____	_____
Does the child take turns during conversations?	_____	_____
Do other children initiate conversations with the child?	_____	_____
Does the child's communication influence the actions of others in an appropriate manner?	_____	_____
Does the child respond verbally when others speak to him/her?	_____	_____

Table 6.1

LANGUAGE DIFFERENCES COMMONLY OBSERVED AMONG SPANISH SPEAKERS

Language Characteristics	Sample English Utterances
1. Adjective comes after noun.	The house green
2. 's is often omitted in plurals and possessives.	The girl book is... Juan hat is red.
3. Past tense *–ed* is often omitted.	We walk yesterday.
4. Double negatives are required.	I don't have no more.
5. Superiority is demonstrated by using *mas.*	This cake is more big.
6. The adverb often follows the verb.	He drives very fast his motorcycle.

Source: Roseberry-McKibbin, C. Multicultural Students with Special Language Needs. Oceanside, CA: Academic Communication Associates, 1995, p.67.

Reprinted with Permission.

Table 6.2

ARTICULATION DIFFERENCES COMMONLY OBSERVED AMONG SPANISH SPEAKERS

Articulation Characteristics	Sample English Patterns
1. /t, d, n/ may be dentalized (tip of tongue is placed against the back of the upper central incisors).	
2. Final consonants are often devoiced	dose/doze
3. b/v substitution	berry/very
4. Deaspirated stops (sounds like speaker is omitting the sound because it is said with little air release).	
5. ch/sh substitution	Chirley/Shirley
6. d/voiced th, or z/voiced th (voiced "th" does not exist in Spanish).	dis/this, zat/that
7. t/voiceless th (voiceless "th" does not exist in Spanish).	tink/think
8. Schwa sound inserted before word initial consonant clusters	eskate/skate espend/spend
9. Words can end in 10 different sounds: a, e, i, o, u, l, r, n, s, d	may omit sounds at the ends of words
10. When words start with /h/, the /h/ is silent	'old/hold, 'it/hit
11. /r/ is tapped or trilled (tap /r/ might sound like the tap in the English word "butter,")	
12. There is no /j/ (e.g., judge) sound in Spanish; speakers may substitute "y"	Yulie/Julie yoke/joke
13. Frontal /s/–Spanish /s/ is produced more frontally than English /s/.	Some speakers may sound like they have frontal lisps.
14. The ñ is pronounced like a "y" (e.g. "baño is pronounced "bahnyo").	
Spanish has 5 vowels: a, e, i, o, u (ah, E, ee, o, u) and few diphthongs. Thus, Spanish speakers may produce the following vowel substitutions:	
15. ee/I substitution	peeg/pig, leertle/little
16. E/ae, ah/ae substitutions	pet/pat Stahn/Stan

Source: Roseberry-McKibbin, C. Multicultural Students with Special Language Needs. Oceanside, CA: Academic Communication Assoicates, 1995, p.63.

Table 7.1

LANGUAGE DIFFERENCES COMMONLY OBSERVED AMONG ASIAN SPEAKERS

Language Characteristics	*Sample English Utterances*
Omission of plurals	Here are 2 piece of toast. I got 5 finger on each hand.
Omission of copula	He going home now. They eating.
Omission of possessive	I have Phuong pencil. Mom food is cold.
Omission of past tense morpheme	We cook dinner yesterday. Last night she walk home.
Past tense double marking	He didn't went by himself.
Double negative	They don't have no books.
Subject-verb-object relationship differences/omissions	I messed up it. He like.
Singular present tense omission or addition	You goes inside. He go to the store.
Misordering of interrogatives	You are going now?
Misuse or omission of prepositions	She is in home. He goes to school 8:00.
Misuse of pronouns	She husband is coming. She said her wife is here.
Omission and/or overgeneralization of articles	Boy is sick. He went the home.
Incorrect use of comparatives	This book is gooder than that book.
Omission of conjunctions	You _____I going to the beach.
Omission, lack of inflection on auxiliary "do"	She _____ not take it. He do not have enough.
Omission, lack of inflection on forms of "have"	She have no money. We_____been the store.
Omission of articles	I see little cat.

Source: Roseberry-McKibbin, C. Multicultural Students with Special Language Needs. Oceanside, CA: Academic Communication Associates, 1995, p.81. Reprinted with Permission.

Table 7.2

ARTICULATION DIFFERENCES OBSERVED COMMONLY AMONG ASIAN SPEAKERS

Articulation Characteristics	*Sample English Utterances*	
In many Asian languages, words end in vowels only or in just a few consonants; speakers may delete many final consonants in English.	ste/step ro/robe	li/lid do/dog
Some languages are monosyllabic; speakers may truncate polysyllabic words or emphasize the wrong syllable.	efunt/elephant DIversity/diversity	
Possible devoicing of voiced cognates	beece/bees luff/love	pick/pig crip/crib
r/l confusion	lize/rise	clown/crown
/t/ may be omitted entirely	gull/girl	tone/torn
Reduction of vowel length in words	Words sound choppy to Americans.	
No voiced or voiceless "th"	dose/those zose/those	tin/thin sin/thin
Epenthesis (addition of "uh" sound in blends, ends of words).	bulack/black	wooduh/wood
Confusion of "ch" and "sh"	sheep/cheap	beesh/beach
/ae/ does not exist in many Asian languages	block/black	shock/shack
b/v substitutions	base/vase	Beberly/Beverly
v/w substitutions	vork/work	vall/wall
p/f substitutions	pall/fall	plower/flower

Source: Roseberry-McKibbin, C. Multicultural Students with Special Language Needs. Oceanside, CA: Academic Communication Associates, 1995, p.82. Reprinted with Permission.

Table 10.1
ARTICULATION AND LANGUAGE DIFFERENCES COMMONLY OBSERVED AMONG ARABIC SPEAKERS (see Buell, 1985; Metz, 1990).

