Michigan

Speech-Language Guidelines:

Suggestions for Eligibility,
Service Delivery, and
Exit Criteria Revised.

Michigan Speech-Language–Hearing Association
Public School Committee
December, 2006

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Thank You to the many professionals and their school districts responsible for this document

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Thank you to many others who contributed in some way.

Special thanks to

Macomb Intermediate School District

and the local districts in Macomb County for supporting this project, as well as many other districts across the state for support in writing and reviewing this document.

December, 2006

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Speech-Language Guidelines:

Suggestions for Eligibility,
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Exit Criteria Revised

Forward

This document is a revision of guidelines originally developed by the Michigan Speech-Language-Hearing Association, Public School Committee (MSHA, PSC) in 1992. An addendum was added in 1995 related to standards for service delivery. Since then, the reauthorization of IDEA in 1997 and in 2004, as well as the passing of NCLB (reauthorization of ESEA) has had a significant impact on service delivery in the schools. In addition, there have been changes in population, such as increased numbers of children in Michigan schools for whom English is a second language and changes in practice, such as increased understanding of speech-language pathologists' (SLPs') roles and responsibilities related to reading and writing. In some cases there has been both a change in population and professional practice. For example, there are more children in school who are medically fragile and have difficulties with feeding and swallowing and there is increased understanding of SLPs' roles related to feeding and swallowing in the schools. This revision includes additional information related to the delivery of speech and language as a related service to each of the disability areas. Finally, guidelines related to special issues that are frequently encountered, or those for which SLPs frequently ask for guidance, are included in the last section of the document including: assistive technology, auditory processing, and selective mutism.

This document is intended to serve as a resource to SLPs and administrators, as local practices are established. It is hoped that this document facilitates discussion. SLPs must follow the procedures and policies in their district. This document is not intended to supersede district policy, but rather to inform.

We are most grateful to all of the individuals who participated in the development of this document and to the school districts that supported its development. We hope that it is a valuable resource. Comments or questions may be directed to the MSHA Public School Committee, in care of the Vice President for Public schools at mainoffice@michiganspeechhearing.org

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SCHOOL PRACTICE AND PROFESSIONALISM

The practice of speech-language pathology within schools is shaped by numerous factors including the needs of the children served, the requirements of the employer or job, the law as it relates to such services and the individuals who need them, the culture of the school(s), and the professionalism of the SLP who applies his/her skills in addressing these factors. Professionalism defined is "the qualities or typical features of a profession or of professionals, especially competence, skill, etc. (Pocket Oxford American Dictionary of Current English, 2003)."

According the American Speech-Language-Hearing Association Code of Ethics (ASHA, 2003) "the goal of the profession of speech-language pathology and its members is provision of the highest quality treatment and other services consistent with the fundamental right of those served to participate in decisions that affect their lives." Accordingly, SLPs practicing in schools who are members of the ASHA and/or MSHA seek to uphold these standards as described within their respective codes of ethics. (See Appendix for Codes of Ethics). Such codes provide professionals with a compass for navigating through the myriad of decisions they must make in order to practice competently.

While professionals are legally bound by rules of law (and in the case of school practice, the rules of both federal legislation such as No Child Left Behind and the reauthorized Individuals with Disabilities Education Improvement Act of 2004 as well as state rules and codes) ethical codes are suggested ways of acting which are enforced by the particular organizations which have enacted them. Members voluntarily subscribe to upholding them as members of the organizations. At times such ethical principles are congruent with existing rules of law; in such cases violations of the code of ethics may also constitute breaking the law. The burden and benefit of professionalism is borne by individuals who strive to maintain a code that ensures a standard of conduct that is thought to be shared by all who seek to be called a speech-language pathologist. The code of ethics is the overarching umbrella that covers all of the particular and specifically articulated/outlined directions, which are seen in the scope of practice and preferred practice patterns.

The four main principles of the ASHA Code of ethics follow:

Principle of Ethics I
Individuals shall honor their responsibility to hold paramount the welfare of persons they serve professionally.

Principle of Ethics II
Individuals shall honor their responsibility to achieve and maintain the highest level of professional competence.

Principle of Ethics III
Individuals shall honor their responsibility to the public by promoting public understanding of the professions, by supporting the development of services designed to fulfill the unmet needs of the public, and by providing accurate information in all communications involving any aspect of the profession.

Principle of Ethics IV
Individuals shall honor their responsibilities to the professions and their relationships with colleagues, students, and members of allied professions. Individuals shall uphold the dignity and autonomy of the professions, maintain harmonious interprofessional and intraprofessional relationships and accept the professions' self-imposed standards.

Each principle includes rules pertaining to it, which describe the particulars of adherence to the principle. However, although ethical codes provide both general principles and rules, sometimes the specifics of how these apply to daily habits and behavior may be less clear. To remind us all of just what constitutes the standard of professionalism, a recent publication has articulated the nuts and bolts of it for us:

Conveying Expectations about Professional Behavior (from *Audiology Today, Vol. 10* (4) 1998

Reprinted with permission) Michael Chial
Only three learned professions were recognized as such at the beginning of this century: law, medicine, and theology. For good or ill, ours is an age in which occupations ranging from aroma therapy to zymometry claim to be "professions" and their proponents, "professionals." It can be argued that whether an occupation rises to the status of a profession is less a function of claims of importance than of underlying principles and values of practitioners. It also can be argued that professionalism (referring to "the manner, spirit and methods of a profession") is more about doing than being.

Education and training in speech-language pathology and audiology necessarily emphasize scientific and technical knowledge, as well as clinical skills. Proper preparation also requires attention to the behaviors that distinguished professionals from amateurs and from dilettantes. These behaviors may not be taught, but they certainly can be learned. Perhaps too often we assume that formal statements of ethics and the actions of more experienced models are sufficient indicators of professional behaviors. As a result students may be unclear about what is expected of them and when they well be accountable for those expectations. One solution is to state—in direct, behavioral terms—what is expected.

The following attempts to do so as simply as possible. It is not intended as rant and cant, but rather as a set of behavioral aspirations. Some of us may have fallen short of some of these aspirations at some times or others. That is less importan6t than our efforts to do the right thing the next time.

Professionalism
Speech-Language Pathology and Audiology are professional disciplines. Professions require certain behaviors of their practitioners. Professional behaviors (which may or may not directly involve other people) have to do with professional task and responsibilities, with the individuals served by the profession, and with relations with other professionals. Included among professional tasks are education and training. The following conveys the expectations about the behaviors of THOSE WHO SEEK TO JOIN THE PROFESSION.

PROFESSIONALISM	
1. You show up. 2. You show up on time. 3. You show up prepared. 4. You show up in a frame of mind appropriate to the professional task. 5. You show up properly attired. 6. You accept the idea that "on time," "prepared," "appropriate," and "properly" are defined by the situations, by the nature of the task or by another person. 7. You accept that your first duty is to the ultimate welfare of the persons served by your professions, and that "ultimate welfare" is a complex mix of desires, wants, needs, abilities and capacities. 8. You recognize that professional duties and situations are about completing tasks and about solving problems in ways that benefit others, either immediately or in the long term are called upon to behave as a professional, you are not the student, the customer, the star, or the victim. 9. You place the importance of professional duties, tasks and problem solving above your own convenience. 10. You strive to work effectively with others for the benefit of the persons served. This means you pursue professional duties, tasks, and problem solving in ways that make it easier (not harder) for others to accomplish their work. 11. You properly credit others for their work. 12. You sign your work. 13. You take responsibility for your actions, your reactions, and your inactions. This means you do not avoid responsibility by offering excuses, by blaming others, by emotional display, or by helplessness. 14. You do not accept professional duties or tasks for which you are personally or professionally unprepared.	15. You do what you say you will do. By the time you said you would do it. To the extent you said you would do it. And to the degree you said you would do it. 16.You take active responsibility for expanding the limits of your knowledge, understanding, and skill. 17. You vigorously seek and tell the truth, including those truths that may be less than flattering to you. 18. You accept directions (including correction) from those who are more knowledgeable or more experienced. You provide direction (including correction) to those who are less knowledgeable or less experienced. 19. You value the resources required to perform professional duties, tasks, and problem solving, including your time and that of others. 20. You accord respect to the values, interests and opinions of others that may differ from your own, as long as they are not objectively harmful to the persons served. 21. You accept the fact that others may establish objectives for you. While you may not always agree with those goals, or may not fully understand them, you will pursue them as long as they are not objectively harmful to the persons served. 22. When you attempt a task for the second time, you do it better than you did it the first time. You revise the ways you approach professional duties, tasks, and problem solving in consideration of peer judgments of best practices. 23. You accept the imperfections of the world in ways that do not compromise the interests of those you serve, or your own pursuit of excellence. 24. You based your opinions, actions and relations with others upon sound empirical evidence, and upon examined personal values consistent with the above. 25. You expect all of the above from other professionals.

Chial, M. (1998). Conveying Expectations about Professional Behavior. *Audiology Today, Vol. 10* (4). (Reprinted with permission)

Code of Ethics of the

MICHIGAN SPEECH-LANGUAGE-HEARING ASSOCIATION

Preamble

The preservation of the highest standards of integrity and ethical principles is vital to the successful discharge of the responsibilities of all members. This Code of Ethics has been promulgated by the Association in an effort to highlight the fundamental rules and is considered essential to this basic purpose. The failure to specify any particular responsibility or practice in the Code of Ethics should not be construed as denial of the existence of other responsibilities or practices that are equally important. Any act that is in violation of the spirit and purpose of this Code of Ethics shall be unethical practice. It is the responsibility of each member to advise the Ethics and Standards Committee of instances of violation of the principles incorporated in the Code.

SECTION A. Client Relationships

The ethical responsibilities of the member require that the welfare of persons served professionally be considered paramount.

1. The member who engages in paid professional clinical work must possess appropriate qualifications.
   a. The member may provide only those services for which proper training has been received, i.e., necessary course work and supervised practicum.
   b. The member who has not completed professional preparation must not provide language, speech or hearing services except in a supervised clinical practicum situation as a part of a training program.
   c. The member who utilizes paraprofessionals must directly supervise their activities.
2. The member must follow acceptable patterns of professional conduct in relationships with the people served.

   a. Results of any language, speech or hearing consultation or therapeutic procedure must not be guaranteed. Although a reasonable statement of prognosis and/or progress may be made, any guarantee of any sort, expressed or implied, oral or written, is unethical.
   b. A member who is receiving a salary or fee for providing services to a person or group of persons may not receive an additional fee for alternative or supplemental services unless authorized to do so by his/her primary employer.
   c. Diagnosis, treatment or re-evaluation of individual language, speech or hearing disorders must not be done by correspondence or by telephone. This does not preclude follow-up correspondence of individuals previously seen, nor does it preclude providing the person served professionally with general information of an educational nature.
   d. Confidential information obtained from individuals served professionally must not be revealed without written permission of the client.
   e. Persons served professionally must not be exploited;

      (1) by accepting them for professional language, speech or hearing services which for any reason are contraindicated;
      (2) by continuing treatment unnecessarily;
      (3) by charging exorbitant fees.
3. The member must use every reasonable resource available, including referral to other specialists as needed, to effect as great improvement as possible in the persons served.

4. The member must take every precaution to avoid injury to each person served professionally.

SECTION B. Professional Relationships

The duties of individual members related to other professional workers are many.

1. Each individual member should seek participation in open and significant professional discussion of all theoretical and practical issues but avoid personal invective directed toward professional colleagues or members of allied professions.

**Approved by the membership at the Association Business Meeting on March 23, 1973. Revised March 21, 1980.*

Code of Ethics of the Michigan Speech-Language-Hearing Association

2. Each member should establish harmonious relations with members of other professions. Others should be informed concerning the services that can be rendered by members of the speech and hearing profession and, in turn, information should be sought from members of related professions. Each member should strive to increase knowledge within the field of speech and hearing.

SECTION C. Other Responsibilities

The member has other special responsibilities.

1. Each individual member must guard against conflicts of professional interest.
   a. Compensation, in any form, must not be accepted from a manufacturer or a dealer in prosthetic or other devices for recommending any particular product.
   b. Individuals may announce *and/or* may make known professional clinical services in a manner consistent with professional standards established in the State of Michigan for medical, dental, psychological and related professions. Services for which an individual has not received professional training may not be stated or offered. Individuals may announce and/or make known consultive services in published listings under the categories for which adequate professional training has been completed and in a manner consistent with professional standards established in the State of Michigan for medical, dental, psychological and related professions.
   c. Individuals must not engage in commercial activities that conflict with responsibilities to the persons served professionally or to colleagues.
   d. Individuals who dispense products to persons served professionally shall observe the following standards:
      (1) Products associated with professional practice must be dispensed to the person served as a part of a program of comprehensive habilitative care.
      (2) Fees established for professional services must be independent of whether a product is dispensed.
      (3) Persons served must be provided freedom of choice for the source of services and products.
      (4) Price information about professional services rendered and products dispensed must be disclosed by providing to or posting for persons a complete schedule of fees and charges in advance of rendering services, with differentiation between fees for professional services and charges for products dispensed.
      (5) A program to assure the effective use of the product dispensed must be provided to the client.
      (6) The individual dispensing such products must comply with the requirements of the State of Michigan for dispensing such products.
2. Individuals should help in the education of the public regarding language, speech, and hearing problems and other matters within their area of professional competence.
3. It is incumbent upon the member to make every reasonable effort to be certain that public information materials are accurate and complete in their reference to professional services and facilities.
4. Each member should seek to provide and expand services to persons with language, speech and hearing handicaps, and to assist in establishing high professional standards for such programs.
5. Individuals must not discriminate on the basis of national origin, religion, sex, or color in their professional relationships with colleagues or clients.

SECTION D. Specialized Codes

The adherence to this code by the membership does not prohibit the development of specialized Codes of Ethics related to specific areas of professional activity.

SECTION E. Revision of the Code of Ethics

The Code of Ethics of the Michigan Speech-Language-Hearing Association may be amended by a 2/3 vote of the membership present at a regular Association Business meeting. The proposed amendments shall be announced to each member in writing at least 30 days prior to such a meeting. Proposed amendments/changes may be submitted by the Executive Council or by any member in good standing.

AMERICAN
SPEECH-LANGUAGE-
HEARING
ASSOCIATION

Code of Ethics

Last Revised January 1, 2003

Preamble

The preservation of the highest standards of integrity and ethical principles is vital to the responsible discharge of obligations by speech-language pathologists, audiologists, and speech, language, and hearing scientists. This Code of Ethics sets forth the fundamental principles and rules considered essential to this purpose.

Every individual who is (a) a member of the American Speech-Language-Hearing Association, whether certified or not, (b) a nonmember holding the Certificate of Clinical Competence from the Association, (c) an applicant for membership or certification, or (d) a Clinical Fellow seeking to fulfill standards for certification shall abide by this Code of Ethics.

Any violation of the spirit and purpose of this Code shall be considered unethical. Failure to specify any particular responsibility or practice in this Code of Ethics shall not be construed as denial of the existence of such responsibilities or practices.

The fundamentals of ethical conduct are described by Principles of Ethics and by Rules of Ethics as they relate to the conduct of research and scholarly activities and responsibility to persons served, the public, and speech-language pathologists, audiologists, and speech, language, and hearing scientists.

Principles of Ethics, aspirational and inspirational in nature, form the underlying moral basis for the Code of Ethics. Individuals shall observe these principles as affirmative obligations under all conditions of professional activity.

Reference this material as: American Speech-Language-Hearing Association. Code of ethics (revised). *ASHA Supplement,* 23, pp. 13–15.

Index terms: ASHA reference products, ethics (professional practice issues), ethics and related papers

Document type: Ethics and related documents

Rules of Ethics are specific statements of minimally acceptable professional conduct or of prohibitions and are applicable to all individuals.

Principle of Ethics I

Individuals shall honor their responsibility to hold paramount the welfare of persons they serve professionally or participants in research and scholarly activities and shall treat animals involved in research in a humane manner.

Rules of Ethics

A. Individuals shall provide all services competently.

B. Individuals shall use every resource, including referral when appropriate, to ensure that high-quality service is provided.

C. Individuals shall not discriminate in the delivery of professional services or the conduct of research and scholarly activities on the basis of race or ethnicity, gender, age, religion, national origin, sexual orientation, or disability.

D. Individuals shall not misrepresent the credentials of assistants, technicians, or support personnel and shall inform those they serve professionally of the name and professional credentials of persons providing services.

E. Individuals who hold the Certificates of Clinical Competence shall not delegate tasks that require the unique skills, knowledge, and judgment that are within the scope of their profession to assistants, technicians, support personnel, students, or any nonprofessionals over whom they have supervisory responsibility. An individual may delegate support services to assistants, technicians, support personnel, students, or any other persons only if those services are adequately supervised by an individual who holds the appropriate Certificate of Clinical Competence.

F. Individuals shall fully inform the persons they serve of the nature and possible effects of services rendered and products dispensed, and they shall inform participants in research about the possible effects of their participation in research conducted.

G. Individuals shall evaluate the effectiveness of services rendered and of products dispensed and shall provide services or dispense products only when benefit can reasonably be expected.

H. Individuals shall not guarantee the results of any treatment or procedure, directly or by implication; however, they may make a reasonable statement of prognosis.

I. Individuals shall not provide clinical services solely by correspondence.

J. Individuals may practice by telecommunication (for example, telehealth/e-health), where not prohibited by law.

K. Individuals shall adequately maintain and appropriately secure records of professional services rendered, research and scholarly activities conducted, and products dispensed and shall allow access to these records only when authorized or when required by law.

L. Individuals shall not reveal, without authorization, any professional or personal information about identified persons served professionally or identified participants involved in research and scholarly activities unless required by law to do so, or unless doing so is necessary to protect the welfare of the person or of the community or otherwise required by law.

M. Individuals shall not charge for services not rendered, nor shall they misrepresent services rendered, products dispensed, or research and scholarly activities conducted.

N. Individuals shall use persons in research or as subjects of teaching demonstrations only with their informed consent.

O. Individuals whose professional services are adversely affected by substance abuse or other health-related conditions shall seek professional assistance and, where appropriate, withdraw from the affected areas of practice.

Principle of Ethics II

Individuals shall honor their responsibility to achieve and maintain the highest level of professional competence.

Rules of Ethics

A. Individuals shall engage in the provision of clinical services only when they hold the appropriate Certificate of Clinical Competence or when they are in the certification process and are supervised by an individual who holds the appropriate Certificate of Clinical Competence.

B. 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.

C. Individuals shall continue their professional development throughout their careers.

D. Individuals shall delegate the provision of clinical services only to: (1) persons who hold the appropriate Certificate of Clinical Competence; (2) persons in the education or certification process who are appropriately supervised by an individual who holds the appropriate Certificate of Clinical Competence; or (3) assistants, technicians, or support personnel who are adequately supervised by an individual who holds the appropriate Certificate of Clinical Competence.

E. Individuals shall not require or permit their professional staff to provide services or conduct research activities that exceed the staff member's competence, level of education, training, and experience.

F. Individuals shall ensure that all equipment used in the provision of services or to conduct research and scholarly activities is in proper working order and is properly calibrated.

Principle of Ethics III

Individuals shall honor their responsibility to the public by promoting public understanding of the professions, by supporting the development of services designed to fulfill the unmet needs of the public, and by providing accurate information in all communications involving any aspect of the professions, including dissemination of research findings and scholarly activities.

Rules of Ethics

A. Individuals shall not misrepresent their credentials, competence, education, training, experience, or scholarly or research contributions.

B. Individuals shall not participate in professional activities that constitute a conflict of interest.

C. Individuals shall refer those served professionally solely on the basis of the interest of those

being referred and not on any personal financial interest.

D. Individuals shall not misrepresent diagnostic information, research, services rendered, or products dispensed; neither shall they engage in any scheme to defraud in connection with obtaining payment or reimbursement for such services or products.

E. Individuals' statements to the public shall provide accurate information about the nature and management of communication disorders, about the professions, about professional services, and about research and scholarly activities.

F. Individuals' statements to the public—advertising, announcing, and marketing their professional services, reporting research results, and promoting products—shall adhere to prevailing professional standards and shall not contain misrepresentations.

Principle of Ethics IV

Individuals shall honor their responsibilities to the professions and their relationships with colleagues, students, and members of allied professions. Individuals shall uphold the dignity and autonomy of the professions, maintain harmonious interprofessional and intraprofessional relationships, and accept the professions' self-imposed standards.

Rules of Ethics

A. Individuals shall prohibit anyone under their supervision from engaging in any practice that violates the Code of Ethics.

B. Individuals shall not engage in dishonesty, fraud, deceit, misrepresentation, sexual harrassment, or any other form of conduct that adversely reflects on the professions or on the individual's fitness to serve persons professionally.

C. Individuals shall not engage in sexual activities with clients or students over whom they exercise professional authority.

D. Individuals shall assign credit only to those who have contributed to a publication, presentation, or product. Credit shall be assigned in proportion to the contribution and only with the contributor's consent.

E. Individuals shall reference the source when using other persons' ideas, research, presentations, or products in written, oral, or any other media presentation or summary.

F. Individuals' statements to colleagues about professional services, research results, and products shall adhere to prevailing professional standards and shall contain no misrepresentations.

G. Individuals shall not provide professional services without exercising independent professional judgment, regardless of referral source or prescription.

H. Individuals shall not discriminate in their relationships with colleagues, students, and members of allied professions on the basis of race or ethnicity, gender, age, religion, national origin, sexual orientation, or disability.

I. Individuals who have reason to believe that the Code of Ethics has been violated shall inform the Board of Ethics.

J. Individuals shall comply fully with the policies of the Board of Ethics in its consideration and adjudication of complaints of violations of the Code of Ethics.

THE WORKLOAD APPROACH TO CASELOAD

Definition
Rule 340.1745 of the Michigan Special Education code provides the following definition of instructional services as of May 20, 2005:

(a) The extent of instructional services provided by a teacher of the speech and language impaired for persons determined to be eligible for special education in R340.1703 to R340.1715 shall be based on the handicapped person's needs as determined by the individualized educational planning committee after reviewing a diagnostic report provided by a teacher of the speech and language impaired.

(b) The determination of caseload size for an individual teacher of the speech and language impaired shall be made by the teacher of the speech and language impaired in cooperation with the district director of special education, or his/her designee, and the building principal or principals of the school or schools in which the students are enrolled. Caseload size shall be based upon the severity and multiplicity of the handicaps and the extent of the service defined in the collective individualized education programs of the students to be served, allowing time for all of the following:
    (i) Diagnostics
    (ii) Report Writing
    (iii) Consulting with parents and teachers
    (iv) Individualized educational planning committee meetings
    (v) Travel

(c) Individual teacher caseloads shall not exceed 60 different persons and shall be adjusted based on factors identified in subdivision (b) of this rule. Students being evaluated should be counted as part of the caseload.

Introduction
The workload approach to caseload is a process of assessing all of the activities an SLP has related to various assignments, informing school teams, families, and administrators about these activities, and making decisions about how to schedule these activities into the workweek. Flexible scheduling is used to provide individualized services to students and respond to their varying needs as progress is monitored during treatment. It allows for a combination of service delivery models that may change with the need of the student and demands of the curriculum.

School SLPs are increasingly expected to handle multiple activities related to servicing both caseload students and pre-referral students. These activities are often a required part of the SLP job. Caseload can be defined as the students serviced who have an Individualized Education Plan (IEP). Workload can be defined as the activities which SLPs are required to perform as part of their job responsibilities. These terms are sometimes thought to be synonymous with each other. Oftentimes, SLPs will arrange

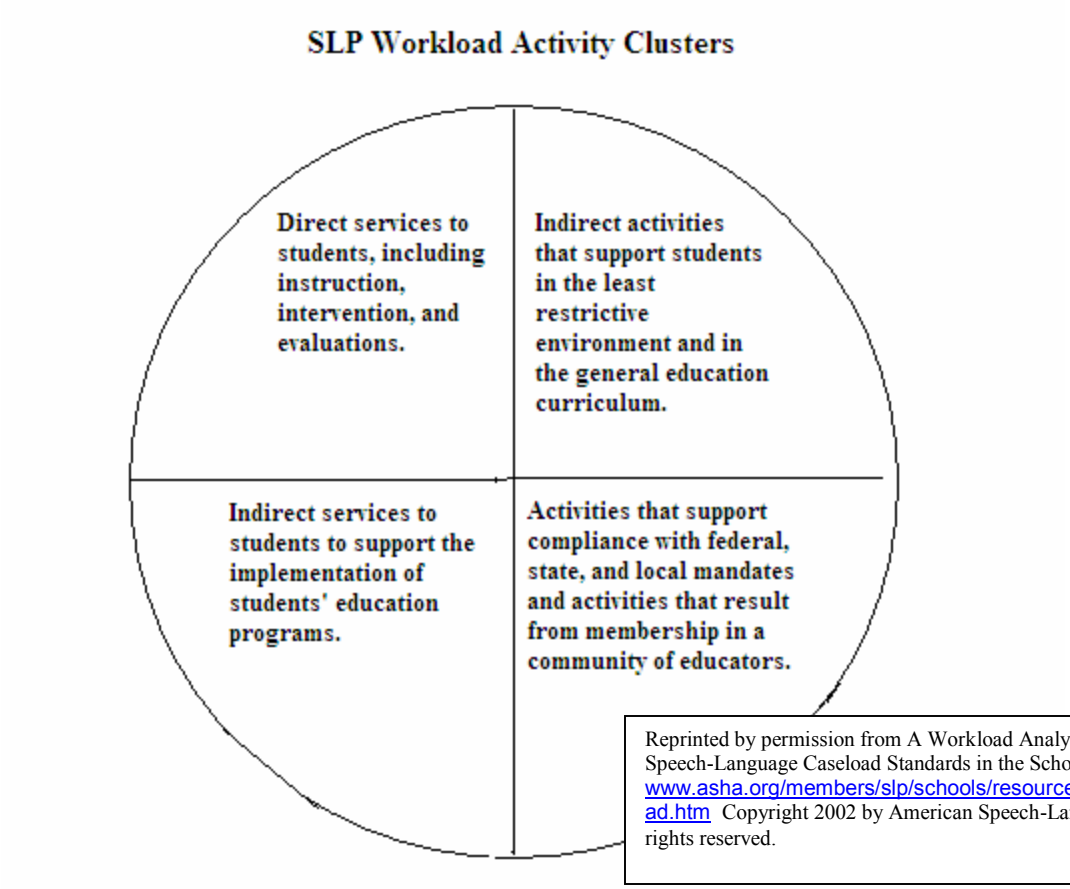
their schedule so that the majority of their time is dedicated to direct services for students. This leaves little to no time for the other duties an SLP needs to complete as part of their employment within a school district. This section will attempt to assist SLPs in ways to accomplish all the tasks they need to complete during the course of their school week and encourage the SLP to "work smarter, not harder".

Factors Affecting Workloads

There are several factors affecting an SLP's workload in the schools. See the graphic below for what ASHA (2002) reports as pertinent factors related to workload.

Workload Activity Clusters

ASHA (2002) divides the SLP responsibilities into four separate clusters. See the graphic below for this representation.



Direct Services

This cluster typically makes up the majority of an SLPs schedule and includes direct therapeutic services and evaluations.

Indirect Services to Support IEPs

This cluster refers to the support activities an SLP may implement as part of individual student needs. These activities include:

- Collecting and analyzing data related to student achievement
- Parent communication/consultation
- School staff inservices
- Development, implementation and maintenance of AAC devices

Indirect Services to Support Least Restrictive Environment (LRE)

This cluster refers to support activities related to general education. These activities include:

- Teacher consultation and collaboration
- Classroom observations
- Pre-referral intervention implementation

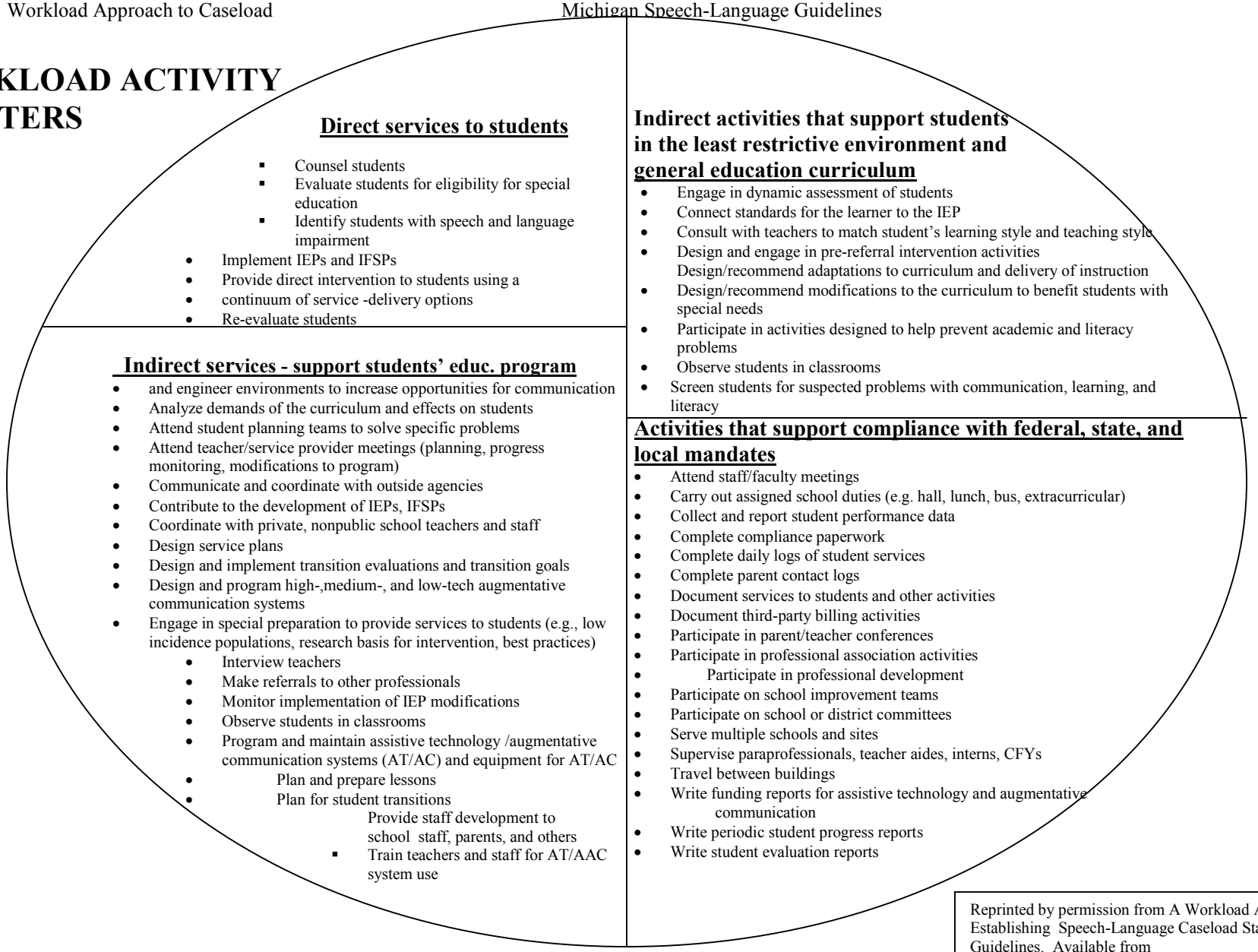
- Design and implementation of instructional accommodations/modifications
- Early intervening services (e.g. classroom based early intervention programs, etc.)

Compliance with Federal, State, and Local Mandates
This cluster refers to the paperwork associated with maintaining compliance for multiple agencies related to school-based speech and language services. These activities can include:

- Local school duties (e.g. bus duty, Professional Learning Community participation, curriculum committee participation, etc.)
- IEPs, IFSPs
- Student report cards
- Third party billing (e.g. Medicaid billing)
- Service in professional organizations including professional development

One way to begin the process of determining workload is for an SLP to create an activity cluster relevant to their personal school situation. The SLP may identify all the activities they are required to perform into a circle graphic. See below for an example of this process from ASHA (2002).

WORKLOAD ACTIVITY CLUSTERS



Flexible Scheduling

Flexible Scheduling provides an alternative manner of scheduling and organizing service delivery is to explore flexible scheduling for servicing students. This type of scheduling can often alleviate issues related to caseload. Although flexible scheduling alone cannot address too many students assigned to an SLP, it can improve the quality of services students receive while allowing SLPs time to implement their other job-related duties. There are several flexible scheduling models available in the literature. Flexible scheduling diverts from the traditional 2-3 times a week pull-out model to a combined service delivery model.

Flexible Monthly Schedules

A flexible monthly schedule combines service delivery options and alters the frequency of services each week. It provides opportunities for individual, small group, classroom-based, and indirect services while allowing the SLP to schedule other job-related duties. Students are scheduled in 4 week cycles whereby each week's service may change. Not all students are on the same cycle. For example, student A's services during week one may be indirect and students B & C may be direct in the classroom. The next week, student A may need more support and receive individualized service, student B receives small group instruction, and student C receives indirect support services. This monthly schedule may be repeated the next month or may be altered dependent upon each student's changing needs. For example, students A, D, and Z may show growth in their language goals and would best be serviced within the classroom or through consultation with the general education teacher. Students B, C, G, and H may demonstrate a lack of progress in the attainment of their goals and require more intensive, individualized therapy for a month or two. Students E, L, and R may require the same level of service as the month before which includes small group and indirect consultation.

3:1 Model (Three weeks direct service: 1 week indirect service)

This model states that the first three weeks in a month are designated for direct services to meet student needs including individual or small group therapy, push-in based services, and evaluations. The last week in the month is reserved for indirect services including consultation and collaboration with teachers, parents or other service providers, developing materials such as AAC, and completion of paperwork. This model has proven to demonstrate several benefits in Oregon including reduction of work being done at home, an increase in third party billing, reduction in therapy cancellations, improved integration of IEP goals in general education curriculum, and improved morale among school SLPs (Annett, 2004). Strong-Van Zandt & Montgomery (2006) also reported that SLPs express significantly greater job satisfaction in a group using 3:1 scheduling as compared to a group using traditional. More SLPs reported increased direct therapy time and much more ability to complete paperwork.

Block Scheduling

In order for an SLP to be most effective when implementing services to students, it may be necessary to see a student both individually and in a larger group or classroom setting. Block scheduling allows for this type of flexibility. It involves blocking time in a

schedule related to a specific group of students needs. This specific group of students may not be serviced at the same time every week or in the same manner every week. Students within the group may be serviced within the classroom, in a small group, or individually. For example, the SLP may choose to group articulation students several times a week. The first contact may consist of 20 minutes individualized drill, the second contact may consist of small group therapy and the third contact may consist of classroom-based generalization techniques. In another example, the SLP may service several autistic students within that school. Time is blocked during the week to address the needs of the autistic population. The first contact may be to consult with the classroom teacher(s), the second contact may be to service the students in a social-communication group, and the third contact may be to design a low-tech AAC device needed for the classroom. These combinations of service delivery models for students can serve to improve the qualify of service for students in the school setting while allowing the SLP time to implement their additional responsibilities to particular students.

Documentation in the IEP

Frequency of Service

Historically, SLPs have documented on the IEP that students will receive direct speech and language services 2-3 times per week. When 60 students all have this same schedule, it becomes difficult for an SLP to implement other related work responsibilities. Several states have implemented alternative ways of scheduling services as documented on the IEP (Boswell, 2005; Cirrin, 2004; Moore, 2004; Rudebusch, 2006). These alternatives include:

- Number of services documented per card marking period
- Number of services documented per month
- Separation of services documented on the IEP between general education and special education (e.g. 9 times per month=special education contacts, 4 times per month=general education contacts)

These alternative scheduling options require SLPs, administrators, state legislators, and others to revise their definition of student "contacts". Boswell (2005) defines contacts as "…any service, direct or indirect, provided on behalf of the student." This shift in thinking may be required when SLPs attempt to alter number of services on an IEP document. Notification to parents about what student contacts mean in the IEP document would be necessary to ensure full disclosure of the types of services a student is receiving.

Documenting Indirect Workload Activities

The SLP should consult their local administrator for how to document alternative scheduling of services within the IEP. The SLP may need to work collaboratively with local administrators, school boards, union representatives, and special education staff members to devise a method of documentation in their local school district. See the reference section for ASHA (2002) guidelines which can support SLPs in their workload analysis endeavors.

Creating a Balanced Workload Schedule
The purpose of creating a balanced workload approach for school-based speech and language services is to allow the SLP time to implement all of the necessary tasks they need to complete as part of their employment in a specific school district. These duties may differ between districts and even school buildings. The following suggestions are taken from ASHA (2002) and are meant to serve as guidelines to the SLP interested in analyzing their workload issues.

Analysis of Current Workload

- Analyze all IEPs for activities required to implement each individualized program for each of the four clusters previously discussed
- Analyze the number of time slots available in a day or week
- Initially fill time slots with compliance activities required by the SLP
- Fill in remaining time slots for the other activity clusters the SLP must provide as part of each student's individualized program and service to the school

Addressing Imbalances, if they exist

- Analyze what activities were not slotted due to time constraints
- Collaborate with various school professionals to address any imbalances which may exist in the schedule
- Use of national, state or local data is helpful when demonstrating SLP effectiveness as it relates to caseload size
- Formulation of committees to address caseload issues in the local school district may occur

RESOURCES

Implementation Guide: A Workload Analysis Approach for Establishing Speech-Language Caseload Standards in the Schools (ASHA 2003) free to members.
This is a companion piece to the ASHA workload policy documents and includes step-by-step information for determining caseload size based on workload and advocating for policy change. Worksheets and a CD-Rom are included. Item #0804297 free to members of ASHA;$20 non-members.

ASHA Special Interest Division 16, School-Based Issues
ASHA member and students may want to consider joining the related Special Interest Division and receive newsletter with articles on this topic, members-only e-mail listserves, and Web forums. The mission of this division is to provide leadership and advocacy through a forum for all speech-language pathologists and audiologists with interests in school-based issues, including clinicians and researchers from schools, universities, and all other settings and to promote the highest quality services within schools by addressing clinical, educational, administrative and legislative/regulatory concerns at local, state, and federal levels.

REFERENCES

American Speech-Language Hearing Association. (2003). Implementation Guide: A workload analysis approach for establishing speech-language caseload standards in the schools. Rockville, MD: Author.

American Speech-Language-Hearing Association. (2002). A Workload Analysis Approach for Establishing Speech-Language Caseload Standards in the Schools: Guidelines. Rockville, MD: Author.

American Speech-Language-Hearing Association. (2002). A Workload Analysis Approach for Establishing Speech-Language Caseload Standards in the Schools: Position Statement. Rockville, MD: Author.

American Speech-Language-Hearing Association. (2002). A Workload Analysis Approach for Establishing Speech-Language Caseload Standards in the Schools: Guidelines. Rockville, MD: Author.

American Speech-Language-Hearing Association. (2002). A Workload Analysis Approach for Establishing Speech-Language Caseload Standards in the Schools: Technical Report. Rockville, MD: Author.

Annett, M.M. (2004, March 4). *Service Delivery Success: SLPs in Oregon schools tackle workload, enhance recruitment.* The ASHA Leader, pp 1, 12-13.

Boswell, S. (2005, June 14). *Workload Analysis: SLP develops software to work smarter*. The ASHA leader, pp 12, 20.

Cirrin, F.M. (2004, June 22). *Advocating for Workload Strategies: The Minnesota story*. The ASHA Leader, pp 1, 18-20.

Moore, M. (2004, June 8). *Workload Analysis: A winning strategy in the schools; Wisconsin SLPs use ASHA documents to craft a weighting system.* The ASHA Leader, pp 1, 8-11.

Rudebusch, J. (2006, February 7). *Clinicians Use Workload in Texas Schools.* The ASHA Leader, 11(2), 1, 35.