Articulation Characteristics	*Possible English Errors*
n/ng substitution	son/song, nothin'/nothing
sh/ch substitution	mush/much, shoe/chew
w/v substitution or f/v substitution	west/vest, Walerie/Valerie fife/five, abofe/above
t/voiceless "th" substitution or s/voiceless "th" substitution	bat/bath, noting/nothing sing/thing, somesing/something
z/voiced "th" substitution	brozer/brother, zese/these zhoke/joke, furzh/fudge
retroflex /r/ doesn't exist;	speakers of Arabic will use a tap or trilled /r/
There are no triple consonant clusters in Arabic, so may have epenthesis	kinduhly/kindly, harduhly/hardly
o/a substitutions	hole/hall, bowl/ball
o/oi substitutions	bowl/boil, foble/foible
a/uh substitutions	snuck/snack, ruck/rack
ee/i substitutions	cheep/chip, sheep/ship
Language Characteristics	*Possible English Errors*
Omission of possessives 's and "of"	That Kathy book. The title the story is...
Omission of plurals	She has 5 horse in her stable. He has 3 pen in his pocket.
Omission of prepositions	Put your shoes.
Omission of form "to be"	She ___ my friend.
Inversion of noun constructs	Let's go to the station gas.

Source: Roseberry-McKibbin, Roseberry. Multicultural Students with Special Language Needs. Oceanside, CA: 1995, p.117. Reprinted with Permission.

American Speech-Language-Hearing Association

Roles of Speech-Language Pathologists in Swallowing and Feeding Disorders: Position Statement

Dysphagia Document Review and Revision Working Group

This position statement defines the role of speech-language pathologists in the evaluation and management of individuals with swallowing and feeding disorders and clarifies the scope and rationale for these services.

It is the position of the American Speech-Language-Hearing Association (ASHA), that speech-language pathologists play a primary role in the evaluation and treatment of infants, children, and adults with swallowing and feeding disorders.

Given the high incidence and prevalence of dysphagia, and the potentially severe and even fatal consequences, appropriate diagnosis and management of swallowing and feeding disorders are critical. In addition, dysphagia's impact on health care economics, quality of life, and caregiver burden is significant.

Speech-language pathologists are knowledgeable about normal and abnormal anatomy, physiology, and neurophysiology of the upper aerodigestive tract responsible for respiration, swallowing, and speech. Their educational and clinical background prepares speech-language pathologists to assume a variety of roles with expertise related to evaluation and treatment of individuals with swallowing and feeding disorders. Appropriate roles for speech-language pathologists include, but are not limited to:

- Performing clinical feeding and swallowing evaluations.
- Performing instrumental assessments that delineate structures and dynamic functions of swallowing.
- Defining the abnormal swallowing anatomy and physiology and diagnosing swallowing disorders.
- Identifying additional disorders in the upper aerodigestive tract and making referrals to appropriate medical personnel.
- Making recommendations about management of swallowing and feeding disorders.
- Developing treatment plans for individuals with swallowing and feeding disorders.
- Providing treatment for swallowing and feeding disorders, documenting progress, and determining appropriate dismissal criteria.
- Teaching and counseling individuals and their families about swallowing and feeding disorders.
- Educating other professionals regarding the needs of individuals with dysphagia, and the speech-language pathologists' role in the evaluation and management of swallowing and feeding disorders.
- Serving as an integral part of a multidisciplinary and/or interdisciplinary team as appropriate.
- Advocating for services for individuals with swallowing and feeding disorders.
- Advancing the knowledge base on swallowing and swallowing disorders through research activities.

Reference this material as: American Speech-Language-Hearing Association. (2001). Roles of speech-language pathologists in swallowing and feeding disorders: Position statement. *ASHA Supplement*, in press.

Index terms: practice scope and patterns, speech-language pathology, swallowing assessment, swallowing disorders, swallowing treatment

Associated documents: Technical report and knowledge and skills statement

AMERICAN SPEECH-LANGUAGE-HEARING ASSOCIATION

Knowledge and Skills Needed by Speech-Language Pathologists Providing Services to Individuals With Swallowing and/or Feeding Disorders

Dysphagia Document Review and Revision Working Group

This policy statement is a revision of a 1990 policy document entitled "Knowledge and Skills Needed by Speech-Language Pathologists Providing Services to Dysphagic Patients/Clients" by a working group chaired by Paula A. Sullivan with members Joan C. Arvedson, Cathy Lazarus, Donna S. Lundy, Gary McCullough, Lisa Newman, and Nancy B. Swigert. Janet Brown served as the National Office liaison and member of the group. Alex Johnson, 2000–2002 Vice President for Professional Practices in Speech-Language Pathology and Bonnie Martin-Harris, Coordinator of the Steering Committee of Special Interest Division 13, Swallowing and Swallowing Disorders, provided guidance and support.

Introduction

This Knowledge and Skills document is an official statement of the American Speech-Language-Hearing Association. The ASHA Scope of Practice states that the practice of speech-language pathology includes providing services for swallowing (dysphagia) and feeding problems. The Preferred Practice Patterns are statements that define universally applicable characteristics of practice. Individuals who practice independently in these areas are required to hold the Certificate of Clinical Competence in Speech-Language Pathology and abide by the ASHA Code of Ethics, including Principle of Ethics II Rule B, which states: "Individuals shall engage in only those aspects of the profession that are within their competence, considering their level of education, training, and experience."

Since 1987, ASHA has developed several policy documents to recognize the role of speech-language pathologists in providing services to individuals with dysphagia and to define current practice, research needs, and requisite knowledge and skills. In order to remain current with new developments in the area of swallowing and feeding, several of the documents have been reviewed and updated. Recognizing the significant potential impact of swallowing and feeding disorders on overall health and quality of life, it is essential that speech-language pathologists possess the knowledge and skills to be proficient in their management of these disorders.