Strong-Van Zandt , S. & Montgomery, N. (2006). A Comparison of Service Delivery Models: What Practicing Professionals Report. ASHA Convention, Miami Beach, FL

CULTURALLY AND LINGUISTICALLY DIVERSE POPULATIONS

INTRODUCTION

In order to qualify students for services under Federal law (IDEA 2004) and state special education rules, the student's communication difficulties must not be due to cultural or linguistic differences. ASHA's definition of Communication Disorders and Variation (ASHA, 1993) stipulates that "a region, social, or cultural/ethnic variation of a symbol system should not be considered a disorder of speech or language. ASHA practice documents and the writings of experts in this practice area are all resources for practices related to treating and assessing children with communication difficulties who are culturally and linguistically diverse. These guidelines are intended to provide only basic information and considerations for assessment and treatment in this practice area and a framework for practice. It is recommended that the reader refer to the law, rules, and other referenced documents for further elaboration.

CULTURAL COMPETENCE OF THE SLP

The ability to distinguish a communication disorder from a difference due to linguistic variability is related to the cultural competence of the SLP. Cultural competence refers to sensitivity to both cultural and linguistic differences. The SLP needs to become aware of his/her own cultural values and standards which could impact the assessment and intervention process (ASHA, 2005). Currently a majority of SLPs have Euro-centered values and standards. It is necessary to understand the history and social customs of the student's culture as well as having an understanding of the impact of bilingualism. The following guidelines are offered by Taylor, Payne, Anderson, and Owen (2001) to facilitate interacting with clients from different cultures:

1. Each encounter is a social situated communicative event subject to cultural rules governing such events by both participants.
2. Children perform differently under differing conditions because of their unique cultural and linguistic backgrounds
3. Different modes, channels, and functions of communication may evidence differing levels of linguistic and communicative performance.
4. Ethnographic techniques (using the focus of the informant's perspective to discover the culture of the family, with the acceptance of the world as defined by the informant) and norms should be used for evaluating behaviors and making determinations of the primary language.
5. Possible sources of conflict in assumptions and norms should be identified prior to interaction and action taken to prevent them from occurring.
6. Learning about cultures is ongoing and should result in constant reevaluation and revision of ideas and in greater sensitivity.

SECOND LANGUAGE LEARNING

There are increasing numbers of students in Michigan schools for whom English is a second language. These students may be bilingual or even multilingual. In some cases, the student may have limited English skills or may have limited skills in both languages.

Second language learning may be simultaneous or successive. It is important for the SLP to understand the processes of acquiring more than one language. Without such understanding the

SLP may mistakenly identify a child as having a language delay or disorder when there is none. Alternatively, the SLP may fail to recognize a true disorder. Characteristics of second language learning described by Roseberry-McKibbins (2002) include:

- Interference (Transfer) – The first language influences use of English.
- Interlanguage – Changes in language rules as the new language is learned.
- Silent period – Listening to the new language with little output
- Code switching (Using both English and native language)
- Language loss – Decrease in use of first language sometimes results in loss of skills as English is being learned.

Before an assessment is initiated one must consider the length of exposure to English. Acquisition of any language progresses along a continuum as persons learn to read, write, speak and listen. Longitudinal research on how bilingual students acquire English language skills indicates that conversational skills often approach native proficiency with about two years of exposure to English. This is referred to as the Basic Interpersonal Communication Skills (BICS). Basic Interpersonal Communication Skills develop more informally through conversation and social interaction. English speaking children develop Basic Interpersonal Communication Skills in early childhood while at home.

In contrast, bilingual students may require five to seven years to develop the formal academic language skills, referred to as Cognitive Academic Language Proficiency (CALP). Academic proficiency refers to listening, speaking, reading and writing abilities as they are applied in the content areas. Cognitive Academic Language Proficiency develops formally through instruction of literate language in the school setting. English speaking children develop their CALP throughout Elementary and Middle School.

STUDENTS WHO ARE BIDIALECTAL

Students who use a dialect of English other than Standard American English are called bidialectal. For example students whose family uses African American English or Southern dialect of English are expected to use Standard American English in school, are bidialectal. Students may be bidialectal in other language as well. For example, in French, the Belgian dialect is different than the dialect of French spoken in Paris, France. One must be sure, that what appears to be a communicative disorder of a bidialectal student is not simply a variation of the communication system shared by a common regional, social, or cultural/ethnic factor not representative of the group's language (ASHA, 2003).

THE USE OF INTERPRETERS

Interpreters should be used to assist the SLP and team throughout the pre-referral and assessment process, unless a speech-language pathologist is fluent in the student's native language. The person used as an interpreter should be fluent in both oral and written modalities of the languages spoken by the student. The interpreters facilitate communication with the family, participate in gathering background and assessment data, and help communicate assessment results and interpretations during meetings. Persons who can act as interpreters are often available through local and/or county bilingual programs.

There are some important considerations for the use of interpreters. The interpreter must be present during assessment and parent conferences. The role of the interpreter must be defined for the family. Prior to the assessment the SLP should meet with the interpreter and discuss the assessment, including the following:

- Discuss roles and responsibilities during assessment.
- Review key concepts, phrases, words, and procedures that will be used.
- Remind the interpreter that he/she must not alter, omit, or add to the communication.
- Ask the interpreter if specific concepts/words are not translatable.
- Ask the interpreter about cultural considerations for the testing event.

After any sessions with the student, ask the interpreter to meet with you. Discuss behaviors, outcomes, questions, and problems observed during the session (Fradd, McGee, & Wilen, 1994; Kayser, 1995; Mattes & Omark, 1991).

It should be noted that if the speech and language pathologist uses an English standardized assessment tool with an interpreter or any other adaptations of the procedures, then the standardized score(s) can not be used to make eligibility decisions. However, the speech and language pathologist may report on communication behaviors seen during the assessment. Any standardized test adaptations and use of an interpreter should be described in the report.

These are just a few of the considerations for students with cultural and linguistic differences. There are additional considerations related to language in the cultural and linguistic diverse for language section and for articulation in the cultural and linguistic diverse for articulation sections of this document.

RESOURCES

ASHA Special Interest Division 14, Communication Disorders and Sciences in Culturally and Linguistically Diverse (CLD) Populations

ASHA members and students may want to consider joining the related Special Interest Division and receive newsletters with articles on this topic, members-only e-mail listserves, and Web forums. The mission of the Division is to provide leadership and advocacy for best practices relating to speech-language pathology and audiology services to members of CLD populations, and research, networking and mentoring opportunities for its members.

REFERENCES

American Speech and Language Association (2005). Cultural Competence. ASHA. *Supplement 25.* Rockville, MD.

American Speech and Language Association, (2003). *IDEA and your caseload: A template for eligibility and dismissal criteria for students ages 3 through 21.* Rockville, MD: Author.

American Speech-Language-Hearing Association Ad Hoc Committee on Service Delivery in the Schools. (1993). Definitions of communication disorders and variations. *ASHA, 35*

(Suppl. 10). 40-41.

Fradd, S. H., McGee, P.L., & Wilen, D., (1994). *Instructional assessment, an integrative approach to evaluating student performance.* White Plains, NY: Addison Wesley Publication Company, Inc.

Individuals with Disabilities Education Improvement Act of 2004 (IDEA), 20 U.S.C. § 1400 *et seq*. (2004).

Kayser, H. (1995). Cultural/linguistic variation in the United States and its implications for assessment and intervention in speech. *Language, Speech, Hearing Services in the Schools*, (27), p. 385-387.

Mattes. L.J., & Omark, D.R. (1991). *Speech and language assessment for the bilingual handicapped* (2nd edition). Oceanside, CA: Academic Communication Associates.

Roseberry-McKibbins, (2002). *Multicultural students with special needs: Practical strategies for assessment and intervention* (2nd edition). Oceanside, CA: Academic Communication Associates, Inc.

Taylor, O., Payne, K. & Anderson, N., & Owen, R.E. (2001) *Language development: An introduction* (5th Edition). Needham Heights, MA: Allyn & Bacon.

SPEECH-LANGUAGE IMPAIRED (SLI) AS A PRIMARY DISABILITY

Students may have speech and language impairments without other disabilities. In these instances the speech-language pathologist (SLP) is typically the lead team member in the prevention, identification, assessment and intervention process. Students may be found eligible as Speech and Language Impaired when they have language, articulation, fluency, or voice disorders that adversely affect educational performance and represent the student's primary impairment. These guidelines include detailed sections for language, articulation, fluency, and voice. These sections are organized by guidelines related to prevention, identification, assessment, intervention, and dismissal. However, there are several considerations for these roles are common to all, especially related to the eligibility determination process.

SLPs must adhere to the rules in Michigan's Special Education Code as well federal regulations that accompany the Individual Educational Improvement Act of 2004 (IDEA; 200). Rule 340.1710 of the Michigan Special Education code provides the following definition of a speech and language impairment as of May 20, 2005:

Rule 340.1710

(1) A "speech and language impairment" means a communication disorder that adversely affects educational performance, such as a language impairment, articulation impairment, fluency impairment, or voice impairment.

(2) A communication disorder shall be determined through the manifestation of 1 or more of the following speech and language impairments that adversely affects educational performance:
   (a) A language impairment which interferes with the student's ability to understand and use language effectively and which includes 1 or more of the following:
      (i.) Phonology. (iv.) Semantics.
      (ii.) Morphology. (v.) Pragmatics
      (iii.) Syntax.
   (b) Articulation impairment, including omissions, substitutions, or distortions of sound, persisting beyond the age at which maturation alone might be expected to correct the deviation.
   (c) Fluency impairment, including an abnormal rate of speaking, speech interruptions, and repetition of sounds, words, phrases, or sentences, that interferes with effective communication.
   (d) Voice impairment, including inappropriate pitch, loudness, or voice quality.

(3) Any impairment under subrule (2) (a) of this rule shall be evidenced by both of the following:
   (a) A spontaneous language sample demonstrating inadequate language functioning.
   (b) Test results on not less than 2 standardized assessment instruments or
      2 subtests designed to determine language functioning which
      Indicate inappropriate language functioning for the student's age.

(4) A student who has a communication disorder, but whose primary disability is other than speech and language may be eligible for speech and language services under R 340.1745 (a).

(5) A determination of impairment shall be based upon a comprehensive evaluation by a multidisciplinary evaluation team, which shall include a teacher of students with speech and language impairment under R 340.1796 or a speech and language pathologist qualified under R 340.1792.

The federal regulations that accompany IDEA 2004 went into effect October 14, 2006.

A child with a disability is defined, along with a speech and language impairment, as follows

§300.8 Child with a disability.

(a) General. (1) Child with a disability means a child evaluated in accordance with §§300.304 through 300.311 as having mental retardation, a hearing impairment (including deafness), **a speech or language impairment,** a visual impairment (including blindness), a serious emotional disturbance (referred to in this part as "emotional disturbance"), an orthopedic impairment, autism, traumatic brain injury, an other health impairment, a specific learning disability, deaf-blindness, or multiple disabilities, and who, by reason thereof, needs special education and related services.

…(c) Definitions of disability terms. The terms used in this definition of a child with a disability are defined as follows: ...

(11) Speech or language impairment means a communication disorder, such as stuttering, impaired articulation, a language impairment, or a voice impairment, that adversely affects a child's educational performance.
(Authority: 20 U.S.C. 1401(3); 1401(30))

PREVENTION

Speech-language pathologists are an important part of a school's resources as schools try to meet the learning needs of all children. With the passing of No Child Left Behind Act of 2001 (NCLB; 2001) the reauthorization of IDEA in 2004, and the changing definition of learning disabilities, schools are challenged in new ways to monitor the progress of ALL children, provide differentiated instruction, and develop capable, literate students who can speak, listen, read, and write using language. Prevention efforts are aimed at ensuring that all students attain speech and language competencies that allow them to make progress in school. Prevention efforts are also aimed to help students at risk for speech and language disorders to attain competency without being labeled as speech and language impaired (SLI).

SLPs have a role in educating school personnel and parents about normal speech and language development. Teachers and parents may promote speech and language development by providing models and by incorporating activities into everyday interactions or curricula. SLPs often support general education students through the SLP's participation in school-wide curricular improvements and through classroom-based services. While providing in-classroom services the teacher may request activities or modeling for additional students. In many cases, these preventative activities often result in reduced referrals for formal evaluation and services.

In some districts, SLPs now provide more direct services as part of early intervening efforts.
A form and guidelines are provided for SLPs using Early Intervening for language articulation, fluency, or voice. IDEA 2004 provides the following regulations:

§300.226 Early intervening services.

(a) General. An LEA may not use more than 15 percent of the amount the LEA receives under Part B of the Act for any fiscal year, less any amount reduced by the LEA pursuant to §300.205, if any, in combination with other amounts (which may include amounts other than education funds), to develop and implement coordinated, early intervening services, which may include interagency financing structures, for students in kindergarten through grade 12 (with a particular emphasis on students in kindergarten through grade three) who are not currently identified as needing special education or related services, but who need additional academic and behavioral support to succeed in a general education environment. (See Appendix D for examples of how §300.205(d), regarding local maintenance of effort, and §300.226(a) affect one another.)

(b) Activities. In implementing coordinated, early intervening services under this section, an LEA may carry out activities that include--

(1) Professional development (which may be provided by entities other than LEAs) for teachers and other school staff to enable such personnel to deliver scientifically based academic and behavioral interventions, including scientifically based literacy instruction, and, where appropriate, instruction on the use of adaptive and instructional software; and

(2) Providing educational and behavioral evaluations, services, and supports, including scientifically based literacy instruction.

(c) Construction. Nothing in this section shall be construed to either limit or create a right to FAPE under Part B of the Act or to delay appropriate evaluation of a child suspected of having a disability.

(d) Reporting. Each LEA that develops and maintains coordinated, early intervening services under this section must annually report to the SEA on--

(1) The number of children served under this section who received early intervening services; and

(2) The number of children served under this section who received early intervening services and subsequently receive special education and related services under Part B of the Act during the preceding two year period.

(e) Coordination with ESEA. Funds made available to carry out this section may be used to carry out coordinated, early intervening services aligned with activities funded by, and carried out under the ESEA if those funds are used to supplement, and not supplant, funds made available under the ESEA for the activities and services assisted under this section. (Approved by the Office of Management and Budget under control number 1820-0600) (Authority: 20 U.S.C. 1413(f))

Guidelines related to the provision of early intervening services are outlined in the sections that follow. The prevention, identification and referral of students suspected of having speech and language impairments should be aligned with the school building's practices for identification and referral for other disabilities. Students who are suspected of having speech and language impairments, especially, language impairments, should be discussed by building support teams or receive other early intervention practices in the same manner as those referred for other disabilities.

ASSESSMENT

Subrule (1) states that "A "speech and language impairment" means a communication disorder that adversely affects educational performance…"; therefore the team must determine that there is both a disorder and an adverse effect on educational performance from that disorder. Determining the presence of speech and language disorders involves the collection of a variety of assessment measures including standardized tests. Important considerations for these activities will be discussed. The presence of a disorder does not necessarily mean that there is an adverse effect on educational performance; therefore, the team must also determine whether the disorder adversely affects educational performance.

Determining Presence of Speech and Language Disorder

Part of the decision the assessment team must make is whether the student demonstrates a speech or language disorder, "without respect to its severity or impact on education," (ASHA, 2003). There should be multiple forms of assessment used to reach this decision as mandated by IDEA 2004. It is also important that the tools selected accurately identify the presence or absence of a disorder. The appropriate interpretation of test results is also crucial, as past practices of cognitive referencing and the use of cut-off scores have been questioned in the literature and by the American Speech-Language-Hearing Association.

Multiple Assessments

A variety of measures and techniques must be used to determine eligibility or the presence of speech and language impairment. According to IDEA 2004, the determination of both a student's disability and eligibility for service must include, "…a variety of assessment tools and strategies…" (Section 300.304). In addition, IDEA 2004 mandates that "…no single procedure is used as the sole criterion…" for determining disability or eligibility for service (Section 300.304). A comprehensive assessment may include a variety of assessment procedures, such as: (a) input from teachers, parents, and the student; (b) review of relevant records and other information, (c) curriculum-based speech/language assessment; (c) dynamic assessment; (d) communication samples, narrative tasks, or portfolio assessment; and (e) administration of standardized normative assessments. These can be considered multiple assessments when documented in the speech and language diagnostic report. Note that the requirement for multiple assessments is not interpreted as multiple standardized tests. Measurement error is inherent to all norm-referenced instruments and instead of facilitating the correct identification of students with disabilities, the administration of numerous tests merely compounds error (Disney, Whitmire, Plante, and Spinello, 2003). Federal regulations and state rules do not specify specific requirements related to the type of documentation needed. SLPs should check with their district for documentation requirements.

Distance from the Mean/Cut-off Scores

The purpose in administering tests is to appropriately identify whether a student has a speech or language disability or whether their communicative skills are within normal limits. The goal is to identify the right students without over-identifying a normally developing student as disabled or under-identifying a disabled student as normal. In the past, SLPs in Michigan were encouraged to use $1^{1/3}$ standard deviations below the mean as a cut-off. This was an arbitrary cut-off and did

not stem from rules or regulations but was promoted in earlier versions of this guidelines document.

The rule in the Michigan special education code defining speech and language impairment (340.1710) states that standardized assessment instruments or subtests must "indicate inappropriate language functioning for the student's age." It does not specify that the student's scores be a minimum number of standard deviations from the mean (cut-off score e.g., $1^{1/3}$ standard deviations). There are no cut-off scores in Federal law, nor in the Guidelines from the American Speech-Language Hearing Association. In fact, the ASHA document, *IDEA and Your Caseload: A Template for Eligibility and Dismissal Criteria* (2003), discusses the problems of using a cut-off score, suggesting that it may result in uneven identification and, at times, over-identification. It is suggested that each test should be considered by the standards set for that test in order for it to be a valid method of identification (Plante, 2003).

The review of several tests in the field reveal that it is common for test authors and publishers to use one standard deviation for the test cut off. When one standard deviation is used, approximately 16% of the population is identified, statistically. See table 1 for further comparisons of standard deviations and percentiles.

Table 1

-2 SD	-1.67 SD	-1.5 SD	-1.3 SD	-1.0 SD	$\bar{x}$
2.75%	7.7%	9.4%	11.8%	15.9%	50%

SD = standard deviation $\bar{x}$ = mean

The requirements and guidelines vary widely across states. Many states do not use a specific cut-off or number of standard deviations. Those states that do have requirements used vastly different criteria. The committee that drafted this document surveyed several states and found a variety used including: 1.0 SD, 1.5 SD, 1.75 SD, and 2.0. Apel (1993) reported similar results with states varying requirements for SLI certification from 1.0–2.0 standard deviations (SD) below the mean back in 1993. Apparently the wide range continues to be evident.

The standard of practice in Michigan for many years has been the use of 1 1/3 SD. Since it is not the purpose of this revision to *change* identification, the committee recommends continuing to use this as a general guideline with the following suggestions:

*Test Selection Guidelines**

- Select tests with appropriate levels ($\geq$ 80%)
  - Sensitivity : percent accuracy at identifying children with known disorders as having a language disorder and
  - Specificity : percent accuracy at identifying children with normal speech and language as not having a disability

  This information is found in the technical manual.
- Watch the research related to the test that may suggest a different cut-off than the original test research (such as a new discriminate analysis).

*Score Comparisons Guidelines**

- Check the test manual for recommended cut-off for the test

- If $\geq 1^{1/3}$ SD, then use that criterion, with the understanding that this criterion should not be the sole determining factor for decisions.
- If $\leq 1^{1/3}$ SD, then it is suggested that students who fall in this range should continue to be monitored through the Early Intervening Process. This means that they would not be added onto caseload, but the team would design a new intervention plan that may be carried out by various team members.

*Note: These guidelines are suggested practices and should not be interpreted as mandatory. SLPs should discuss/confirm their own district policies.