Depending on the individual's work environment and population(s) served, every speech-language pathologist will not necessarily need to develop proficiencies in all roles. Some roles are clinical and the speech-language pathologist will need to develop proficiencies based on the populations served (e.g., adult, head and neck cancer, pediatrics). Some roles are administrative in nature and would be best performed by a person with extensive experience in supervision. Achievement of proficiencies should be documented and systematic plans for attaining proficiency should be in place in settings serving individuals with swallowing and feeding problems.

Basic Competencies

The purpose of this document is to outline the knowledge and skills needed by speech-language pathologists providing services to individuals with swallowing and/or feeding disorders. These knowledge and skill areas form the basis for assessing clinical competency in this specialized area of practice. Knowledge and skills applicable to serving one population or one age group of individuals do not presume knowledge to serve individuals of other ages and/or populations.

In addition, speech-language pathologists assessing individuals with potential swallowing and/or feeding disorders and providing treatment to individuals with such disorders should have a basic understanding of the following:

Reference this material as: American Speech-Language-Hearing Association. (2002). Knowledge and skills needed by speech-language pathologists providing services to individuals with swallowing and/or feeding disorders. *ASHA Supplement*, in press.

Index terms: competencies, practice scope and patterns, speech-language pathology, swallowing disorders, swallowing treatment.

- Normal and abnormal anatomy and physiology related to swallowing function.
- Signs and symptoms of dysphagia.
- Indications for, and procedures involved with, instrumental techniques used to assist in diagnosis and management.
- Proper procedures for analyzing and integrating clinical and instrumental information into a formal diagnosis of swallowing and feeding disorders with appropriate written documentation.
- Basic management issues, including how to determine candidacy for intervention, as well as how to implement compensations and habilitative/rehabilitative therapy techniques.
- How to educate and counsel individuals with swallowing and/or feeding problems and their parents, care providers, or other supporting persons.
- Importance of quality of life issues as they relate to the individual and the individual's family.
- Ability to identify and use appropriate functional outcome measures.
- Understanding of medical issues related to swallowing and feeding disorders.

The specific knowledge and skills required to meet these basic competencies are presented in detail in the remainder of this document.

Roles and Knowledge and Skills

The following roles, knowledge bases, and skills enable the speech-language pathologist to provide a continuum of services for individuals with swallowing and/or feeding disorders appropriate to the population(s) served. Also, additional knowledge and skills areas may be necessitated by needs of the individual or complexity of his/her swallowing and feeding disorder. These areas may not be limited to the following:

1.0 Role: Identification of individuals at risk for swallowing and/or feeding disorders.

Knowledge:

1.a. Knowledge of normal anatomy, physiology, and pathophysiology of swallowing in a developmental framework across the age continuum;

1.b. Knowledge of the medical diagnoses, language skills, and mental status characteristics contributing to swallowing and/or feeding disorders across the age continuum;

1.c. Knowledge of nutritional intake methods (oral and nonoral) and the problems associated with each that may contribute to dysphagia or be exacerbated by dysphagia;

1.d. Knowledge of signs and symptoms of swallowing and/or feeding disorders in the individual's behavior, medical history, and medical status;

1.e. Knowledge of methods of communicating results of dysphagia screening and/or need for swallowing and feeding assessment to individual and care providers; and

1.f. Knowledge of assessment strategies for use with individuals with swallowing and/or feeding disorders.

Skills:

1.1 Recognize signs and symptoms of swallowing and feeding disorders;

1.2 Train caregivers to identify the presence of dysphagia and refer for swallowing and/or feeding assessment;

1.3 Identify cognitive, communication, behavioral, and psychological factors contributing to swallowing and/or feeding status; and

1.4 Determine current nutritional intake (e.g., positioning, feeding dependency, environment, diet modification, compensations).

2.0 Role: Conduct a clinical examination of the upper aerodigestive tract.

Knowledge:

2.a. Knowledge of normal upper aerodigestive tract structure;

2.b. Knowledge of normal upper aerodigestive tract function;

2.c. Knowledge of significance and implications of abnormal findings as they relate to swallowing and/or feeding;

2.d. Knowledge of strengths and limitations of the clinical examination, specifically with regard to detecting aspiration and risks for aspiration and determining treatment strategies for pharyngeal swallowing disorders;

2.e. Knowledge of how to provide documentation that is concise, thorough, objective, and interpretive; and

2.f. Knowledge of any special medical condition (e.g., pulmonary dysfunction, tracheostomy, neuromotor involvement) that may have an impact on an individual's feeding and swallowing.

Skills:

2.1 Identify abnormal structure;

2.2. Identify abnormal function;

2.3 Identify significant signs, symptoms, medical conditions, and medications pertinent to dysphagia;

2.4 Conduct an oral, pharyngeal, laryngeal, and respiratory function/expiration examination as it relates to functional assessment of swallowing and feeding;

2.5 Interpret examination findings;

2.6 Document of examination findings; and

2.7 Communicate examination findings to individuals, caregivers and other professionals.

3.0 Role: Conduct instrumental examination.

Knowledge:

3.a. Knowledge of existing instrumental techniques, including their advantages and limitations;

3.b. Knowledge of the variability of normal swallowing behaviors (e.g., bolus volume, viscosity, age, or gender);

3.c. Knowledge of techniques to modify sensory input that can be introduced during the instrumental assessment(s) to ensure a reliable and valid examination; and

3.d. Knowledge of how to provide documentation of results that is concise, thorough, objective, and interpretive, and involves other professionals as appropriate.

Skills:

3.1 Identify available and appropriate testing resources (e.g., equipment, personnel);

3.2 Recommend appropriate instrumentation techniques when indicated.

3.3 Perform appropriate instrumental assessments according to protocols used by various facilities.

3.4 Interpret instrumental assessment;

3.5 Document instrumental assessment; and

3.6 Communicate results of instrumental assessment to individuals, caregivers and other professionals.

4.0 Role: Determination of individual's management decisions regarding methods of oral intake; risk precautions and candidacy for intervention.

Knowledge:

4.a. Knowledge of oral versus nonoral (e.g., parenteral and enteral) intake methods and medical risks;

4.b. Knowledge of existing treatment procedures;

4.c. Knowledge of advances in treatment procedures and potential application from other fields;

4.d. Knowledge of appropriateness and safety for specific intervention procedures;

4.e. Knowledge of ethical and quality of life issues to incorporate into decisions concerning swallowing and/or feeding management;

4.f. Knowledge of cognitive, communication, behavioral, psychological, cultural, and social issues that may impact swallowing and/or feeding;

4.g. Knowledge of the status of various medical conditions causing swallowing and/or feeding disorders and their impact on recovery, maintenance of skills, or deterioration of function.

4.h. Knowledge of documentation procedures; and

4.i. Knowledge of roles of appropriate support personnel and services.

Skills:

4.1. Identify acceptable and appropriate oral intake methods;

4.2. Develop intervention strategies appropriate to individual's medical condition, swallowing and/or feeding disorder, cognitive status and behavioral status;

4.3. Identify potential risks of aspiration and appropriate precautions to minimize those risks;

4.4. Identify measurable short- and long-term treatment goals targeting functional outcomes;

4.5. Document management decisions and changes in decisions over time; and

4.6. Identify relevant support personnel services and skills in accessing, educating, and utilizing support personnel and referral services.

5.0 **Role:** Provide treatment for individuals with swallowing and feeding disorders.

Knowledge:

5.a. Knowledge of principles and procedures pertaining to learning and behavior modification;

5.b. Knowledge of the anatomy and physiology of the individual's swallowing and/or feeding disorder appropriate to age and/or developmental stage;

5.c. Knowledge of the individual's cognitive, communication, behavioral, psychological, cultural, and social issues;

5.d. Knowledge of treatment strategies described in the literature including habilitative/rehabilitative techniques and compensatory strategies;

5.e. Knowledge of techniques to quantify change in swallowing performance and/or feeding behaviors;

5.f. Knowledge of outcomes data collection methods and tools;

5.g. Knowledge of appropriate diet choices at various points in treatment; and

5.h. Knowledge of different methods of food and liquid presentation, including utensils, and their impact on feeding and/or swallowing.

Skills:

5.1 Consult with registered dietitian concerning oral intake;

5.2 Identify the individual's need for habilitative/rehabilitative treatment of swallowing and feeding management;

5.3 Interpret the individual's response to treatment;

5.4 Quantify the individual's response to treatment;

5.5 Apply learning and behavior modification procedures;

5.6 Collect outcomes data for comparison to benchmark;

5.7 Communicate the individual's progress/status in treatment;

5.8 Revise treatment when appropriate;

5.9 Identify the individual's need for re-evaluation; and

5.10 Determine criteria for discharge/dismissal from treatment.

6.0 **Role:** Additional knowledge and skills in assessment and management of swallowing and feeding problems in infants and young children.

Knowledge:

6.a. Knowledge of embryology, anatomy, swallowing physiology, and neurophysiology, as well as postural and sensory bases underlying swallowing and feeding in a developmental framework;

6.b. Knowledge of etiologies (e.g., genetic syndromes, brain injury, metabolic disorders, gastrointestinal tract disorders that affect premature and term infants) that cause or contribute to swallowing and feeding disorders;

6.c. Knowledge of nutrition and consequences of undernutrition in the first 2 years of life and throughout childhood;

6.d. Knowledge of medical tests and procedures as they affect swallowing and feeding;

6.e. Knowledge of pulmonary implications and complications resulting from aspiration;

6.f. Knowledge of dehydration implications and complications resulting from dehydration; and

6.g. Knowledge of infant and early childhood development as it relates to parent-child interactions and communication.

Skills:

6.1 Recognize signs and symptoms of suck, swallow, and respiratory organization and disorganization;

6.2 Demonstrate understanding of etiologies in discussions with parents and other professionals and incorporate into the case history;

6.3 Demonstrating nutrition knowledge by incorporating information into the case history, communicating with team members, and making appropriate referrals;

6.4 Demonstrate awareness of risks for aspiration consequences through management decisions that do not place infants and young children with complex dysphagia issues at increased health risks;

6.5 Identify and interpret cognitive and communication levels of function as a basis for management decisions in a holistic approach to the child's environment;

6.6 Perform instrumental assessment appropriate for the specific age and developmental level of the infant/child;

6.7 Interpret instrumental assessment with regard to appropriate developmental milestones; and

6.8 Carry out treatment for swallowing and feeding disorders appropriate for the specific age of the infant/child.

7.0 Role: Provide education, counseling, and training to individual with a swallowing and/or feeding disorder, family, significant others, dysphagia team, health and education professionals.

Knowledge:

7.a. Knowledge of principles of instruction;

7.b. Knowledge of counseling principles; and

7.c. Knowledge of behavior modification principles.

Skills:

7.1 Identify educational and training needs;

7.2 Provide educational and training programs;

7.3 Adjust content and delivery to the level of the person being educated, counseled, or trained;

7.4 Develop in-service educational programs;

7.5 Provide counseling regarding swallowing and/or feeding disorders;

7.6 Provide advocacy for individuals with swallowing and/or feeding disorders;

7.7 Instruct non-speech-language pathology staff and other caregivers in treatment techniques, problem solving, and monitoring of the status of the individual with a swallowing and/or feeding disorder;

7.8 Document education, counseling, and training provided; and

7.9 Evaluate teaching effectiveness.

8.0 Role: Manage and/or participate in swallowing and/or feeding team.

Knowledge:

8a. Knowledge of the roles and responsibilities of team members in management of individuals with swallowing and/or feeding disorders;

8.b. Knowledge of the specialized expertise of interdisciplinary team members pertinent to evaluation and treatment of individuals with swallowing and/or feeding disorders;

8.c. Knowledge of techniques or processes in effective facilitation and maintenance of team communication and interaction;

8.d. Knowledge of team management and service delivery models;

8.e. Knowledge of specialized consultation needs and procedures for referral;

8.f. Knowledge of appropriate methods of documentation that delineate team decisions and recommendations;

8.g. Knowledge of data and procedures that administrators need so they can support a swallowing and/or feeding team (e.g., cost accounting and productivity factors); and

8.h. Knowledge of basic management and administrative procedures.