Specific tests will not be listed in these guidelines due to the rapidly changing assessment tools and related research. The American Speech-Language Hearing Association provides some guidance. Other sources of guidance can be found in the technical manuals of the tests and journal articles that report on test instruments.

Normative Reference Points
Chronological Age Referencing The Michigan rule defining speech and language impairment (340.1710) states that standardized assessment instruments or subtests must "indicate inappropriate language functioning for the student's *age*." This means that test scores are compared to the student's chronological age.

Cognitive Referencing The Michigan rule defining speech and language impairment (340.1745) does not state that standardized assessment instruments or subtests be compared in any way to the student's cognitive performance (i.e., Mental age or IQ). This practice of comparing a student's language performance to their performance on cognitive measures is referred to as cognitive referencing. It is also known as using a discrepancy formula since one would attempt to identify a discrepancy between language performance and cognitive performance (frequently nonverbal cognitive performance).

Cognitive referencing is based upon several assumptions related to students with cognitive impairments, and intelligence quotient (IQ) testing. Cognitive referencing makes the assumption that treating children who do not have an IQ-language gap will be of no benefit. Research has shown that this is not the case, that children without such a gap do indeed make demonstrable gains from speech and language intervention (Cole, 1996). It also makes the assumption that IQ measures are stable. It has been shown that scores on IQ tests may fluctuate both across tests and within the same tests over time. Consequently, discrepancies are unstable (Plante, 2003). Cognitive referencing was also based on the premise that there are non-verbal IQ measures to compare with language measures. However, it questionable whether any IQ measures are truly language free (Disney, Plante, Whitmire, & Spinello, 2003).

Although the 1991 version of this document encouraged this comparison, this was never part of the Michigan rule or Federal law. Current law (both state and federal) does NOT mandate or encourage cognitive referencing when determining eligibility for speech and language services. In fact, the use of cognitive referencing as the *sole* determining factor may be questionable, since IDEA 2004 guarantees that eligibility is based upon educational need versus a diagnostic category and because all children must be provided a free and appropriate public education.

Recently, it is proposed that the implementation of a Response to Intervention models may provide an alternative to cognitive referencing (Ehren & Nelson, 2005; Troia, 2005).
Cognitive referencing often becomes an issue for speech pathologists when students have low-average or borderline cognitive performance. The student struggles in school, but does not qualify as cognitively impaired or learning disabled. These students often have learning problems across several domains in addition to language problems. If the discrepancy model is used for LD and *not* used for SLI, there is the potential for making the SLP the primary service provider for a student needing significant levels of support, accommodations, and modification. When a primary eligibility of SLI is considered, this should reflect the student's ***primary*** disability. If the team finds throughout assessment that the student has many learning difficulties across several domains, then a plan needs to be designed to meet the student's needs, whether it be through general or special education. Responsibility for this should not rest solely with the SLP. Hopefully, as Response to Intervention models are implemented, systems will be put into place that will provide support to students who are struggling in general education. This will enable students who do not fit the traditional eligibility requirements for LD and SLI to have supports.

Determining Adverse Educational Effect, NCLB, and IDEA 2004
Since the publication of the last version of this document, there has been a significant shift of emphasis on the student's ability to progress educationally and the impact on their communication deficits on educational performance. This is actually not a new aspect of Michigan rule as the first part of rule 340.1710 has always pertained to educational effect:

> "A 'speech and language impairment' means a communication disorder that adversely affects educational performance, such as a language impairment, articulation impairment, fluency impairment, or voice impairment."

However, with the passage of the 1997 Reauthorization of IDEA, there was a greater emphasis on students' progress in the general curriculum, and this is significantly reinforced in IDEA 2004, with multiple references to NCLB. NCLB has had such a great impact on education it that "it has become impossible to discuss IDEA or special education without having a fundamental understanding of NCLB, its intent, and its general provisions" (Moore-Brown and Montgomery, 2005, p. 3). SLPs must show the relevance of their services as schools struggle to help all students to make adequate yearly progress (AYP). Moore-Brown and Montgomery (2005) provide a glossary of terms for NCLB and discuss the implications for SLPs.

A crucial aspect of speech and language assessments include evaluating the student's speech and language abilities given the communication demands in school. This includes assessing the student's response to supports and scaffolding from the teacher or SLP, review of students' portfolios and work samples, watching how the student attempts various challenging tasks or speaking opportunities. This information drives decision making. Much of this data may be gathered during the early intervening phase. If early intervening services were not provided, then it is suggested that the SLP uses dynamic assessment/trial intervention, observations, collecting samples, and other activities described later in this document. The assessment of adverse effect is often the more burdensome task and will often require narrative description in the diagnostic report.

It should also be noted that the Department of Education, Office of Special Education and Rehabilitative Services has written policy letters interpreting the term, "adversely affects educational performance" as it relates to eligibility considerations for speech and language impairments. Repeatedly the Department of Education has indicated that educational performance is a "broader construct" than academic performance alone and multiple assessment measures and the professional judgment of the SLP must be used to determine the need for services. In 1980, the interpretation states, in part,

> "In the event that the speech-language pathologist establishes through appropriate appraisal procedures the existence of a speech-language impairment, the determination of the child's status as a "handicapped child" cannot be conditioned on a requirement that there must be a concurrent deficiency in academic performance" (Department of Education, 1980).

In addition, the Department of Education has "a child's education performance must be determined on an individual basis and should include nonacademic as well as academic areas" (Department of Education, 1990). "Local agencies that deny student services who have obvious speech and language impairments because they did not have concomitant problems in academic achievement were using a very narrow definition of educational performance" (Dublinske, 2002). Furthermore Dublinske (2002) notes that one can simply review the curriculum benchmarks, standards, or grade level expectations to see evidence of impact of speech impairments (articulation, voice, or fluency) on curriculum.

Throughout IDEA 2004, references to educational performance are discussed as academic and functional (e.g., §300.324, 300.303) and to academic, nonacademic, and such as in §300.107 as follows:

§300.107 Nonacademic services.

The State must ensure the following:

(a) Each public agency must take steps, including the provision of supplementary aids and services determined appropriate and necessary by the child's IEP Team, to provide nonacademic and extracurricular services and activities in the manner necessary to afford children with disabilities an equal opportunity for participation in those services and activities.

(b) Nonacademic and extracurricular services and activities may include counseling services, athletics, transportation, health services, recreational activities, special interest groups or clubs sponsored by the public agency, referrals to agencies that provide assistance to individuals with disabilities, and employment of students, including both employment by the public agency and assistance in making outside employment available.

(Approved by the Office of Management and Budget under control number 1820-0030)
(Authority: 20 U.S.C. 1412(a)(1))

INTERVENTION

It is most important that speech and language intervention help students to progress in the general curriculum as mandated in IDEA 2004. As discussed above, educationally relevant

practices are essential. Intervention approached should also be evidenced-based. It is the responsibility of the SLP and team It is also essential that SLPs carefully track the progress of the students they serve, and use these results to make changes to intervention programs as the data indicates. These issues will be discussed as they pertain to each speech and language area in the following sections on language, articulation, fluency, and voice.

DISMISSAL CRITERIA

ASHA (2003) makes the following recommendations for dismissal criteria in the schools. These suggestions differ from the recommendations in the last version of the MSHA document and in the 1999 Guidelines document from ASHA, in order to meet the requirements of IDEA regulations 1997 and 2004. It is suggested that these considerations be made and discussed further by local districts.

> The decision-making process for dismissing a child from speech-language services is different for children receiving special education services than it is in the clinical setting. In a clinical setting, dismissal criteria can include issues regarding motivation, attendance, or lack of progress. In special education, however, dismissal decisions must comply with IDEA.
>
> All children who are found eligible for special education must receive services. Eligibility stems from the federal definition of a "child with a disability" and has a two-prong test:
>
> 1. Has the child been found to have a disability as a result of an evaluation conducted in accordance with IDEA requirements? AND
> 2. As a result of having a disability, does the child need special education and related services?
>
> A child may be dismissed from receiving services only when he/she no longer would be identified as having a speech-language impairment. If the child continues to meet those criteria, the child must continue to be served.
>
> So, how is a child to be dismissed? The school team that makes eligibility decisions conducts the two-prong test, reviewing the evaluation data (which can include data on the child's progress in meeting the annual goals). A review of the definitions of speech-language impairment and special education can assist in making the decision.
>
> - "Speech-language impairment means a communication disorder, such as stuttering, impaired articulation, a language impairment, or a voice impairment, that adversely affects a child's educational performance." (34 CFR § 300.7)
> - "Special education means specially designed instruction, at no cost to the parents, to meet the unique needs of a child with a disability…" (34 CFR § 300.26)
>
> Children who have a speech-language impairment and no other disability must need special education (specially designed instruction) to be eligible. The converse would also

be true for a child to be dismissed from services –the child with "speech-language only" would no longer need specially designed instruction.

Dismissal from services may occur if:

- the child no longer has a speech-language impairment; OR
- although the child has a speech-language impairment, it no longer affects his/her educational performance; OR
- although the child who has received speech-language services as special education still has a speech-language impairment that affects his/her educational performance, the eligibility team determines that he/she does not need special education;

The question remains as to what options speech-language pathologists have when children are failing to make progress, for any of a variety of reasons. IDEA 2004 includes requirements regarding lack of progress. The IEP team is to "review the child's IEP to determine whether the annual goals for the child are being achieved and revise the IEP as appropriate to address any lack of expected progress toward the annual goals" (34 CFR § 300.343 (c)). The speech-language pathologist should seek the assistance of the IEP team whenever a child fails to make progress. A number of options could be considered as follows:

- The child is not motivated to continued working on a communication impairment. The IEP team may determine that the child is having motivational problems in other special education and regular education classes. A joint effort would then be pursued to address motivation. If the IEP team identifies that motivation is a problem only in speech-language services, the SLP may consider a change in intervention focus or service delivery, or discuss other support options with the IEP team.

- There are extenuating medical circumstances. If the medical circumstance is temporary (i.e., the child is receiving a particular treatment that requires absence from school), the IEP team should reconvene and revise the IEP to reflect the services the child should receive during the medical situation. Documentation should be in place to explain why any service is temporarily discontinued. Upon the child's recovery and return to school, the IEP should be again revised and services initiated as appropriate. Such a child would not be dismissed from services temporarily.

- The child is not making progress. If the lack of progress is not related to reaching a plateau that could be anticipated based on the child's disability, the IEP team should consider the reasons for the lack of progress. In some cases, the cause may be the complexity of the speech-language impairment and the need for the student to receive more specialized speech-language services.

(ASHA, 1993, p. 30-32, reprinted with permission)

When the student has plateaued in his/her progress and multiple attempts have been made to redesign services, the team may discuss whether there is a lack of educational benefit. The team makes decisions about how to proceed with the input of district administrators.

REFERENCES

American Speech-Language-Hearing Association. (2003). IDEA and Your Caseload: A Template for Eligibility and Dismissal Criteria for Students Ages 3 through 21. Rockville, MD: Author.

Apel, K. (1993, November). *Index of state's definition of language impairment and qualification for service* [Handout]. Presentation at the annual convention of the American Speech-Language Hearing Association, Anaheim, CA.

Cole, K. (1996). What is the Evidence from Research with Young Children with Language Disorders? ASHA Special Interest Division 1, Language Learning and Education Newsletter, 3(1), 6-7.

Disney, S., Plante, E., Whitmire, K., & Spinello, E. (2003). Educationally Relevant Assessments. Rockville, MD: American Speech-Language –Hearing Association

Dublinske, S. (2002) "Adverse Affects Educational Performance" Policy 1980-2002; Nothing has changed Perspectives on School-Based Issues, American Speech-Language-Hearing association Division 16, vol, 3, (2) pp 3-8.

Individuals with Disabilities Education Act (IDEA), 20 U.S.C. §1400 et seq. (1990).

Individuals with Disabilities Education Act (IDEA) Amendments, 20 U.S.C. §1400 et seq. (1997).

Individuals with Disabilities Education Improvement Act of 2004 (IDEA), 20 U.S.C. § 1400 *et seq*. (2004).

Michigan Department of Education (2002). Revised Administrative Rules for Special Education. Lansing, MI: Author.

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

Moore-Brown, B. & Montgomery, J. (2001). Making a Difference for America's Children In an Era of Accountability: Update on NCLB and IDEA 2004. Eau Claire, WI: Thinking Publications.

No Child Left Behind Act of 2001, 20 U.S.C., §6311 *et seq*. (2002).

Plante, E. (2003). Cognition, Language, and IDEA: What you should know about eligibility criteria. Concurrent session at the ASHA Schools 2003 Conference.7/11/03-7/13/03. Anaheim, CA.

LANGUAGE

DEFINITION

Students are found eligible as language impaired under Special Education Rule:

Rule 340.1710 of the Michigan Special Education code provides the following definition of a language impairment as of May 20, 2005:

Rule 10.

(1) A "speech and language impairment" means a communication disorder that adversely affects educational performance, such as a **language impairment**, articulation impairment, fluency impairment, or voice impairment.

(2) A communication disorder shall be determined through the manifestation of 1 or more of the following speech and language impairments that adversely affects educational performance:

(a) A language impairment which interferes with the student's ability to understand and use language effectively and which includes 1 or more of the following:

(i.) Phonology.

(ii.) Morphology.

(iii.) Syntax.

(iv.) Semantics.

(v.) Pragmatics.

(b) Articulation impairment, including omissions, substitutions, or distortions of sound, persisting beyond the age at which maturation alone might be expected to correct the deviation.

(c) Fluency impairment, including an abnormal rate of speaking, speech interruptions, and repetition of sounds, words, phrases, or sentences, that interferes with effective communication.

(d) Voice impairment, including inappropriate pitch, loudness, or voice quality.

(3) Any impairment under sub rule (2) (a) of this rule shall be evidenced by both of the following:

(a) A spontaneous language sample demonstrating inadequate language functioning.

(b) Test results on not less than 2 standardized assessment instruments or 2 subtests designed to determine language functioning which indicate inappropriate language functioning for the student's age.

(4) A student who has a communication disorder, but whose primary disability is other than speech and language may be eligible for speech and language services under R 340.1745 (a).

(5) A determination of impairment shall be based upon a comprehensive evaluation by a multidisciplinary evaluation team, which shall include a teacher of students with speech and language impairment under R 340.1796 or a speech and language pathologist qualified under R 340.1792.

Note: This section includes the primary guidelines for language. Additional considerations for specific groups (e.g., adolescents, infants) follows, but it is hoped that this section is referenced, as well.

INTRODUCTION

The prevention, assessment and intervention for language impairments are the most common activities of the school-based speech-language pathologist. School occurs in the medium of language. A student's abilities in oral and written language define how that student is able to participate in, access, and progress in the general curriculum.

Definition of a Language Disorder

ASHA (1993, p. 40) provides the following definition of a language disorder and its components:

> A 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.

1. Form of Language
   a. Phonology is the sound system of language and the rules that govern the sound combinations.
   b. Morphology is the system that governs the structure of words and the construction of word forms.
   c. Syntax is the system governing the order and combination of words to form sentences and the relationships among the elements within a sentence.
2. Content of Language
   a. Semantics is the system that governs the meanings of words and sentences.
3. Function of Language
   a. Pragmatics is the system that combines the above language components in functional and socially appropriate communication.

Literacy

The provision of speech and language services in the area of language includes both oral and written language. A position statement from the American Speech-Language Hearing Association states that, "speech-language pathologists play a critical and direct role in the development of literacy for children and adolescents with communication disorders, including those with severe or multiple disabilities. SLPs also make a contribution to the literacy efforts of a school district or community on behalf of other children and adolescents" (ASHA, 2001, p. 1). The roles and responsibilities of SLPs related to written language include the prevention of written language problems by fostering language acquisition and emergent literacy, the identification of children at risk for reading and writing difficulties; the assessment of reading and writing, the provision of intervention for reading and writing and other roles such as assistance to general education teachers, helping others to understand effective literacy practices as well as research and education (ASHA, 1993).

The SLPs' roles and responsibilities related to reading and writing will be embedded throughout the discussion of the prevention, identification, assessment, and intervention of language disorders in this section. These roles will also be further defined in the section of this document related to the prevention and intervention for students at risk for and experiencing learning disabilities. The overlap of the portions of this document related to speech and language as a

primary language disorder and or learning disabilities as a primary impairment is inevitable as language is the underlying impairment in an overwhelming number of learning disabilities.

Response to Intervention

A response to intervention (RtI) framework will be integrated throughout the language section. In a response to intervention approach, schools work to ensure that instructional programs are effective in meeting students' learning and behavioral needs, reducing difficulties in these areas. This approach is often referred to as a "Three-tiered Model" as it is generally organized into at least three tiers. The first tier includes *all* students. Regular assessment or progress monitoring is necessary to determine which students are progressing adequately toward curricular benchmarks and which students are not progressing adequately as well as to inform staff about how the curriculum is meeting students' needs. In Tier II, students who are identified as not progressing adequately receive supplemental intervention. This is increased in Tier III so that the students receive intensive intervention and may be referred for special education services. For a complete description of the RtI model, refer to the Response to Intervention Policies and Considerations by the National Association of State Directors of Special Education (NASDE, 2005).

The RtI framework is useful for the delivery of language services (Ehren and Nelson, 2005; Staskowski and Rivera, 2005). Within an RtI model the SLP may provide more direct services related to prevention. Using curriculum-relevant language assessment and early intervening practices enable SLPs to use their expertise to affect the educational progress of a larger group of students or to better understand the specific challenges faced by students of concern. Providing indirect or direct intervention as part of early intervening gives SLPs a powerful vehicle to determine whether instructional changes and accommodations are needed and whether the student experiences a language disorder and needs direct language intervention. For further reading about SLPs' roles in RtI, see volume 25, issue 2 of *Topics in Language Disorders* (Ehren, 2005). See the learning disabilities section of this document for further discussion of the SLP's roles in the implementation of an RtI approach for the prevention and identification of learning disabilities.

PREVENTION OF LANGUAGE DISORDERS

Speech-language pathologists are an important part of a school's resources as schools try to meet the learning needs of all children. With the passing of No Child Left Behind, the reauthorization of IDEA in 2004, and the changing definition of learning disabilities, schools are challenged in new ways to monitor the progress of ALL children, provide differentiated instruction, and develop capable, literate students who can speak, listen, read, and write using language. Prevention efforts are aimed at ensuring that all students attain speech and language competencies that allow them to make progress in school. Prevention efforts are also aimed to help students at risk for speech and language disorders to attain competency without being labeled as speech and language impaired (SLI).

Early Intervening -Tier I - All Students

Speech-language pathologists have an important contribution to district-wide and school-wide activities that are aimed at ensuring that all students develop language skills appropriately (ASHA 1999; Ehren & Nelson, 2005; Moore-Brown & Montgomery, 2001). These efforts include initiatives such as curriculum committees, school improvement teams and accreditation

committees such as North Central Accreditation or Professional Learning Communities (PLC). Through this type of school involvement, the entire school body benefits from SLPs' expertise.

It can also include participation in: Parent-Teacher conferences, "Meet Your Teacher" night, Kindergarten Round-up, field trips, assemblies, general education curriculum seminars, and professional development. SLPs conduct presentations such as teacher, parent, or staff in-services. They may provide written information for building staff or parents, which is an effective means of increasing awareness and ability to respond to the communication needs of students. Communication development or disorders and the effects of communication impairments on overall educational performance, such as reading and writing difficulties, are most often discussed. Presenting practical classroom communication strategies to general education staff is especially effective for enhancing the classroom performance of students with communication impairments, as well as those students with weaker language skills. Classroom strategies can be applied to scaffold, accommodate and modify language demands of the classroom.

SLPs also participate on RtI teams that consider the progress of the student body. This could include involvement in school-wide efforts to design and implement monitoring programs in language arts. As the results are analyzed at the grade and school levels, the team may plan activities aimed at improving targeted areas for the grade level or school. This could include any of the prevention activities described above.