Skills:

8.1 Identify core team members and supportive services;

8.2 Facilitate team communication;

8.3 Maintain team focus, communication, and interaction;

8.4 Document team activity; and

8.5 Use appropriate consultation procedures to and from other team members and other services.

9.0 Role: Maintain quality control/risk management program.

Knowledge:

9.a. Knowledge of quality improvement policies established by accrediting bodies;

9.b. Knowledge of institution-specific risk management policies and procedures;

9.c. Knowledge of appropriate performance indicators that are evidence-based with focus on outcomes for quality improvement program development;

9.d. Knowledge of methods used for measuring and monitoring quality improvement goals and processes;

9.e. Knowledge of processes for resolution of identified problems that include collaborative team efforts;

9.f. Knowledge of infection control procedures;

9.g. Knowledge of risks and consequences of aspiration;

9.h. Knowledge of causes of and precipitating factors for aspiration;

9.i. Knowledge of ways to reduce risk of aspiration;

9.j. Knowledge of ASHA 's Code of Ethics and Scope of Practice for the Profession of Speech-Language Pathology;

9.k. Knowledge of institution-specific policies and procedures concerning professional liability;

9.l. Knowledge of professional and institution-specific documentation policies and procedures; and

9.m. Knowledge of patient safety measures and universal precautions as pertinent to specific setting and institution guidelines (e.g., CPR, suctioning, radiation safety).

Skills:

9.1 Identify quality improvement indicators that are appropriate to meet requirements or standards for specific accrediting bodies;

9.2 Perform systematic measurements and monitoring of quality improvement indicators;

9.3 Resolve identified problems that include collaborative team efforts;

9.4 Identify and communicate risk factors to individuals, family, and team members;

9.5 Utilize appropriate risk management procedures (e.g., resolution of identified risk factors, routine revision of quality improvement monitors); and

9.6 Document quality improvement plans, goals, and processes for reaching desirable outcomes.

10.0 **Role:** Provide discharge/dismissal planning and follow-up care.

Knowledge:

10.a. Knowledge of discharge criteria;

10.b. Knowledge of discharge needs, how to establish a team-oriented discharge plan, and coordinate required services;

10.c. Knowledge of determining criteria for follow-up care and establishing policies and procedures to meet identified needs;

10.d. Knowledge of appropriate documentation of discharge criteria, discharge plan, and follow-up care; and

10.e. Knowledge of how to access team recommendations pertinent to follow-up care and procedures for swallowing and/ or feeding disorders and developing procedures for implementation.

Skills:

10.1 Identify discharge/dismissal criteria;

10.2 Identify discharge needs for patient and care providers;

10.3 Participate in team-oriented discharge planning;

10.4 Identify need for follow-up care, including frequency of treatment monitoring and/or re-evaluation; and

10.5 Document discharge criteria, discharge plan, and follow-up care.

11.0 **Role:** Teach and supervise persons, clinical fellows, supportive personnel, and students-in-training.

Knowledge:

11.a. Knowledge of previous coursework and current proficiency of the trainee;

11.b. Knowledge of education principles;

11.c. Knowledge of supervision principles;

11.d. Knowledge of requisite documentation requirements; and

11.e. Knowledge of methods of evaluating trainee performance.

Skills:

11.1 Identify education and clinical training needs;

11.2 Apply education techniques;

11.3 Provide supervision;

11.4 Document teaching and supervision; and

11.5 Evaluate teaching effectiveness.

12.0 **Role:** Provide public education and advocacy for serving individuals with swallowing and/ or feeding disorders.

Knowledge:

12.a. Knowledge of public education sources and procedures for increasing awareness of groups with special needs;

12.b. Knowledge of available education resources designed to assist pertinent education and advocacy positions; and

12.c. Knowledge of advocacy, legal, and regulatory procedures that affect the needs of individuals with swallowing and/or feeding disorders; and

12.e. Knowledge of funding sources pertinent to swallowing and/or feeding disorders.

Skills:

12.1 Demonstrate skills in methods for public education and advocacy regarding the needs of individuals with swallowing and/or feeding disorders;

12.2 Provide testimony to various governmental, regulatory, and educational agencies; and

12.3 Provide assistance in obtaining funding for services from appropriate sources.

13.0 **Role:** Conduct research.

Knowledge:

13.a. Knowledge of existing literature in normal and disordered swallowing and/or feeding;

13.b. Knowledge of research design;

13.c. Knowledge of appropriate methods for protecting human and animal subjects and obtaining informed consent;

13.d. Knowledge of accurate data collection techniques;

13.e. Knowledge of procedures for statistical analyses and interpretation; and

13.f. Knowledge of scientific writing for dissemination of research findings.

Skills:

13.1 Obtain and interpret literature;

13.2 Develop and apply research design;

13.3 Collect data;

13.4 Skills in procedures for statistical analysis; and

13.5 Skills in writing dissemination of research findings.

Terminology

Aspiration—entry of secretions, food, or any foreign material into the airway that travels below the level of the true vocal folds. Aspiration may occur before, during, or after the pharyngeal phase of swallowing. It can also occur from reflux of gastric contents.

Bolus—food, liquid, or other material placed in the mouth for ingestion.

Dysphagia—a swallowing disorder. The signs and symptoms of dysphagia may involve the mouth, pharynx, larynx, and/or esophagus.

Enteral Feeding—Delivery of hydration and nutrients anywhere along the gastrointestinal tract.