Early Intervening -Tier II – Students At Risk

SLPs help school staff identify students who are at-risk for language difficulties (ASHA, 2001). This may be through a universal screening for all students as part of an RTI approach. For example, one school uses the "Word Usage Fluency" subtest of the Dynamic Indicators of Basic Early Literacy Skills (DIBELS), and another uses the Oral Language portions of the Michigan Literacy Progress Profile (MLPP) to identify students who may need early intervening. Students can be identified as 'at-risk' in other ways as well.

Once the at-risk students are identified within the student body, grade level or classroom interventions become a priority. Typically the consultation of professionals with the classroom teacher leads to strategies to attempt to alleviate difficulties or promote increased success for the at-risk students. SLPs participate on teams to develop and implement such strategies. This team documents the planned strategies and set a timeline for implementation for *groups* of children. The following areas may be considered in suggesting strategies for modifying the educational environment to meet students' communication styles and needs:

> The Classroom Curriculum – Analysis of the language demands of the curriculum and how they compare to the skills of the at-risk population often to lead to suggestions for change. Increasing classroom experiences designed to foster language development may enhance the performance of students with weak language skills. The type of reading instruction and written language demands might also be analyzed, and accommodations and modifications suggested.

The Classroom Structure - A language rich classroom environment will foster language development in those children with weak language skills. Opportunities for communication or language skills to be practiced during student-to-student and student-to-adult interactions can be enhanced. The use of visual supports to highlight the structure may be implemented.

The Instructional Experiences – The addition of hands-on, manipulative, or visual representational instructional activities can help a student to access the curriculum. An emphasis on these kinds of learning activities is essential for students with weaker language skills. For a student with weak vocabulary the team may suggest that the teacher use multi-sensory activities to enhance retention of new vocabulary; the SLP might model such suggestions during class time. The team may also consider technology supports for a student's learning.

Language Style/Processing – The team might consider the demands placed on students' listening and language processing skills. Variations in teacher instructional style, including rate, grammatical complexity, abstractness, and sentence length may be considered. These variables might be modified to enable a student with weak processing skills to perform more successfully in the classroom. The SLP may model how to simplify directions and use concrete or visual supports. Other modifications may include longer wait time, time between directions, use of visual supports, or rewording of directions.

The SLP's role in prevention at the grade or classroom level can include a variety of responsibilities. The SLP may be utilized in direct and/or indirect methods at this level. Direct methods may include the SLP working with an at-risk student or groups of at-risk students on specific curricular areas. Methods may also include co-teaching or direct classroom teaching. Indirect methods may include consultation with other regular or special education staff on specific skills training or modifications within classroom environments.

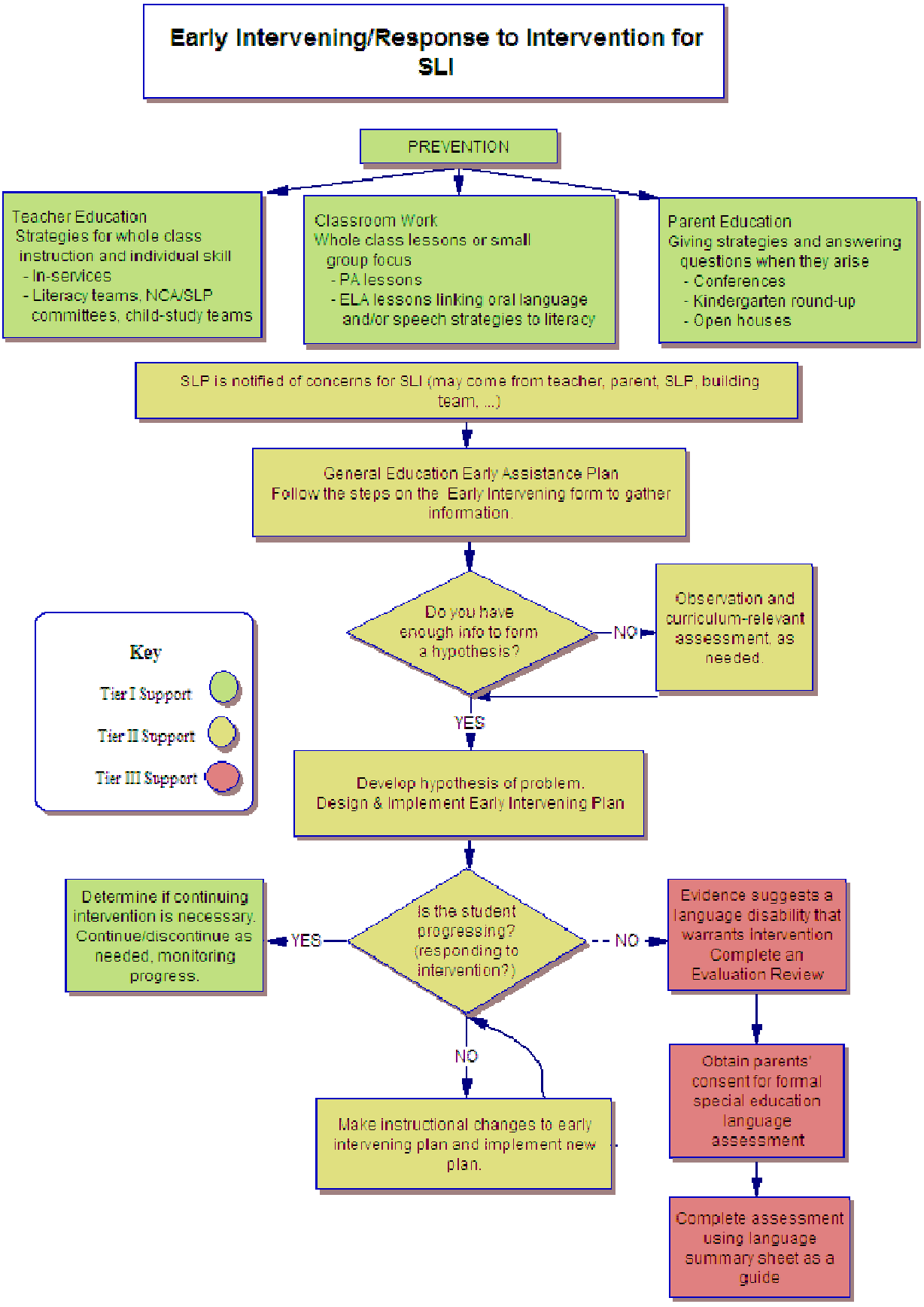
Specific Students Efforts/Early Intervening for Specific Students (RtI)

After general education staff has implemented supplementary strategies with the support of special education consultation and progress continues to be minimal, a decision may be made to further evaluate a student's linguistic behaviors. It is recommended that when students are suspected of having language difficulties, that the same process (such as child study or early intervening) is used as the district uses when there are suspicions of other disabilities (such as learning disabilities). If an SLP is involved in the pre-referral process (or early intervening), it increases the likelihood that a student will be correctly identified for speech and language services. Some states have found that lack of involvement of the SLP at the pre-referral level results in inconsistent qualification for language services across schools or districts (Connecticut, 1999).

The Early Intervening/Response to Intervention flowchart on the following page summarizes the early intervening activities. Specific referral concerns are analyzed by the SLP and teacher to determine which team members need to be included and invited to a early intervening (or child study) meeting. Other team members may be needed for their specific areas of expertise when a

student demonstrates academic, social or vocational needs. The team then follows a process such as the one described below to design a specific plan for early intervening and to document that plan. This may be documented in a variety of ways. Some school districts may have their own form for this purpose.

An example of such a form is the General Education Assistance Plan for Early Intervening Services, found on page L-7. Directions for completing it follow the form. This form, or a similar one, is completed by the team to guide the plan for early intervening services. This is the same form included for articulation, fluency, and voice, as well as for Early Intervening Services for Learning Disabilities.


Early Intervening/Response to Intervention for SLI
PREVENTION
Teacher Education
Strategies for whole class instruction and individual skill
- In-services
- Literacy teams, NCA/SLP committees, child-study teams
Classroom Work
Whole class lessons or small group focus
- PA lessons
- ELA lessons linking oral language and/or speech strategies to literacy
Parent Education
Giving strategies and answering questions when they arise
- Conferences
- Kindergarten round-up
- Open houses
SLP is notified of concerns for SLI (may come from teacher, parent, SLP, building team, ...)
General Education Early Assistance Plan
Follow the steps on the Early Intervening form to gather information.
Do you have enough info to form a hypothesis?
NO
Observation and curriculum-relevant assessment, as needed.
YES
Key
Tier I Support
Tier II Support
Tier III Support
Develop hypothesis of problem.
Design & Implement Early Intervening Plan
Is the student progressing? (responding to intervention?)
YES
Determine if continuing intervention is necessary. Continue/discontinue as needed, monitoring progress.
NO
Evidence suggests a language disability that warrants intervention
Complete an Evaluation Review
NO
Make instructional changes to early intervening plan and implement new plan.
Obtain parents' consent for formal special education language assessment
Complete assessment using language summary sheet as a guide

General Education Assistance Plan for Early Intervening Services

Name: _____ DOB: _____ Grade: _____
Meeting date: _____ Follow-up date: _____

Persons Attending the Meeting

Name:_____ Name:_____
Name:_____ Name:_____
Name:_____ Name:_____

Person(s) who referred: _____
Specific Concerns: _____
_____

Review of Pertinent Information

_____
_____

Current Accommodations and Modifications	Progress and Results	Time Frame

Hypothesis of Problem: _____
_____
_____

Early Intervening Plan	Who is Responsible	Time Frame	Response to Intervention

Parent Notification and/or Signature: _____Date:_____
Recommendations: _____
_____
_____

Each section of the form is discussed below. This form may be used to document services and strategies attempted and student's response.

Specific Concerns
The teacher describes the specific concerns regarding the student's skills related to the curriculum. The team discusses how these concerns relate to language skills.

Review of Pertinent Information
In order to design a plan for the student, the team collects information about the student including: identifying data, any relevant developmental or medical history, family history, possible cultural or linguistic differences, previous academic test results, test results from outside sources, educational records, previous educational supports or placements and attendance. If it is indicated that the student speaks another language, the SLP may refer to the Culturally and Linguistically Diverse Language Section of this document and complete the process outlined. The team then analyzes the environmental and economic differences at this time. For example, attendance issues or a lack of stable schooling opportunities could be explored.

Current Accommodations and Modifications
Current accommodations and modifications being used, as well as specific strategies and programs being used with the child are analyzed. The student's responses to these attempts are examined as well as the length of time that these strategies have been implemented to determine the direction for further intervention. The SLP can gain more information about classroom performance by having the teacher(s) complete a teacher input form (L-13).

Hypothesis of Problem
Based on an analysis of the student's background information and response to classroom accommodations and/or modifications, the SLP may have a hypothesis about which specific area(s) of language present the most difficulty in the curriculum. The team asks: what specific area(s) of language is impeding the student's access to the curriculum? The SLP may need to do some observation or inquiring to develop a more specific hypothesis about which language skills and/or strategies are lacking or they may have adequate data to form this preliminary hypothesis. If it is difficult to define at this time, the SLP may want to refer to the longer, curriculum-based language assessment (CBLA) process described later in the assessment section (page L-35).

Early Intervening Plan, Parent Notification and/or Signature, Implementation
The team then designs an early intervening plan. The plan might include consultative intervention or direct language intervention delivered in classroom-based or pull-out service delivery models. The purpose of the intervention is to determine what is needed for the student to be successful in the general education curriculum.

The SLP/team reviews with the parent the specific area(s) of difficulty the student is having, what has been attempted and aspects of the new early intervening plan. Policies and procedures related to how the parents are notified for early intervening vary across districts, SLPs should follow their district procedures.

Response to Intervention and Recommendations
If the student begins to progress adequately, then the SLP begins to transfer the responsibility for strategy implementation to the teacher. The SLP may consult as the treatment period is ended to promote continued progress. In this example no referral is necessary.

If the team determines that the student is not making adequate progress based on data collected, then the plan is redesigned and another period of intervention is attempted. Throughout the trial intervention attempts, the SLP/teacher team reconvenes as needed and monitors progress using data to evaluate the student's response to intervention and the effectiveness of the strategies being used. The team may decide to alter the strategies and continue early intervening. The SLP/teacher team may find that the student is not making adequate progress and the team, the team may initiate an Evaluation Review, if appropriate, that may lead to a formal evaluation for speech and language services.

Evaluation Review/Consent
The team reviews all of the pertinent data collected to this point, including results of the pre-referral interventions. The team decides what additional information is needed in order to determine the presence of a disability and adverse educational effect. A plan is made and agreed upon. Parental consent is gained for the plan (Evaluation Review, if appropriate) and the proposed evaluation (initial consent) (following the district's procedures).

INITIAL ELIGIBILITY ASSESSMENT
A worksheet on the following page, the Language Eligibility Guide Summary outlines the procedures in a formal assessment. The assessment section of this document is organized by this table, as each row in the Summary Guide is a heading in the text. This is followed by an explanation of suggested assessment activities and the sequence in which they may be carried out. The primary goal of the *initial assessment* is to both determine eligibility and to identify an appropriate treatment plan. This means that the SLP and team must determine:

- Whether a language impairment exists,
- Whether the language impairment adversely affects educational performance (academic, nonacademic, or extracurricular), and
- How intervention should be designed and implemented in order to help the student to progress in the general curriculum.

These activities are described in the sequence provided by the Language Eligibility Guide Summary on the next page.

LANGUAGE ELIGIBILITY GUIDE/TEAM SUMMARY

Student _____ Birthdate_____ Date_____
Speech-Language Pathologist _____ Team Members_____

		Eligibility Determination Phase	
	*Collected in part during pre-referral phase	Does **not** support eligibility	Supports eligibility
Input	**Teacher(s)** ☐ interview /observations *		
	Parent ☐ notification (pre-referral) ☐ interview /observations *		
	Student interview /comments *		
	Review of Pertinent Information Educational achievement and other records such as: MLPP, DIBELS, student permanent record (CA-60) *		
Consideration of cultural / linguistic differences * Complete the process in the Culturally and Linguistically Diverse - Language Section if indicated			
Consideration of environmental or economic differences * Provide documentation from team reports, teacher, and parent Reviews if needed.			
Curriculum-Based Language Assessment * Watch the student attempt a curricular task reported to be difficult either with you or in the classroom. Determine whether the student's language is adequate for successful participation in that curricular task or whether the student lacks the language skills and strategies needed.			
Language Samples/ Narrative Tasks/ Portfolio Assessment Collect oral and written language samples to further investigate the student's language function within the curriculum.	**Word level:** Phonology**,** morphology, semantics, reading decoding, spelling, word retrieval, and pragmatics		
	Sentence level: Morphology, syntax, semantics, formulation, and pragmatics		
	Discourse level: Organization, semantics, syntax, formulation, cohesion, and pragmatics		
Results of Student's Response to Intervention * Document the results of the early intervening process. Note the level of accommodation or intervention strategies that the student requires to be successful in the curriculum. Could the student be successful if the classroom teacher used these strategies or are special education services needed? **Trial Intervention** If early intervening was not done prior to the referral then provide a period of trial intervention in order to assess the level of accommodation or intervention strategies that the student requires to be successful in the curriculum and get information needed to design intervention plan related to the curriculum.			
Test Profile	**Test scores** below average by standards set for that test		
	Variation within language test profile		

Summary of Disability

Team comments about the presence or absence of disability.

Summary of Adverse Educational Effect

Team comments about the presence or absence of adverse effects on social, vocational, or academic performance based upon all of the above assessment components.

Summary of Eligibility in Language

Team comments and decision regarding the student's eligibility.

Medical History Input: Attach report or interview of students' doctor or other appropriate medical professionals if applicable

Hearing Screen	Pass_____	Fail_____
History of chronic otitis media	Yes_____	No_____
History of medical issues related to articulation	Yes_____	No_____

Input

When a formal assessment is begun, a great deal of information has already been gathered during the pre-referral phase. The extent of additional information needed to determine eligibility will vary from student to student. During the pre-referral stage, less information was needed because the planning was based on a primary area of concern; however, the team must assess and plan for the student's progress throughout the curriculum. In addition, the pre-referral phase was focused on planning a short period of intervention. During the assessment, the team must collect enough information to plan intervention for a year after the initial IEP.

Teacher Input

Additional information may be gathered from the teacher. There are a variety of teacher checklists or interview formats in the literature that would fit this purpose. Refer to the teacher input form on the following page (L-13) as an example, if not already gathered in the pre-referral activity. This form can be completed by the student's teacher or recorded by the SLP while talking with the teacher.

LANGUAGE
Teacher Input Form

Student's Name_____ Date:_____ Grade:____
Teacher's Name_____Birthdate/Age:_____
Speech-Language Pathologist _____

Please describe your student's top two strengths:_____
_____

Please describe your student's main difficulties: _____
_____

Does your student have difficulty with the following: Please answer by circling: N (Never), S (Sometimes) , F (Frequently), A (Always)					**Subject(s) Where Difficulty Occurs**
Understanding directions, discussions, lectures?	N	S	F	A	_____
Understanding written directions or text?	N	S	F	A	_____
Recalling words and information?	N	S	F	A	_____
Understanding concepts in math, social studies, and science?	N	S	F	A	_____
Understanding and using age-level vocabulary?	N	S	F	A	_____
Understanding and expressing age-level figurative language?	N	S	F	A	_____
Using age-appropriate sentences?	N	S	F	A	_____
Using age-level grammatical skills?	N	S	F	A	_____
Understanding and asking questions?	N	S	F	A	_____
Participating in classroom discussions?	N	S	F	A	_____
Relating information in an organized, sequential manner?	N	S	F	A	_____
Remembering details?	N	S	F	A	_____
Completing written assignments?	N	S	F	A	_____
Taking notes in class?	N	S	F	A	_____
Test-taking?	N	S	F	A	_____

Are your student's written errors similar to his/her oral language errors? N S F A
Is your student having behavior difficulties in structured situations? N S F A
Is your student having behavior difficulties in unstructured situations? N S F A

Does your student try to make himself/herself understood? _____ Yes _____ No
If yes, please describe._____

Please list any accommodations you have already tried within the classroom for this student:
(i.e., increased wait time, shortened assignments, reading tests,
etc.)_____

Please attach a current progress/report card or discuss academic progress here: _____
_____

_____ _____
Teacher Signature Date

Parent Input
Gathering input is often best done through conversation with the parents about their concerns for their child and how the parents feel that their child's communication difficulties are making school difficult. There is a sample Parent Input form that may be used as a guide on page L-15.

Student Input
It is also important to identify how the student feels about their communication difficulties and the effect of these on school performance. This is particularly important for older students and adolescents. This can be as simple as asking the student to describe what is easiest and hardest about school. Talk with the student about the reasons that tasks seem to be more or less difficult to determine whether language appears to be a factor. There are some tools designed to help students to self-evaluate their abilities in a variety of classroom learning skills such as reading, writing, following directions, understanding lectures, vocabulary. A sample Student Input form for older students is on page L-16. A second form is provided on the following page to interview a student about one class (subject) and what is known about the expectations (page L-17).

Review of Pertinent Information
Student records and other materials were most likely gathered and reviewed prior to referral. However, some data may not have been available or present during the initial pre-referral phase. For example, recent standardized achievement results may have become available or updated vision and/or hearing screenings may have been completed. Updated achievement data is also gathered from the teacher(s). This might include the student's performance on any achievement or progress measures administered to the children in the classroom/grade level, such as results of the Michigan Literacy Progress Profile (MLPP) or the Michigan Education Assessment Program (MEAP). Other additional information which needs to be reviewed includes the child's previous report cards and a history of previous early intervention methods. This information is useful for determining adverse educational effect.

LANGUAGE
Parent Input Form

Name_____Date_____
Birth date_____ Input provided by_____
Language(s) spoken in the home_____

Please describe your child's strengths: _____
_____

What concerns do you have for your child's education? _____
_____

Does your child have difficulty with the following:

Please answer by circling N (Never), S (Sometimes) , F (Frequently), A (Always)

Understanding directions or discussions?	N S F A
Understanding written directions or text?	N S F A
Recalling words and information?	N S F A
Understanding and using age-level vocabulary?	N S F A
Understanding and expressing age-level figurative language?	N S F A
Using age-appropriate sentences?	N S F A
Using age-level grammatical skills?	N S F A
Understanding and asking questions?	N S F A
Participating in discussions?	N S F A
Relating information in an organized, sequential manner?	N S F A
Remembering details?	N S F A
Completing homework assignments?	N S F A
Expressing needs and wants?	N S F A
Expressing thoughts and ideas?	N S F A
Expressing feelings or frustrations?	N S F A

Does your child appear frustrated by his/her language difficulty? _____Yes _____No

Does your child have difficulty communicating with
siblings?_____peers?_____adults?_____
If yes, please describe:_____

How do your child's language difficulties impact him/her? _____
_____

Comments: _____

_____

_____ _____
Parent Signature Date

LANGUAGE
Student Input Form

Student's Name_____ Date:_____ Grade:_____

Teacher's Name_____ Birth date/Age: _____

1. What are usually your best subjects in school? _____
2. Why do you think these subjects are easier for you?_____
3. What are usually your hardest subjects?_____
4. What is hard about these subjects?_____
5. Think of a teacher who has really helped you learn. How did this teacher help you? What exactly did this teacher do that worked for you?_____
   Think of a teacher whose way of teaching was not good for you. What exactly did this teacher do that did not work for you? _____
   How often are you bored in class? ___ Often ___ Sometimes ___ Not very much
   What do you do to pay better attention?_____
   Where do you sit in your classes now?_____
8. How often do you ask question in class? ___ Often ___ Sometimes ___ Not very much
   What keeps you from asking a question in class?_____
   ___ Embarrassed ___ Not enough time ___Teacher might say poor attention
9. Do you catch on to new lessons easily or ___ do you prefer extra explanation? Does it depend on the class?_____
10. When you understand something, do you usually ___ remember it, or ___do you have to go over it a lot to remember? How's your memory out of school?_____
11. How often are you graded down for a late or missing assignment?
    ___ Every week ___Once a month ___One or two times a grade period
12. Do you write your assignments down? ___ Always ___ Sometimes ___ Never
13. Do you usually remember to bring your books and materials ___ Home ___ To school
14. Can you usually predict how well you did on a test ___ (yes) or ___ are you often surprised when the test grade is returned? Do you get a ___higher or ___lower grade than you predicted or ___can it be either?
15. Are you receiving any special help in ___school or ___other? When did you first start getting special help?_____
16. Do you have trouble understanding teacher directions? _____What test questions mean?_____
    _____Can you usually explain your ideas ___easily, or is it ___hard to say what you mean?
    Do you have more trouble talking to ___kids or ___adults?
17. Have you ever worked with a speech language pathologist?___ What did you work on with the SLP?___
    _____
18. What problems do you have in reading? ___Sounding out words? ___Finding answers to questions? How often do you have to read something over again? ___A lot? ___Sometimes? ___Rarely? Does rereading help? ___Yes ___No. Can you usually tell about what you have read? ___Yes ___No.
    How do you feel about reading aloud in class? What have you enjoyed reading lately? _____
    _____ Do you like ___fiction or ___nonfiction?
19. What problems do you have in writing? ___Finding topics? ___Getting started in writing? ___Writing enough? ___Spelling problems? What do you do when you need a word in your writing but you can't spell it? _____
20. What kind of speller are you? _____ Can you memorize a list of words for a test? ___
    _____ Do you remember those words later? _____Can you find your misspellings yourself?_____ Does a spell check help you?_____
21. Describe your math ability. _____
    Can you add and subtract small problems in your head or ___ do you need to use your fingers? Have you memorized the multiplication facts? _____ Was it hard to do? _____Do you understand: ___long division, ___fractions, ___word problems? Have you had Algebra?_____ How did you do in Algebra?_____ Geometry?_____

Tattershall, S. (2002). *Adolescents with language and learning needs: A shoulder-to-shoulder collaboration*. Albany, NY: Delmar

LANGUAGE

Student Input Form

Interview Related to One Course

Student's Name_____ Date _____ Grade ____

Teacher's Name_____Birth date/Age_____

Name of Course _____ Hour _____

1. What is the usual routine in this class? _____
   What happens first, next, and so on? _____
   _____

2. Does the teacher lecture or guide discussion? _____
   If discussion, how does he/she start the discussion? _____
   What does he/she usually want you to know?_____

3. Is the teacher following the book closely? _____

4. How does the teacher want you to use the textbook? _____
   Should you read before class discussion or after? _____
   Does he/she want you to read other materials? _____

5. Is it hard to take notes in this class? _____Does the teacher use an overhead projector or the chalkboard to write notes or key words?_____

6. What is the usual daily homework in this class? _____
   Are there any big projects?_____

7. When are tests usually given? _____ Quizzes?_____

8. What kind of tests does this teacher give?_____

9. What is this teacher's grading system?_____

10. Who are the best students in this class? _____
    How can you tell?_____

11. What do you like or dislike about this class? _____
    What is easiest and hardest in this class? _____

12. What would make this class easier for you? _____

Tattershall, S. (2002). *Adolescents with language and learning needs: A shoulder-to-shoulder collaboration*. Albany, NY: Delmar

Consideration of Cultural/Linguistic Differences
When a student's native language is other than English, it is important to consider that the language or cultural differences may be the root of the educational difficulties. The SLP first completes the process in the Culturally and Linguistically Diverse Section, if indicated. Consideration needs to be given as to whether the student's difficulties are due to cultural or linguistic differences.

Consideration of Environmental or Economic Differences
It is important to consider a students' environment or economic situation during the assessment process as a possible contributing factor related to the child's educational difficulties. An SLP investigates these issues and provide documentation as to the impact of environmental or economic differences which may impact the student's language. This documentation may be in the form of team reports or various interviews made with teacher(s) and parent(s). They may also want to include observations to document aspects of the student's language patterns related to their economic or environmental situation.

Many children who experience environmental or economic differences use language that is considerably more 'casual' than what is expected in American schools. The assessment team considers this issue and resulting educational effects. The team may assess the language patterns as they represent various 'registers.' Payne (2003) differentiates between the registers expected in school and casual registers as follows:

- Formal language register is the language of school. Standard English is the language of choice for work and school. There are specific word choices and grammar structure utilized in this register. In formal discourse, the students relay the intent of their message in a direct manner. Story structure in formal-register follows a narrative format with a clear beginning, middle, end, listing events in chronological order, and the plot is the focus of the story.
- Casual language register is the language of friends. In the casual register, the message can be lengthy and goes on continuously before stating the main point or intent. Story structure in casual-register begins with the end of the story first, or with the story component with the most intensity. In casual register, the character is the most important part of the story. This register is often observed in students who come from disadvantaged homes or students who have been truant. The use of a casual register should be identified as such and not mistaken for a language disorder. Should a student have trouble with academic activities such as story sequencing, the team should make sure that the student has had adequate exposure to the formal register and narrative structure before assuming a language impairment.

Students from different economic status may or may not have access to formal register models in their home environment, which can have an impact on their language output in the classroom. These students may not have the vocabulary, discourse, story structure, or syntax skills needed for classroom participation. It is difficult for these students to rely on words to communicate, when non verbal aspects of language carry most of their communicative intent. Therefore, they may *appear* to have a disability but may not have had adequate exposure to the more formal registers of language. These language patterns should be documented. If throughout the

evaluation it is determined that these difference are the sole source of the student's educational difficulties, it would not support the student's eligibility.

Current Accommodations and Modifications
The team also reviews current changes, accommodations, modifications, or interventions that are currently being provided to the student. If assistive technology is being provided to the student it can be assessed for its effectiveness related to educational success. These strategies and the student's response to them need to be documented.

Curriculum-Based Language Assessment
Curriculum-based language assessment initially begins during the prevention stage when the child has been identified as "at-risk." The SLP gains information on the child's ability to respond to intervention through prevention efforts. However, such assessment during that period may be brief. During the assessment phase, more comprehensive information may be required about the student's language functioning in several aspects of the curriculum. When a formal language assessment is indicated, the SLP then uses the information gathered from the student, parent, and teachers to identify aspects of the curriculum that present the greatest challenges to the student. Curricular contexts include not only the academic curriculum, but also the social "underground" curriculum of developing peer relationships (Nelson, 1998). The SLP focuses assessment activities on the student's language abilities within the activities described as challenging by the teacher(s), parents, and student. This form of curriculum-based language assessment (CBA) differs from CBA used by other professionals to answer the question, "Is the student learning the curriculum?" It addresses, rather, the question, "Does the student have the speech-language-communication skills to learn the curriculum and to participate fully in school?"

The guiding considerations can be stated as assessment questions:

1. What language skills are needed for successful participation in this part of the curriculum?
2. What does the student usually do when attempting this task?
3. What language skills and strategies might the student acquire to become more successful?
4. How should the task be modified?

(Nelson, 1989; Nelson, 1998)

The first question probes language skills a student needs to participate successfully in problematic curricular activities. To answer this question, the SLP must analyze what it takes for the student to participate in the activities the teachers and student say are challenging. For example, a student must be able to participate in discussions and comprehend the language of a science textbook and formulate answers to questions orally or in writing.

The second question asks what the student usually does when attempting the targeted tasks. This question may be answered either by observing the student in the classroom context or by having the student bring selected curricular materials to the speech-language room. In either case, it is ideal if the SLP can start out as an observer to see what the student does independently, but then shift to helping the student ask strategic questions to understand what inner strategies the student

may be bringing to the task. For example, after viewing a classroom discussion, the SLP might ask a student what he or she was thinking when the teacher asked various questions, then probe to find out whether the student knew some answers but did not raise his or her hand. If so, why not?

The third question asks what the student might learn to do differently to perform the activity more successfully. To answer this question, the SLP employs dynamic assessment or trial intervention activities, exploring strategically which cueing, focusing, guiding, or feedback "scaffolds" might assist the student to perform at higher levels of competence.

The final question asks whether the task should be modified to make it more accessible. This question can be addressed during the dynamic assessment process, but generally involves more extensive collaborative problem solving with others in the student's educational environment. The goal is to make it possible for the student to be successful in the general curriculum, with an emphasis on keeping the student in that curriculum.

SLPs may identify one task to be used for both the observation and dynamic assessment, although more than one task can be observed if desired/needed. Here are some examples:

- A teacher reports that student has difficulty understanding the classroom discussion and the textbook. Together, you have agreed that these difficulties would most likely be observed during social studies. The SLP decides to observe a classroom discussion and group assignment, then to take the student to the therapy room and discuss what went on. The SLP helps the student by showing the student how to use imagery and questioning as they discuss the content and complete the assignment.

- A teacher reports that a student's language is confusing and hard to follow (disorganized discourse). Together, you have agreed that these difficulties would most likely be observed during a story retelling task. The teacher described how they typically do retellings and the SLP simply brought the task to the therapy room. The task is completed with no help, then varying degrees of help. In some instances, the SLP may add the student to a language intervention group working on something similar.

- The teacher reports that a student has difficulty following oral and written directions. Together you have agreed that these difficulties would most likely be observed during a science lab project. This could be an observation in the classroom followed by a brief retell of instructions outside the classroom, or the SLP may decide to review oral and/or written directions for a home science project in the therapy room.

- A teacher reports that a student has difficulty with pragmatics. Together, you have agreed that these difficulties would most likely be observed when the student is participating in cooperative groups for science experiments. This could be an observation in the classroom followed by a brief retell of instructions outside the classroom or in the therapy room.

Curriculum-Based Language Assessment and Analysis Worksheets
Curriculum based language assessments and analysis worksheets may be utilized for CBLA. Prelock, Miller & Reed (1993) give an example of a type of language-based curriculum analysis that can be completed by the general education teacher and the SLP in their book entitled *Working with the Classroom Curriculum: A Guide for Analysis and Use in Speech Therapy* (pp. 50-56). This analysis requires a comprehensive examination of a given subject area, considering the curriculum and speech-language objectives a student must achieve to ensure comprehension of academic material.

The Curriculum-Based Language Assessment Worksheet (L-35, L-36) can be used to assist in the SLP's analysis of a student's performance on a curricular task. This worksheet is a checklist that may quickly help the SLP with the assessment. Following that are Reading Assessment Worksheets (L-37, L-38) and Writing Process and Product Worksheets (L-39, L-40) may assist with evaluation. These worksheets are included in this document as potential tools to guide observations. They are *not* meant to be a mandatory part of assessment.

Language Samples/Probes/Portfolio Assessments

Collecting a sample of a student's oral and written language is an important component of the evaluation process and may be collected in the general education classroom, speech/special education setting, via video supplied by the child's parent/caregiver, and through collecting student work samples. Collection of a language sample allows the SLP to examine the student's functional use of language and how it relates to the general education environment. When obtaining a language sample, it is important to match the type of sample collected with the identified area(s) of concern. The language sample then becomes more valuable in terms of understanding the student's communication challenges and strengths. For example, analyzing the processes the child utilizes when comprehending language and her subsequent answers on a social studies essay test may reveal the curricular challenges she faces related to her language disability.

It is important to remember that there is often overlap between the types of samples collected. For example, if the SLP obtains a sample of expressive language in the form of a written sequencing activity, a sample of receptive language has also been obtained. While the focus of the task may have been on the child's written language facility, analysis may also be made of the child's receptive ability e.g. did the child follow the directions for the assignment, does the child understand the sequence of events involved in the task.

There is a multitude of ways to probe and analyze a language sample. Language samples include oral and written samples from word level through discourse or paragraph level samples. Language samples may vary in length but should be relevant to the areas of concern. Many language samples are created by students daily as part of their curriculum, such as essays, retellings, oral reports, and comprehension questions. These can be reviewed to provide information regarding a student's language performance. The following outline may aid the SLP in identifying areas to be examined, tasks or probes to be used, and methods of analysis.

Methods/Probes for Collecting Oral & Written Language Samples

RECEPTIVE LANGUAGE- Listening and Reading	
Probes/Sample Types	
Direction Tasks	Holzhauser-Peters & Huseman (1995). *Communication Assessment in the School Environment.*
Main Idea Tasks	Naremore, Densmore, & Harman (2001). *Assessment and Treatment of School Age Language Disorders* (pp. 133-165).
Details, Inference and Synthesis Tasks, or Comprehension Strategy Probes	Harvey & Goudvis (2000). *Strategies That Work* (pp. 68-165).
Think Alouds	Wade, S. (1990). Using think alouds to assess comprehension. *The Reading Teacher, 43,* pp. 442-451.
Questioning Hierarchies	Bloom's taxonomy
Analysis/Analysis Tools/Checklists	
Reading Miscue Analysis	Norris, J. & Hoffman, P., (1993). *Whole Language Intervention for School Age Children.*
Comprehension/Retelling (MLPP)	Michigan Department of Education
Evaluation of Children with Suspected Listening Difficulties	Assessment and management of listening skills in school-aged children. *Seminars in Hearing Disorders, 12(4),* pp. 389-401.
Teacher Checklist for Listening	Semel, Wiig, and Secord (2003)
Early Identification of Language Based Reading Disabilities – A Checklist Language Speech and Hearing Services in Schools**	Catts, H. (1997). The early identification of language based reading disabilities: A checklist. *Language Speech and Hearing Services in Schools, 28,* 86-89. **See page L-45
EXPRESSIVE LANGUAGE- Speaking and Writing	
Probes/Sample Types	
Narrative	
Curriculum based retelling task grades 1-8	Holzhauser-Peters & Huseman, (1995)
Children's Narrative Developmental Stages and Strategies	Esterreicher, C. (1995)
Oral Language (MLPP)	Michigan Department of Education
Expositive	
Compare/Contrast, Sequence, Question/Answer, Problem/Solution, Cause/Effect, Persuasion, Description, or Explanation	Holzhauser-Peters & Huseman, (1995)
Inference	Naremore, Densmore & Harman (2001). *Assessment and Treatment of School Age Language Disorders,* pp. 126-132.
Analysis/Analysis Tools/Checklists	
Narrative/Expository	
Narrative Levels of Analysis Form and Definitions of Narrative Maturity and Age of Emergence	Applebee, A. N. (1978). *The Child's Concept of a Story.*
The Strong Narrative Assessment Procedure	Strong, C. (1998). Thinking Publications
Narrative Maturity Rating Using Story Grammar Levels	Nelson, N., Bahr, Van Meter & Kinnucan-Welsh. (2000). *The Writing Lab Approach.*

Sample Questions to Test Prior Knowledge/5 Communication Processes Matched w/ 11 Writing Processes	Grinzinski, Yolande, F., & Holzhouser-Peters, L. (2001). *Write on target: Using graphic organizers to improve writing skills.*
Michigan Literacy Proficiency Profile (MLPP)	Michigan Department of Education
Discourse Analysis **	Damico (1985) ** See page L-44
The Writing Profile 1-4 Rating Scale	Singer & Bashir, (1999). What are executive functions and self-regulation and what do they have to do with language-learning disorders? *Language, Speech, and Hearing Services in the Schools,* Vol. 30(3), pp. 265-273.
Me and My Writing-Student Self Assessment	Singer & Bashir, (1999). What are executive functions and self-regulation and what do they have to do with language-learning disorders? *Language, Speech, and Hearing Services in the Schools,* Vol. 30(3), pp. 265-273.
Writing Process and Produce Worksheet**	Van Meter, Nelson & Bahr, *Assessing writing processes, products, and contexts*. **See page L-39 and 40
T-Units	N. Nelson, (1994).
Mean Length of Utterance	
Spelling (MLPP)	Michigan Department of Education
Spelling/Word Study–Words Their Way	Bear, Invernizzi,., Templeton, & Johnston. (2004)
Phonological Awareness/Phonemic Awareness	
Phonological Awareness	Michigan Department of Education
Phonemic Awareness	Michigan Department of Education
Dynamic Indicators of Basic Early Literacy Skills (DIBELS)	University of Oregon
Phonemic Awareness	Swank & Catts, (1999). Phonological awareness & written word decoding. *Language, Speech, and Hearing Services in Schools,* 9-14.
Phonemic Awareness Inventory	Fitzpatrick, (1997). *Phonemic awareness: Playing with sounds to strengthen beginning reading skills*.
SOCIAL LANGUAGE (Pragmatics)	
Probes/Sample Types	
Conversational discourse analysis**	Damico, (1985). * See page L-44
Adolescent Conversational Analysis Profile	McKinley & Larson, (1995). *Language disorders in older students: Preadolescents and adolescents*.
Analysis/Analysis Tools/Checklists	
Pragmatic Protocol **	Prutting & Kirchner, (1987). * See page L-41-43
The Adolescent Pragmatics Screening Scale	Brice, A. (1991).
Checklist of Pragmatic Language	Tattershall, (1988).
Social Conversational Skills Rating Scale for Parents	Girolametto, (1997)

**These tools are included in this document on the following pages.

They include: The Pragmatic Protocol (L-41-43), Conversational Discourse Analysis (L-44), and The Early Identification of Language-Based Reading Problems Checklist (L-45). Also, the following tools are located elsewhere is this document: The Writing Process and Product Worksheet (L-39-40), The Reading Worksheet (L-37-38).

Portfolio Review
A portfolio review is a review of the student's work and is another example of a crossover of the curriculum-based language assessment and language sample. Written language samples reviewed from the student's completed class work provide further evidence of both the language proficiency of the student and how the student's language proficiency may affect the student's performance in the general education classroom (Kratcoski, 1998).

Dynamic Assessment and Response to Intervention Documentation
During the assessment phase, the SLP summarizes the data regarding the student's response to pre-referral intervention. If early intervening was implemented, the SLP is likely to have a wealth of information about the type of supports with which the student best responds. If early intervening was not used, then dynamic assessment/ trial intervention may be useful now to gather that information. The SLP determines the level of accommodation the student needed in order to be successful in the curriculum. These types of accommodations are evaluated to determine if the teacher is able to utilize these strategies or whether special education strategies are required. The documentation gathered during the pre-referral intervention phase are used as evidence in this summary as it relates to eligibility.