Feeding Disorder—disordered placement of food in the mouth; difficulty in food manipulation prior to initiation of the swallow, including mastication; and the oral stage of the swallow when the bolus is propelled backward by the tongue. In pediatrics, this term may be used to describe a failure to develop or demonstrate developmentally appropriate eating and drinking behaviors.

Ingestion/Swallow—refers to all processes, functions, and acts associated with bolus introduction, preparation, transfer, and transport.

Management—involves all aspects of evaluation, treating, counseling, and discharge planning.

Oral Intake—placement of food in the mouth; oral gestures used to prepare food for the swallow and gain pleasure from eating; and, tongue movement to initiate the oral stage of the swallow. This sometimes also refers to the amount of food or liquid the individual is able to take in by mouth.

Parenteral Feeding—Administration of nutrients via a vein. Can be through a central vein (total parenteral) or through a peripheral vein (peripheral parenteral).

Team—collection or representation of different disciplines or specialists. May be multidisciplinary, interdisciplinary, or transdisciplinary as approach to assessment and management of complex patients with swallowing and feeding disorders.

Treatment Strategy—Examples: Habilitative/rehabilitative techniques include exercises and movements designed to change swallowing physiology. Compensation strategies impose alteration in behavior (posture, rate), bolus characteristics (volume, consistency) to achieve functional swallowing. These strategies are not intended to alter swallow physiology.

Upper Aerodigestive Tract—the region involved in swallowing and breathing that includes the oral cavity, oropharynx, pharynx, larynx, upper trachea, and upper esophagus.

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Dysphagia Intervention in Schools: An Ethical Dilemma?

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Recently, in an elementary school, a young girl (we'll call Jessica) was referred to a medical speech-language pathologist by the school speech-language pathologist for a clinical evaluation and swallow study. Jessica, who had a primary diagnosis of cerebral palsy, attended classes in a self-contained preschool/kindergarten classroom and was assisted with meals and snacks by school staff. It was during those sessions that the school speech-language pathologist observed possible overt symptoms of dysphagia. Jessica was experiencing bouts of coughing during lunch or snack time that eventually led to cessation of the mealtime. As a result, Jessica was losing weight and was becoming increasingly lethargic in school. Following her clinical evaluation and subsequent modified barium swallow (MBS) study, Jessica was diagnosed with moderate oral and moderately severe pharyngeal dysphagia with significant risk for aspiration. In coordination with the medical speech-language pathologist, the school-based speech-language pathologist followed through with recommendations and modifications. Together with the school occupational therapist, the school speech-language pathologist initiated feeding strategies in the classroom. School staff and parents were inserviced by the speech-language pathologist using the actual MBS video. As a result of the initial referral by the school speech-language pathologist, to the medical speech-language pathologist and follow-up intervention, Jessica's mealtimes appeared significantly more enjoyable. Struggling behaviors of dysphagia and risk for aspiration were gained weight and subsequently became more responsive in the classroom.

This scenario is not unusual in the schools. With the passage of Public Law 94-142 (currently the Individuals With Disabilities Education Act) in 1975, there has been an increase in the number of students with severe disabilities in the school setting. It is not uncommon to see medically fragile children with multiple disabilities, feeding tubes, tracheostomies, etc., functioning in the same school environment as their normally developing peers.

According to a 1997 Omnibus Survey of the American Speech-Language-Hearing Association (ASHA, 1997), 19% of school-based speech-language pathologists work with students with dysphagia. It is projected by some that this percentage has increased since many new graduates are more prepared in swallowing disorders and per the recent increase in migration of speech-language pathologists from the medical to the school setting.

Documents developed by ASHA reflect the trends concerning dysphagia intervention in schools. The *Guidelines for the Roles and Responsibilities of the School-Based Speech-Language Pathologist* (ASHA, 1999) state that intervention for swallowing disorders may include "providing information and guidance to students, families, and caregivers regarding the nature of swallowing and swallowing disorders; consulting and collaboration with medical providers throughout planning and intervention; training caregivers and educational staff on safe eating and swallowing techniques; instructing families, caregivers, and educators on the social-emotional relationship between feeding/swallowing and educational success; facilitating the student's ability to efficiently chew and swallow more safely and efficiently; integrating swallowing function intervention with communication function intervention" (Whitmore, 2000, p. 100). This document correlates with the ASHA *Scope of Practice in Speech-Language Pathology* (ASHA, 1996). Both documents imply that not every speech-language pathologist is an expert in dysphagia, and decisions made to intervene in these cases must be made in correlation with the ASHA Code of Ethics and within the individual professional's knowledge base and professional experience.

The ASHA Code of Ethics states, "Individuals shall engage in only those aspects of the professions that are within the scope of their competence, considering their level of education, training and experience" (ASHA, 1994). Herein lies the ethical dilemma. The school speech-language pathologist is faced with questions of, "Am I qualified?; Should I intervene?; How should I intervene?; and, ultimately, am I operating within the ASHA Code of Ethics? A subsequent question is often, "If I don't identify a child with potential dysphagia, who will?"

With increasing pressures on speech-language pathologists to intervene in dysphagia cases within the school setting, we are confronted with questions regarding what the minimum qualifications of the school-based service provider should be, the appropriate model of dysphagia intervention in a non-medical setting, and the intensity and frequency of intervention.

A quick anecdotal review of the "real world" of dysphagia intervention in the schools suggests the following:

1. There are currently many levels and frequencies of dysp

agia intervention in the schools ranging from aggressive treatment to no intervention at all. There are varying opinions as well as confusion regarding what the appropriate type and degree of dysphagia intervention should be in the school setting per the individual speech-language pathologist's expertise, school limitations, prudent practices, and the *ASHA Code of Ethics*.

2. A variety of models of service delivery exist ranging from indirect consultation to direct "hands on" treatment. Well-organized multidisciplinary swallowing teams or the designation of a district speech-language pathologist with dysphagia expertise as the reference person are among the emerging successful approaches to intervention.