Dynamic assessment/trial intervention is the observation of language or learning during the mediation process (Lidz, 1991). This can be done in two or more sessions. In some districts SLPs have the student being assessed included in therapy groups during the assessment to gather information about how the student can be supported. Dynamic assessment begins with the SLP presenting the student with a task that relates to the aspect of the curriculum that presents the greatest challenge to the student. The SLP then supports the student through the activities in a variety of ways to accomplish the task. The SLP can then determine the type and degree of assistance that is needed for the student to be successful. Then SLP continues to provide assistance until the student can complete the task. The purpose of dynamic assessment is to record the level of the student's performance along with the type and degree of assistance that was most helpful. Dynamic assessment information can be collected as a result of early intervening and document the response to intervention. It can also be collected in a shorter time period as part of a formal assessment when RtI information is unavailable. This information can be used as a starting point for the intervention process (Moore-Brown, Montgomery, 2001).

Examples of dynamic assessment

The teacher reports that the student is having difficulty with the vocabulary that is presented in the social studies curriculum. The SLP then observes the student during a social studies lesson and collects baseline data by assessing the student's understanding/use of the vocabulary terms. In the therapy room, the SLP implements several strategies to support the student's learning. For example, the SLP may provide visual and/or auditory cues, context clues, or have the student use strategies such as making "text to self" or "text to world" connections. During this process, the SLP takes careful notes of the strategies that appear most successful. Finally the SLP retests the student in the same manner as above to see if the student retained the information.

The teacher reports that a student is having difficulty with sequencing a story. Within the classroom, the SLP determines how much of the story the student can retell by asking for a

spontaneous retelling. The SLP analyzes the retelling and notes the various areas of difficulty. Next, the SLP brings the student to the therapy room for a retelling activity. The SLP provides several interventions to increase the student's retelling abilities. During the same task, the SLP may intervene to assist the student by scaffolding with questions or prompts, giving examples, visual cues, etc. The SLP may modify the task if needed and determine what support or modifications result in success for the task. Finally the SLP makes note of what interventions were successful. Finally, the student is asked to retell a story similar to the original. The strategies that worked are then shared with the classroom teacher.

The Dynamic Assessment phase allows the SLP to determine the student's response to intervention, if not already documented. The assessment process gives the SLP the opportunity to consider whether intervention strategies will help the student successfully access general education curriculum. These strategies can be shared with the student's teacher to be implemented in the general education classroom. Implementation of these strategies may be sufficient support to allow the student to continue as a general education student. With consideration to the Language Eligibility Guide/Team Summary report, student success during the dynamic assessment phase would indicate the SLP state that the student is not eligible for support.

Standardized Test Profile

When completing a referral for language services the SLP employs standardized testing as one component of determining eligibility for language services. By reviewing data previously collected in the pre-referral phase, the SLP selects tests that target the areas of concern for further examination. However, multiple forms of assessment as required by IDEA 2004 have already been gathered to this point. The SLP has previously analyzed teacher and/or parent input, a comprehensive file review, curriculum-based language assessment, language samples, and dynamic assessment which satisfy IDEA 2004. Therefore multiple standardized assessments are not needed. In addition, caution should be taken when giving multiple standardized tests. Since measurement error is inherent to all norm-referenced instruments, the administration of numerous tests merely compounds error (Disney, et. al., 2003). Therefore correct identification of students with disabilities may be reduced.

There are many issues to consider in the selection and use of standardized tests for the determination of a language disability. Please refer to the introduction of this section, "SLI as a Primary Disability" for a review of issues related to standardized testing. The following is taken from the section titled "Determining Presence of a Speech and Language Disorder."

The requirements and guidelines vary widely across states. Many states do not use a specific cut-off or number of standard deviations (SD). Those states that do have requirements used vastly different criteria. The committee that drafted this document surveyed several states and found a variety used including: 1.0 SD, 1.5 SD, 1.75 SD, and 2.0. Apel (1993) reported similar results with states varying requirements for SLI certification from 1.0–2.0 standard deviations (SD) below the mean back in 1993. Apparently the wide range continues to be evident.

The standard of practice in Michigan for many years has been the use of 1 1/3 SD. Since it is not the purpose of this revision to *change* identification, the committee recommends continuing to use this as a general guideline with the following suggestions:

*Test Selection Guidelines**

- Select tests with appropriate levels ($\geq$ 80%)
  - Sensitivity : percent accuracy at identifying children with known disorders as having a language disorder and
  - Specificity : percent accuracy at identifying children with normal speech and language as not having a disability
- Watch the research related to the test that may suggest a different cut-off than the original test research (such as a new discriminate analysis).

*Score Comparisons Guidelines**

- Check the test manual for recommended cut-off for the test
- If $\geq$ $1^{1/3}$ SD, then use that criterion, with the understanding that this criterion should not be the sole determining factor for decisions.
- If $\leq 1^{1/3}$ SD, then it is suggested that students who falls in this range continue to be monitored through the Early Intervening Process. This means that they would not be added onto caseload, but the team would design a new intervention plan that may be carried out by various team members.

***Note: These are guidelines are suggested practices and should not be interpreted as mandatory. SLPs should discuss/confirm their own district policies.**

Chronological Age Referencing

The Michigan rule defining speech and language impairment (340.1710) simply states that standardized assessment instruments or subtests "indicate inappropriate language functioning for the student's *age*." This means that test scores are compared to the student's chronological age.

Cognitive Referencing (Comparison to IQ for discrepancy)

The Michigan rule defining speech and language impairment (340.1710) does not state that standardized assessment instruments or subtests be compared to the student's cognitive performance (i.e., Mental age or IQ). Cognitive referencing is based upon several assumptions including: treating children who do not have an IQ-language gap will be of no benefit or that IQ measures are stable. Research has shown that children without such a gap do indeed make demonstrable gains from speech and language intervention (Cole, 1996). It has been shown that scores on IQ tests may fluctuate both across tests and within the same tests over time. Consequently, discrepancies are unstable (Disney, Plante, Whitmire, & Spinello, 2003). It has been proposed that the Response to Intervention models may serve as an alternative to cognitive referencing for SLPs (Ehren & Nelson, 2005; Troia, 2005).

Cognitive referencing often becomes an issue for speech pathologists when students have low-average or borderline cognitive performance. The student struggles in school, but does not

qualify as cognitively impaired or learning disabled. These students often have learning problems across several domains in addition to language problems. If the discrepancy model is used for LD and *not* used for SLI, there is the potential for making the SLP the primary service provider for a student needing significant levels of support, accommodations, and modification. When a primary eligibility of SLI is considered, this should reflect the student's ***primary*** disability. If the team finds throughout assessment that the student has many learning difficulties across several domains, then a plan needs to be designed to meet the student's needs, whether it be through general or special education. Responsibility for this should not rest solely with the SLP. Hopefully, as Response to Intervention models are implemented, systems will be put into place that will provide support to students who are struggling in general education. This will enable students who do not fit the traditional eligibility requirements for LD and SLI to have supports.

Results of Assessment
The SLP and team then consider all information gathered during the assessment phase.

Summary of Disability
When all the relevant information has been gathered and reviewed (e.g. interviews, CBLA, and DA), the team considers whether the assessment documentation supports the identification of a language disability. The SLP describes this disability in the assessment documentation/report.

Summary of Adverse Educational Effect
Based on the information gathered, the team decides whether the child is experiencing an adverse educational effect as a result of a language impairment. If it is determined that a language impairment negatively impacts the student's ability to be successful in the general education environment (academic, nonacademic, and extra-curricular), special education certification may be considered. If there is not an adverse education effect, the student is not eligible for special education services even if the child demonstrates a language impairment.

Summary of Eligibility in Language
When it has been determined that a disability is present which adversely effects educational performance, eligibility for speech and language services may be considered by the IEP team. A MET form is completed regardless of whether or not the student qualified for language services.

INTERVENTION
According to IDEA 2004 (Public Law 105-17), intervention targets for children with language disorders must be relevant to accessing the curriculum (academic, nonacademic, and extra-curricular). Formulation of the intervention plan can best be accomplished through a team decision-making process as a result of a thorough, curriculum-based language assessment. The combination of the curriculum-based assessments and observations and the implementation of various strategies during pre-referral intervention and assessment provides a wealth of information for the team to build a curriculum-relevant intervention plan. This is then documented by the construction of a carefully-thought out Individualized Education Plan which encompasses all aspects of the student's education, giving special consideration to his/her language disorder and subsequent educational needs. SLPs should choose treatment approaches which are research-based and provide evidence of its effectiveness.

Individualized Education Plans (IEPs)

Once the assessment has been completed and the team has determined the student is eligible for speech and language services, an IEP must be held. This meeting typically consists of the SLP, parent, teachers, administrator and other service providers or school personnel (SSW, OT, PT). The purpose of the IEP is to create a plan which specifically addresses the diverse and specific needs of that student. It may be written thoroughly enough that other professionals who have no experience with the student are clear about the student's area(s) of difficulty and what kind of intervention is required to address those needs IEPs need to be educationally relevant and provide direct links to the curriculum to show how a student's language impairment is adversely affecting him/her within the classroom.

The services that are provided by the SLP now encompass a broader range of activities, given the need for more time spent tying intervention to the general education curriculum. Language written into the IEP can reflect this time spent conducting both direct and indirect services on behalf of the student. Examples and further discussion on this topic are provided in the Workload Approach to Caseload at the front of this document. SLPs should refer to district procedures and their administrator for directives related to documentation.

Within the IEP paperwork, written descriptions of the relevant classroom accommodations and/or modifications may be presented. These accommodations address the student's specific language needs within the curriculum and how the teacher can give the student the best access to that curriculum. There are several resources available which describe the different types of accommodations and modifications available. Individual school districts may provide the team with lists of accommodations and modifications to use. The key is to choose those that will make the most positive impact for the student to gain access to the curriculum and are related to that student's area(s) of need as identified in the IEP.

Goals

Intervention for language disorders in school-age children is most effective when approached as a collaborative effort involving the SLP, teachers, other support staff, and parents. In addition, the IEP process dictates that the creation of goals be a collaborative endeavor which allows all members of the team to take ownership for the achievement of those goals. Goals are derived from the comprehensive evaluation conducted by the SLP, which may include a variety of sources. The general education teacher becomes an important aspect of this process. The general education teacher not only assists in identifying the aspects of language which adversely affects classroom performance, they also aid the SLP in determining student goals relevant to the curriculum.

Goal writing has expanded to focus more on direct classroom links and are aimed to be observable and measurable. Current monitoring mandates have dictated that goals must be meaningful, measurable, monitored, and useful in making decisions. They are written in a form that allows the relevant staff members to take data throughout intervention. The criteria for achievement must be specific and relate to the type of data gathered. Further, they relate to the Michigan Curriculum Framework, Grade Level Content Expectations (GLCEs) (www.michigan.gov/mde/), and the curriculum of the school district. These curriculum-based documents should be used in creating relevant long-term goals and short-term objectives in

collaboration with other school district personnel. Because language skills are the underpinnings of academic learning, language intervention goals can be readily linked to the standards and benchmarks written for educational purposes. (ASHA, 2000). Goal examples are provided in the, "Curriculum-Relevant Therapy Planning for SLPs" worksheet example on page L-47. A blank version is included for SLPs' use in planning on L-46 (Ehren 1999, 2005).

Sharing Responsibility for Progress on IEP Goals

For intervention to be effective, all relevant persons are involved in maintaining progress on goals and objectives. These persons include the SLP, teacher, parents, student, and other professional service providers (e.g., occupational therapist, physical therapist, teacher consultant, social worker). Each person can approach the student's language issue from a different perspective to achieve the same goal. For example, the teacher can focus on the curriculum and how to best insert specific language strategies in their lesson plans. Parents can support the student at home by reinforcing strategies learned in school or the student can take an active part in comprehending their responsibilities to be a successful student as written in the IEP. Finally, other staff members may approach the achievement of a language goal from their particular professional perspective and incorporate unique strategies to facilitate goal achievement.

Tracking and Evaluating Progress

The IEP team determines the frequency of progress monitoring. Progress is reported to parents at least as frequently as general education (IDEA, 2004). So SLPs often check progress each card marking. If progress is evident with a particular intervention, the team may decide to proceed with few adjustments. If no progress is noted, the method of intervention should change for the next time interval. This process of adjusting intervention strategies when no improvement is seen can continue for several time periods. If after several adjustments in evidence-based practice intervention methods the student continues to make no progress, a re-evaluation of service may be warranted to determine if the student may benefit from a change in support services.

Considerations Providing Curriculum-Relevant Intervention

Curriculum-based language intervention can be defined as providing students with the language components and skills that are needed in order to be successful within the academic curriculum. (Prelock, Miller, & Reed, 1993). SLPs blend therapeutic goals and methods with educational standards to facilitate the generalization and enhancement of language abilities (Moore-Brown & Montgomery, 2001). Curriculum relevant language therapy engages students in meaningful, relevant, results-oriented work, leading to academic success. Curriculum relevant therapy captures two basic principles of best practice: the intervention provided by the SLP is therapeutic in nature; and intervention relates directly to what students have to learn in school (Ehren, 2000).

Federal requirements of IDEA 2004 mandate that language services are directly related to the curriculum. In addition to meeting legal requirements, curriculum based therapy has been suggested to increase language performance of students who are identified as language impaired (Swenson, 2000). Furthermore, when curriculum-relevant therapy is delivered in collaboration with the general education classroom teacher (in contrast to being delivered independently by the SLP), the student achieves even higher gains in language skills (Throneburg, Calvert, Sturm, Paramboukas, & Paul, 2000)

Curriculum-based intervention centers around developing effective communication skills using classroom content that is necessary for overall school success. This is in contrast to traditional speech and language therapy services that were delivered in a pull-out approach and focused on drilling missing language structures separate from classroom content. Due to this paradigm shift, some SLPs may find this change difficult in the beginning, but it is necessary if students are to achieve and generalize their language goals and improve participation and progress within the general education curriculum (Prelock, Miller, & Reed, 1993). Referring back to the questions posed in the assessment section (Nelson, 1989; Nelson, 1998), the data that you have already gathered will assist you in planning curriculum-based intervention:

1) What language skills are needed for successful participation in this part of the curriculum?
2) What does the student usually do when attempting this task?
3) What language skills and strategies might the student acquire to become more successful?
4) How should the task be modified?

In order to provide optimal Curriculum-based intervention, it is also a necessity for SLPs to possess several fundamental skills (Prelock et. al., 1993):

- Working knowledge of your district's curriculum (Ask for documentation which breaks down the subject matter taught in each grade).
- Grade level expectations of skill mastery (As defined by the district Grade Level Content Expectations/Standards and Benchmarks)
- Familiarity of textbooks and supplemental materials used at each grade
- Language demands of the curriculum (How does one subject area compare to the others?)
- Student's comprehension of curriculum
- Student's ability to seek clarification in the classroom

Planning Curriculum-Relevant Intervention

A planning worksheet and example are provided on pages L-46 and L-47. (Ehren 1999, 2005). SLPs use their working knowledge of the district's curriculum to identify the standards and benchmarks that the student is expected to attain. Once the standards and benchmarks have been identified, the SLP can then determine the specific language underpinnings necessary to meet these. SLPs focus predominantly on these underpinnings when facilitating curriculum-based language intervention. The SLP will then identify the areas in which the student is having the most difficulty and describe current performance in these areas. Using classroom content, therapy goals and objectives will be established to ensure curricular relevance. Collaboration with teachers is an integral part of promoting generalization and attaining student success. This process is used for curriculum-relevant intervention that takes place in the therapy room or a different context as well as intervention that takes place in the classroom.

Examples of Curriculum-relevant Intervention:

- Use vocational duties to create a schedule for sequencing job tasks.
- Use classroom units or themes for the week in home intervention so that the student continues to receive similar instruction.

- Assist the student with their classroom assignment during independent work time and generalize therapy strategies to their work.
- Provide a "center" in the elementary classroom setting and instruct students on a particular area such as phonemic awareness or oral language development.
- Co-teach with the general education teacher where language strategies are actively taught to the whole group in conjunction with the curriculum topic.
- During a research paper assignment, assist the student during classroom time to organize information and develop written language strategies for their assignment.
- Do a mini-lesson of approximately 15 minutes during the introduction of a math lesson where the SLP instructs the students about the relevant math vocabulary needed for the unit.
- Reinforce the teacher's writing lesson after presentation and present a modified version of it to the student within the classroom.
- Assist with student's comprehension of vocabulary such as drama, choir, machine shop, etc. before and during the performance of these special tasks.
- Use classroom literature as a base for a language lesson taught in the therapy room.
- Teach study skills and comprehension strategies using science and social studies notes.
- Use spelling or vocabulary words to teach specific syntax and semantic lessons. Phonemic skills can also be targeted using spelling words.
- Take a literature selection that the teacher is using to reinforce narrative retelling and comprehension skills.
- Use classroom math story problems to teach comprehension strategies or language concepts needed when problem solving. (Merritt & Culatta, 1998)
- Preview vocabulary and concepts that the student will be encountering in upcoming subject areas or chapters.
- Teach pragmatic skills during cooperative group lessons.
- Instruct students on how to contribute relevant information to group discussion using current classroom topics.
- Embed word finding strategies into content lessons (i.e., attribute cueing, semantic alternates, associative cueing, phonemic cueing, reflective pausing and rehearsal) (German, 1993)
- Use a mnemonic, such as the EmPower strategy, to scaffold the writing process for a student (Singer & Bashir, 2004)
- Enhance comprehension of content material presented by supplementing directions and text with visuals and gestures. In addition, the SLP can foster comprehension by utilizing strategies such as making connections, visualizing, asking questions, making inferences, determining importance, synthesizing information, and evaluating. (Harvey & Goudvis, 2000)
- Incorporate phonological awareness activities into daily classroom routines, such as lining up to rhyming words or collecting materials that begin with specific sounds.

As suggested by these examples, curriculum-relevant intervention can take many different forms. All of these can be designed for the student's specific needs and the curriculum GLCEs or benchmarks. A planning chart is on the following pages. SLPs can use the blank form and refer to the sample for guidance. It shows how an SLP analyzed the curriculum standards and benchmarks, the student's challenges and designed appropriate treatment.

Service Delivery Models (See graphic on Page L-48)
Curriculum-relevant intervention can be provided within multiple service-delivery approaches. Based upon student needs and classroom routine, service delivery may continuously change throughout the course of the school year

Selection of an appropriate service delivery model is important so that students make optimal progress and the adverse effects of the disability are reduced. Progress toward goals and progress in the general education curriculum can be affected by inappropriate models of service delivery. The service delivery model selected should best support the student's learning in the aspects of the curriculum for which the student struggles in the least restrictive environment. The type of delivery service model used should also be dependent upon the current status and intervention targets of the student. Scheduling of intervention activities should be flexible to accommodate the student's changing language needs. The type of service a student receives should **not** be determined by which model can be conveniently applied by the SLP.

Service delivery models historically have included "pull-out", consultative, classroom-based, and collaborative. The "pull-out" model has been widely used and remains prevalent. However, it is suggested that intervention services that are curriculum based and provided in the general education classroom may improve the educational gains of students with communication impairments (Falk-Ross, 2002; Hoskins, 1990). The student is less likely to miss academic instruction and opportunities for socialization within the classroom context with this model. The classroom teacher's willingness to allow the SLP to deliver services in the classroom should be considered. A classroom teacher that is unwilling or uncooperative can negatively affect the quality of service that can be delivered. It is important to consult with the student's general education teacher regularly when providing classroom intervention services. This is a means through which the SLP can become familiar with general education curriculum. Additionally, it gives the classroom teacher the ability to both gain knowledge of language instruction and develop an on-going dialogue between professionals. Yet, there are times when the traditional "pull-out" model is most appropriate. Certainly, if the intervention needs of the student cannot be addressed in the classroom in a way that protects the child's self-esteem or does not negatively affect the classroom routine, then a "pull-out" model is used. Such a model, however, cannot be successfully implemented to achieve collaborative, integrative objectives without an accompanying consultative component. If there is only isolated treatment without coordination with the classroom teacher, there can be little movement toward truly addressing curricular issues.