3. School-based speech-language pathologists have reported a continuum of dysphagia education, training, and experience ranging from little or no dysphagia background to less common advanced expertise in accordance with the ASHA *Dysphagia Guidelines* (ASHA, 1998). Individual background knowledge differs and can be found in geriatric/adult and/or pediatric dysphagia training and experience. (The combination of background knowledge in both pediatric and adult dysphagia is important for those school-based speech-language pathologists who serve more than one school in a district and may have students ranging in ages from 4 to 21 years on their caseloads.) The range of education, training, and expertise of the school-based professional in the area of dysphagia are as diverse in the school system as they are in the entire

4. There appears to be a discrepancy in opinion between school-based speech-language pathologists who feel dysphagia intervention does not belong in the school setting and speech-language pathologists who feel they have a valid role in school intervention. Not only does this difference of opinion appear to be prevalent within the educational community but also between medical and school-based speech-language pathologists as well. Whether or not one is within good ethical practice is often in question with regard to dysphagia intervention in schools, as opposed to the medical model.

5. School administrators are increasing pressure on school-based speech-language pathologists to become involved with dysphagia intervention as part of third-party billing. "More sick children are expected by their third-party payers to receive their dysphagia management in the schools and schools are billing third-parties for the kinds of speech and swallowing treatment being provided in the educational setting" (O'Toole, 2000, p. 79).

6. Training for school-based dysphagia intervention in colleges and universities appears to have lagged behind dysphagia training in the medical model. Also, some school-based speech-language pathologists who have already graduated and who recognize their need for further training in this area, express frustration with 'where' and 'how to' begin.

7. The school-based speech-language pathologist with a dysphagia knowledge base is frequently the only professional in the school setting with the background to identify symptoms of children at risk for aspiration, guage pathologist for further evaluation, monitor modifications and recommendations of the medical speech-language pathologist daily, and inservice administrators and the school staff. If the school speech-language pathologist is unqualified by minimum standards, or is qualified but unwilling to intervene within the school setting, these children, who are at risk for aspiration, often go undetected.

According to the ASHA Rules of Ethics, "Individuals shall provide all services competently; Individuals shall use every resource, including referral when appropriate, to ensure that high-quality service is provided" (ASHA, 1994). It appears that, as we define the school speech-language pathologist's role in dysphagia intervention within the context of ethical practice, we need to expand our professional discussion and actions to include the following:

1. Increased dialogue and research by school, medically, and academically-based speech-language pathologists regarding our role in dysphagia management in schools should occur. This should include examination of various levels/degrees and models of intervention with concomitant studies on efficacy and appropriateness of the model in the school setting. The limitations of the school setting versus the medical setting should be factored into these discussions of the most appropriate interventions.

2. Considering the diversity of dysphagia expertise found in the school systems, policy statements, guidelines, and protocols that are specific to the schools should be developed. Possibly, these documents could be based on a continuum ranging from the minimum to the advanced knowledge base re-

pathologist correlated with the appropriate level and model of intervention (e.g., "referral only" to more "direct treatment" with advanced expertise). (Perhaps groups such as ASHA Special Interest Division 13, Swallowing and Swallowing Disorders and Division 16, combined with the ASHA School Services Division could work on such a project.)

3. Opportunities for furthering one's expertise on school-based dysphagia intervention should be promoted at all levels via the university/college curriculum and/or continuing education (CE) opportunities.

4. We should support ASHA's current attempts to obtain IDEA clarification regarding swallowing disorders and their legitimacy in school provided services. (Currently, the IDEA [1997] does not define or identify dysphagia as a disabling condition.) As we know, a child, who is not healthy, will be compromised in their educational performance.

5. There needs to be ongoing clarification and information readily available to school-based speech-language pathologists regarding dysphagia and third-party billing by the school system so that when approached by administrators, we are well informed.

6. As a profession, we need to continue educating school administrators, staff, and parents regarding our role as a speech-language pathologists, which may be inclusive of dysphagia intervention when appropriate.

7. We need continued dialogue, cooperation, understanding, respect, and teamwork between medical, academic, and school-based speech-language pathologists to ensure the efficacy of intervention and safety of the

In conclusion, our primary concern is for the health, safety, and welfare of our students enabling them to participate and benefit from the educational process and increased quality of life. The school-based speech-language pathologist is frequently on the "front line" in terms of recognizing/identifying symptoms of possible dysphagia that may have gone undetected by the pediatrician or parents. Therefore, it is beneficial to all for the school-based speech-language pathologist to be knowledgeable in the dysphagia realm while staying within his/her knowledge base, expertise, limitations, and ASHA Code of Ethics in terms of intervention. Further focus on setting specific requirements for dysphagia intervention in the schools should be promoted by our profession to ensure the "Jessica's" of the world a safer, healthier state of being in preparation for learning in the classroom.

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Continuing Education Questions

1. According to a 1997 ASHA Omnibus Survey, what percentage of school-based speech-language pathologists work with students with dysphagia?
   a. 19%
   b. 20%
   c. 15%
   d. 33%

2. The ASHA 1999 *Guidelines for the Roles and Responsibilities of the School-Based SLP* relative to dysphagia intervention do not include
   a. training caregivers and educational staff on safer eating and swallowing techniques.
   b. integrating swallowing function intervention with communication function intervention.
   c. performing modified barium swallow studies.
   d. facilitating the student's ability to efficiently chew and swallow more safely and efficiently.

3. Regarding dysphagia intervention, which of the following are among the ethical dilemmas encountered by the school-based speech-language pathologist
   a. Determining if one is functioning within the *ASHA* Code of Ethics specific to dysphagia intervention in the school setting
   b. Determining how to respond when recognizing a child with potential dysphagia and not feeling qualified to intervene
   c. Determining the model and degree of appropriate dysphagia intervention relative to prudent practice in a non-medical setting
   d. All of the above

APPENDIX B

Appendix B
Resources

The websites listed below are included for information only. When searching the internet for accurate information, it is often good practice to confine the search to national institutes, national organizations, hospitals and medical schools. These resources listed below will provide information and links to other sites. Please note this is not a comprehensive list but merely some sites to help begin a search for information. The Rhode Island Department of Education has no control over information at these sites. Views and opinions of these organizations are not necessarily those of the Rhode Island Department of Education or Rhode Island Speech-Language-Hearing Association.

Organizations

American Speech-Language-Hearing Association
ASHA
10801 Rockville Pike
Rockville, Maryland 20852
Professionals/Childs 1-800-498-2071
Public 1-800-638-8255
http://www.asha.org

National Information Center for Children and Youth with Disabilities
NICHCY
PO Box 1492
Washington, D.C. 20013
1-800-695-0285
http://nichcy.org

Rhode Island Speech-Language-Hearing Association
PO Box 9241
Providence, RI 02904
1-401-455-7472 (RISA)
http://www.RISHA.Info

Resources

Special Education Resources on the Internet
SERI
401 Rosemont Avenue
Frederick, Maryland 21701
1-301-663-3131
http://www.familyvillage.wisc.edu

Parent Advocacy Coalition for Educational Rights
PACER Center
8161 Normandale Boulevard
Minneapolis, Minnesota 55437
Phone: 1-952-8738-9000
TTY: 1-952-838-0l90
http://www.pacer.org

Stuttering Foundation of America
3100 Walnut Grove Road Suite 603
PO Box 11749
Memphis, Tennessee 38111
1-800-992-9392
1-800-967-7700
1-901-452-7343
http://www.stutterhelp.org

National Institute on Deafness and Other Communication Disorders
NIDCD
31 Center Drive
MSC 2320, Room 3C35
Bethesda, Maryland 20892
1-800-241-1044
http://www.nih.gov/nidcd

National Institute of Neurological Disorders and Stroke
NINDS
PO Box 5801
Bethesda, Maryland 20824
1-800-352-9424
http://www.ninds.nih.gov

Local Support

Rhode Island Department of Health
Information on Early Intervention Sites
3 Capitol Hill
Providence, RI 02908
Phone: 401-222-2231
Fax: 401-222-6548
711 (RI Relay)
http://www.health.state.ri.us

Lifespan
Coro Building
167 Point Street
Providence, RI 02903
401-444-3500
http://www.lifespan.org

Hasbro Children's Hospital
C.D.C.
593 Eddy Street
Providence, RI 02903
401-444-4000
http://www.lifespan.org/partners/hch

Bradley Hospital
1011 Veteran's Parkway
East Providence, RI 02915
401-432-1000
http://www.lifespan.org/partners/bh/

Miriam Hospital
164 Summit Avenue
Providence, RI 02906
401-793-2500
http://www.lifespan.org/partners/tmh/

Vanderbilt Rehabilitation Center
Newport Hospital
11 Friendship Street
Newport, RI 02840
401-846-6400
http://www.lifespan.org/services/rehab/vrc/

University of Rhode Island
Speech and Hearing Center
106 Quinn Hall
Kingston, RI 02881
401-874-5969

Rhode Island School for the Deaf
Audiology Clinic
Corliss Park
Provicence, RI 02909
401-222-7428

Parent and Professional Information Resources

Rhode Island Department of Education
RIDE
255 Westminster Street
Providence, RI 02903
http://www.ridoe.net

Rhode Island Parent Information Network
RIPIN
75 Main Street
Pawtucket, RI 02886
1-800-464-3399
http://www.ripin.org

Parent Support Network
PSN
400 Warwick Avenue Suite 12
Warwick, RI 02888
1-800-483-8844

DHS/Office of Rehabilitation Services (Assistive Technology Access Partnership)
40 Fountain Street
Providence, RI 02903
1-401-421-7005 ext. 310
1-401-421-7016 (TTY)
http://www.atap.state.ri.us.ri

Tech ACCESS of Rhode Island, Inc.
110 Jefferson Boulevard
Warwick, RI 02888
http://www.techaccess@techaccess-ri.org

Rhode Island Technical Assistance Project (RITAP)
At Rhode Island College
600 Mt. Pleasant Ave.
Providence, RI 02908
1-401-456-4600
http://www.ritap.org

Special Education Resources on the Internet
SERI
401 Rosemont Avenue
Frederick, Maryland 21701
1-301-663-3131
http://www.hood.edu

The Family Village
Waisman Center
University of Wisconsin-Madison
1500 Highland Avenue
Madison Wisconsin 53705-2280
http://www.familyvillage.wisc.edu

Parent Advocacy Coalition for Educational Rights
PACER Center
8161 Normandale Boulevard
Minneapolis, Minnesota 55437
Phone: 1-952-838-9000
TTY: 1-952-838-0190
http://www.pacer.org

Council for Exceptional Children
11920 Association Drive
Reston, Virginia 20191
1-703-620-3660
http://www.cec.sped.gov

American Academy of Pediatrics
141 Northwest Point Boulevard
Elk Grove Village, Illinois 60007
Phone: 1-847-434-4000
http://www.aap.org

Rhode Island Autism Project
Thurbers Avenue
Providence, RI
Phone: (401) 785-2666

CEDARR Family Centers
About Families CEDARR Family Center
32 Branch Ave.
Providence, RI 02904
(401) 331-2700

Easter Seals CEDARR Family Center
5 Woodruff Ave.
Narragansett, RI 02882
(401) 284-1000

Family Solutions CEDARR
134 Thurbers Ave. Suite 102
Providence, RI 02905
(401) 461-4351 or (800) 640-7283

Family First CEDARR Center
Hasbro Children's Hospital, Room 120
583 Eddy St.
Providence, RI 02903
(401) 444-7703

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The University Affiliated Program of Indiana (Kim, this is the footnote on the information for autism.)