Consultation is an important part of the intervention process. Regardless of which intervention model is appropriate to meet the student's needs, consultation provides a means by which the classroom teacher can become aware of how to respond to the student's difficulties in the general education classroom. Further, it is a means by which the SLP can monitor intervention progress.

Current service delivery models, along with a description of what that model entails are described as follows. In addition, examples of what curriculum-based language therapy consists of within each of these various models are provided.

Evidence-Based Intervention Practices
Evidence-based intervention practice reflects the belief that best practices are an integration of current research findings and the SLP's clinical knowledge. Clinicians using evidence-based practice need to be current in respect to research findings relevant to their caseload. They need to determine which research to integrate into therapeutic practice and modify findings to reapply them to therapeutic practice.

Scheduling Services-Workload vs. Caseload
Once the student has become a part of the SLP's caseload, it is important to keep in mind that there are a variety of activities that the SLP is required to complete which comprise a part of the overall workload. Workload is not only providing direct services to a caseload student, but it also includes all activities needed to support student's educational programs, implement best practices for SLP services, and ensure compliance with IDEA. In addition, professional activities and responsibilities associated with working in a school setting are involved. Time spent executing all of these activities should be taken into consideration when providing language intervention to students. See the section of this document entitled, "Workload Approach to Caseload.

DISMISSAL
Please refer to the introduction to this section, SLI as a Primary Disability, for guideliens related to dismissal, pages SLI-7, SLI-8.

CURRICULUM-BASED LANGUAGE ASSESSMENT WORKSHEET

Student Name: _____ School: _____ Grade: _____ Birth Date: _____ Age: _____Date Observed: _____ Examiner Name: _____
Teacher Name_____ ESL or Dialect?_____Main Areas of Concern (from teacher/parent/student interviews): _____
(e.g., understanding/contributing to classroom discussion, direction following, math story problems, disorganized discourse in stories, difficulty with peers)

) LANGUAGE SKILLS OBSERVED IN CURRICULUM TASK(S)

Sensory Input/Motor Output
___ Hearing normal
___ Vision normal or corrected
___ Oral-motor skills adequate
___ Grapho-motor skills adequate

Approach to Curriculum Task (Executive Skills/ Strategies)
___ Willingly approaches task
___ Can explain demands of task & what is easy/hard
___ Asks questions appropriately to clarify
___ Persists in task until complete (lack of avoidance)
___ Shows systematic approach to problem solving
___ Attentive and has strategies for resisting distractions
___ Emotions/behavior under control
___ Uses communication skills to deal with personal frustrations (e.g., instead of acting out or withdrawing)
___ Uses strategies and multiple attempts when challenged by a task
___ Uses metalinguistic skills and self-talk to work through task difficulties
___ Reflects on work periodically and revises

___ # "I don't know, I can't," or other neg. comments

Word-Level and Phonological Processes
___ Reproduces complex wds: ___ phonological structure
___syllabic structure ___ morphological structure

___ Decodes words at grade level
___ Spells words at grade level
___ Uses/understands basic vocabulary (e.g., *center, top, bottom, under, after, because, during, similar, different*)
___ Uses/understands specific curricular vocabulary
e.g._____

Sentence-Level Comprehension
___ Responds with understanding to:
___ Teacher's ___ peers' spoken questions
___ Sentences read by others ___ by self
___ Varied syntax: ___prep. phrs. ___infinitives/gerunds
___coor. clauses ___subord. clauses ___embeddings

Sentence-Level Production
___ Formulates sentences with accurate:
___ Morphology: ___subject-verb agree. ___verb phrs.
___ pronouns ___articles ___ vocabulary

___ Syntax: ___prep. phrs. ___infinitives/gerunds
___negatives ___questions ___word order
___coor. clauses ___subord. clauses ___embeddings
___MLT-U (Mean Length in words per T-Unit; i.e., main clause + embedded or subordinated clause; each coordinated clause is a separate T-unit)

Discourse-Level Comprehension and Production
___ Conversation ___Narrative ___Expository
___ Gets gist ___in reading ___in listening
___ Paraphrases selected sections ___ retells whole
___ Answers factual questions ___ inferential questions
___ Remembers details ___maintains sequence
___ Expresses gist ___in speaking ___in writing
___ Organizes discourse ___uses cohesive devices
____ Provides details and info needed by listeners/readers

Social-Interaction/Communication Skills
___ Pragmatic skills: ___topic mgt., ___ clarification,___nonverbal/gestural, ___turn-taking
___ Accepted by peers ___Invited to join groups
___ Sensitive to social cues (e.g., closeness, turn-taking)___ Uses age-appropriate vocabulary /slang/prosody
___ Communicates politeness ___to adults ___to peers
___ Uses communication skills to deal with social problems (e.g., instead of acting out or withdrawing)

Other Observations

DYNAMIC ASSESSMENT (CHANGES WITH SCAFFOLDING)

Fully Developed Skills (independent strengths)	Partially Developed Skills **(improve with scaffolding)**	Underdeveloped Skills (difficult even with scaffolding)

Key: + clearly evident without scaffolding (independent); ~ partially evident or appears with scaffolding; — minimally evident (even with scaffolding); n/a = no

CURRICULUM-BASED LANGUAGE ASSESSMENT SUMMARY AND GOALS

Student _____ Grade _____ Teacher(s)_____

Examiner _____ Curriculum task(s) assessed _____

Assessment setting(s) _____ Date(s) of assessment_____

OBSERVATIONS AND IMPRESSIONS	GOALS AND BENCHMARKS
Executive Skills/Strategies (e.g., independent approach to task, response to scaffolding of new strategies/self-talk, self-regulatory strategies)	
Language Skills **Word level** (e.g., vocabulary, phonological awareness and reproduction, reading decoding, spelling) **Sentence level** (e.g., understanding & formulation of varied sentence types, morphological selection & inflection) **Discourse level** (e.g., text organization, sequencing, cohesive devices, genre-specific expectations)	
Social Interaction/Pragmatic Skills (e.g., pragmatic skills of social or academic communication, acceptance by peers, communication skills for handling behavioral issues)	

Michigan Speech-Language Guidelines

READING ASSESSMENT WORKSHEET

Student Name: _____ School: _____ Grade: _____ Birthdate: _____ Age: _____

Reading Selection (type of genre and relation to reading and grade level): _____

Date Observed: _____ Observer Name: _____ # Wds in sample:_____ # Miscues:_____ % Wds correct:_____

(subtract any overlooked pages or lines) (include self-corrected miscues) (wds w/o miscue/tot wds*100)

DECODING PROCESSES AND STRATEGIES

Miscue Summary

	Yes +	Partial ~	No -
Meaning used			
Syntax used			
Grapho**P**honemic used			

Pattern

___ Uses all cueing systems

___ Prosody shows use of end punctuation

Uses mostly cueing systems **M S GP** In

Spoken Language

___ Meaning system strong

___ Syntax system strong

___ Phonemic system strong

___ Phonemic awareness strong

Decoding Strategies for Difficult Text

__ Shows knowledge of sound-symbol relationships

__ consonants __ vowels

__ digraphs __ diphthongs

__Uses graphophonemic relationships

__first letters

__onset

__rime

__last letters

__blends after "sounding out"

__Uses chunks

__syllables

__consonant clusters

__orthographic patterns

__Uses morphological information

__prefixes

__suffixes

__tries varied pronunciations for non-words

Predicting Strategies

___ Previews book before reading

___ Uses picture & format cues

___ Rereads to get a running start

Miscues that go with preceding text

(Read up to and including miscue—Can you say that?

[test does not work on initial words in sentence])

Talley **yes**: Talley **no**:

yes ____/____ total*100 = ____%

Confirming Strategies

Self-corrected miscues

____/____ total*100 = ____%

Uncorrected miscues that go with following text

(Read miscue to end of sentence—Can you say that?

[test does not work on final words in sentence])

Talley **yes**: Talley **no**:

yes ____/____ total ____%

___Uses self-talk about sense making

COMPREHENSION PROCESSES AND STRATEGIES

Expectations of Self as Reader

___ Willingly selects book

___ Has many choices of reading material

___ Makes comments about meaning

___ Can describe what "good readers" do

___ Uses strategies and multiple attempts

___ # "I don't know."

Retelling

___ Gets the gist

___ Includes major events

___ Maintains temporal order

___ Includes important details

___ Paraphrases successfully

___ Conveys appropriate inferences

Compare with retelling after hearing story read aloud:

Questions/Dynamic Assessment

___ Product questions re facts

___ Process questions re reasons

___ Inferential questions

___ Points out pronoun referents in text

___ Paraphrases selected text

____single sentences ____multiple sentences

Key: + = clearly evident; independent ~ = partially evident; still needs scaffolding - = still emerging

READING ASSESSMENT SUMMARY AND GOALS

Student _____ Grade _____ Teacher _____
Assessment sources _____Genre _____ Date _____

OBSERVATIONS AND IMPRESSIONS	GOALS AND OBJECTIVES
Decoding Processes (Miscue Evidence) Graphophonemic cues Syntactic cues **Meaning cues**	
Decoding Strategies for Difficult Text **Chunking and other word-level strategies** **Sentence-level strategies** (e.g., rereading, punctuation cues, predicting and confirming) **Text-level strategies** (asking what might make sense, self-talk about meaning)	
Oral Language/Comprehension **Retelling/paraphrasing** **Comprehension questions** **Factual questions** **Inferential questions**	

WRITING PROCESS AND PRODUCT WORKSHEET

Student Name _____ Teacher _____ School _____ Grade _____ Birthdate _____ Age _____
Date of Sample _____ Sampling Activity _____ Observer _____

ASSESSING WRITING PROCESSES

Planning and Organizing
___ Approaches writing tasks willingly
___ Arrives at topic independently
___ Picture
___ Graphic organizer Type _____
___ Notes
___ Dictates

Drafting
___Refers to planning
___ Proceeds quickly from start to finish
___ Pauses periodically
___ Revises along the way
___Dependent on others for spelling

Revising and Editing
___ Rereads work
___ Adds information
___ Rewords ideas
___ Clarifies references
___ Reorganizes content
___ Corrects grammar
___ Corrects spelling
___ Corrects punctuation
___ # edits

ASSESSING WRITTEN PRODUCTS

Discourse Level
Fluency
___ Total # words
___ # words/t-unit

Structural Organization
___ True to genre: _____
Maturity level:

___ Clarity within sentences
___ Clarity across text—*repeats idea*
___ Pronoun reference cohesion
___ Verb tense cohesion

Sense of Audience
___ Title ___ End
___ Creative and original
___ Relevant information
___ Adequate information
___ Dialogue/ Other literary devices

Sentence Level
T-units
___ Total # T-units
___ # words/T-unit
___ range of T-unit length

Types of Sentences
___ # Simple incorrect
___ # Simple correct
___ # Complex incorrect
___ # Complex correct
___ # run-on clauses (after 2 coord.) Variability
___ Varied sentence types
___ Over-reliance on a particular construction

Word Level
Word Choice
___ Mature and interesting choices
___ Over-reliance on particular words
___ Usage errors

Spelling Accuracy
___ % incorrect

Spelling developmental Stage
___ Pre-phonetic
___ Semi-phonetic
___ Phonetic
___ Transitional
___ Conventional

Conventions
Capitalization
___ Initial letter of sentence
___ Titles ___ Proper nouns

End punctuation
___ Periods ___ Question marks

Commas
___ Divide series ___ Divide clauses

Apostrophes
___ Contractions ___ Possessives

Quotation marks
___ Direct quotes

Formatting
___ Paragraphs
___ Poetry/other_____

ASSESSING SPOKEN LANGUAGE IN WRITING PROCESS CONTEXTS

Listening and Comprehension
___ Makes eye contact with speaker
___ Listens without interrupting
___ Seeks clarification when needed
___ Follows directions

Manner
___ Articulates clearly
___ Speaks fluently
___ Uses natural prosody
___ Appropriate eye gaze
___ Appropriate loudness

Topic Maintenance
___ Situationally appropriate
___ Provides adequate information
___ Asks relevant questions
___ Shares opinions
___ Reflects on own work and others'
___ Engages in conversational turn-taking

Linguistic Skill
___ Organizes ideas adequately
___ Completes utterances
___ Uses specific vocabulary

Key: + =clearly evident; independent ~ =partially evident; still needs scaffolding - =not yet emerging

WRITING ASSESSMENT SUMMARY AND GOALS

Student _____ **Grade** _____ **Teacher** _____
Assessment sources _____**Genre** _____ **Date** _____

OBSERVATIONS AND IMPRESSIONS	GOALS AND BENCHMARKS
Writing Processes **Planning and organizing** **Drafting** Revising and editing	
Written Products Discourse level Sentence level Word level Conventions	
Oral Language Writing process oral contexts Genre specific	

PRAGMATIC PROTOCOL

(Prutting & Kirchner, 1987)

The pragmatic protocol is completed after observing individuals, age 5 years and older, engaged in spontaneous, unstructured conversation with a communicative partner for 15 minutes. At this time, each pragmatic aspect of language on the protocol is judged as appropriate, inappropriate, or not observed. Further instructions follow pages L-31 and L-32. The following guidelines are used:

Appropriate: Parameters are judged to facilitate the communicative interaction or are neutral.
Inappropriate: Parameters are judged to detract from the communicative exchange and penalize the individual.
No opportunity to observe: If the evaluator does not have sufficient information to judge the behavior as appropriate or inappropriate, the clinician marks this column. Aspects marked in this column can be reassessed during additional samples of conversational interaction.

Communicative Acts	Appropriate	Inappropriate	No Opportunities	Examples & Comments
Verbal Aspects				
A. Speech Acts				
1. Speech act pair analysis				
2. Variety of speech acts				
B. Topics				
3. Selection				
4. Introduction				
5. Maintenance				
6. Change				
C. Turn Taking				
7. Initiation				
8. Response				
9. Repair/revision				
10. Pause time				
11. Interruption/overlap				
12. Feedback to speakers				
13. Adjacency				
14. Contingency				
15. Quantity/conciseness				
D. Lexical selection/use across speech acts				
16. Specificity/accuracy				
17. Cohesion				
E. Stylistic variations				
18.The varying of communicative style				
Paralinguistic Aspect				
F. Intelligibility and prosodics				
19. Intelligibility				
20. Vocal intensity				
21. Vocal quality				
22. Prosody				
23. Fluency				
Nonverbal aspects				
G. Kinesics and proxemics				
24. Physical proximity				
25. Physical contacts				
26. Body posture				
27. Foot/leg and hand/arm movements				
28. Gestures				
29. Facial expression				
30. Eye gaze				

Prutting, C.A., & Kirchner, D.M. (1987). A clinical appraisal of the pragmatic aspects of language. *Journal of speech and hearing disorders*, 52, p. 105-119

The Pragmatic Protocol: Definitions and Examples

(Prutting & Kirchner, 1987)

Verbal Aspects

A. Speech acts.

1. Speech act pair analysis: The ability to take both speaker and listener role appropriately. If given a directive, complies; if asked a question, answers; if speaker comments, acknowledges and vice versa. Initiates directives, queries, and comments; responds to directives by complying; responds to queries; responds appropriately to requests; and acknowledges comments made by the speaker. Appropriate behavior can be verbal or nonverbal as I the case of taking appropriate action to a direction or request.
2. Variety of speech acts

The partner shows both appropriate use of and diversity in the number of different speech acts he can accomplish, such as comment, assert, request, promise, etc.

B. Topic

3. Selection
4. Introduction
5. Maintenance
6. Change

The speaker/listener is able to make relevant contributions to a topic, is able to make smooth changes in topic at appropriate times in the discourse, is able to select appropriate topics for discussion given the context and participants, and is able to end discussion of a topic at an appropriate place in the discourse.

C. Turn taking

7. Initiation
8. Response
9. Repair/revision
10. Pause time
11. Interruption/overlap
12. Feedback to listener – verbal such as “yeah” or “really?” or nonverbal head nods.
13. Adjacency – utterances that occur immediately after the partner’s utterance
14. Contingency – utterances that share the same topic with a preceding utterance and add information to the prior communication act.
15. Quantity/conciseness

Behavior is judged in relationship to both speaker and listener in the dyad. Initiating conversation and responding to comments made by the speaker, asking for clarification when a portion of the message is misunderstood and revising one’s own message to facilitate understanding, avoiding interrupting or talking before the other partner is finished, giving feedback to the speaker as a way of moving the conversation forward, appropriate length of pauses in the conversation to support timing relationships in the conversation, and making comments relevant and informative.

D. Lexical selection/use cross speech acts

16. Specificity/accuracy - the ability to be specific and make appropriate lexical choices to clearly convey information in the discourse.

17. Cohesion – relatedness and unity in the discourse. One is able to follow the conversation, and the ideas are expressed in a logical and sequential way.

E. Stylistic variances – the ability to adjust speech style to the listener
18. The varying of communicative style

Paralinguistic aspects

F. Intelligibility and prosodics
19. Intelligibility
20. Vocal intensity
21. Vocal quality
22. Prosody
23. Fluency

Speech that is clear; not too loud or too soft; appropriate in quality; and shows appropriate use of intonation, stress, and pitch to support the communicative/linguistic intention of the message.

Nonverbal aspects

G. Kinesics and proxemics
24. Physical proximity
25. Physical contacts
26. Body posture
27. Foot/let and hand/arm movements
28. Gestures
29. Facial expression
30. Eye gaze

Use of nonverbal aspects of communication that demonstrate level of affiliation between partners, aid in regulating discourse turns, and may supplement or support linguistic aspects of the message.

DISCOURSE ANALYSIS

After conversing with a student, use this form to make observations about their discourse.

Student's Name_____ Date:_____ Grade:____

Teacher's Name_____Birthdate/Age:_____

Quantity

- Insufficient information _____
- Nonspecific vocabulary _____
- Informational redundancy _____
- Need for repetition _____

Quality

- Message inaccuracy _____

Relation

- Poor topic maintenance _____
- Inappropriate response _____
- Failure to ask relevant questions _____
- Situational inappropriateness _____
- Inappropriate speech style _____

Manner

- Linguistic nonfluency _____
- Revision _____
- Delay before responding _____
- Failure to structure discourse _____
- Turn-taking difficulty _____
- Gaze inefficiency _____
- Inappropriate intonational contour _____

If numeric data is needed, the following analysis may help you to quantify your observations:

- Total utterances _____
- Total discourse problem behaviors _____
- Total utterances with these behaviors _____
- Percentage of utterances with problem behaviors _____

Damico, J.S. (1985). Clinical discourse analysis: A functional approach to language assessment. In C.S. Simon (Ed.), *Communication skills and classroom success: Assessment of language-learning disabled students*, (pp. 165-206). San Diego, CA: College-Hill Press.

Early Identification of Language-Based Reading Disabilities: A Checklist

Student Name: _____ Grade: _____
Teacher: _____ Date: _____
Completed by: _____
Please carefully consider the descriptors below and check those that characterize the student's behavior.

Phonological Awareness
- ☐ doesn't understand and enjoy rhymes
- ☐ doesn't easily recognize that words may begin with the same sound
- ☐ has difficulty counting the syllables in spoken words
- ☐ has problem clapping hands or tapping feet in rhythm with songs and/or rhymes
- ☐ demonstrates problems learning sound-letter correspondences

Word Retrieval
- ☐ has difficulty retrieving a specific word (e.g., calls a sheep a "goat" or says "you know, a woolly animal")
- ☐ shows poor memory for classmates' names
- ☐ speech is hesitant, filled with pauses or vocalizations (e.g., "um." "you know")
- ☐ frequently uses words lacking specificity (e.g., "stuff," "thing," "what you call it")
- ☐ has a problem remembering /retrieving verbal sequences (e.g., days of the week, alphabet)

Verbal Memory
- ☐ has difficulty remembering instructions or directions
- ☐ shows problems learning names of people or places
- ☐ has difficulty remembering the words to songs or poems
- ☐ has problems learning a second language

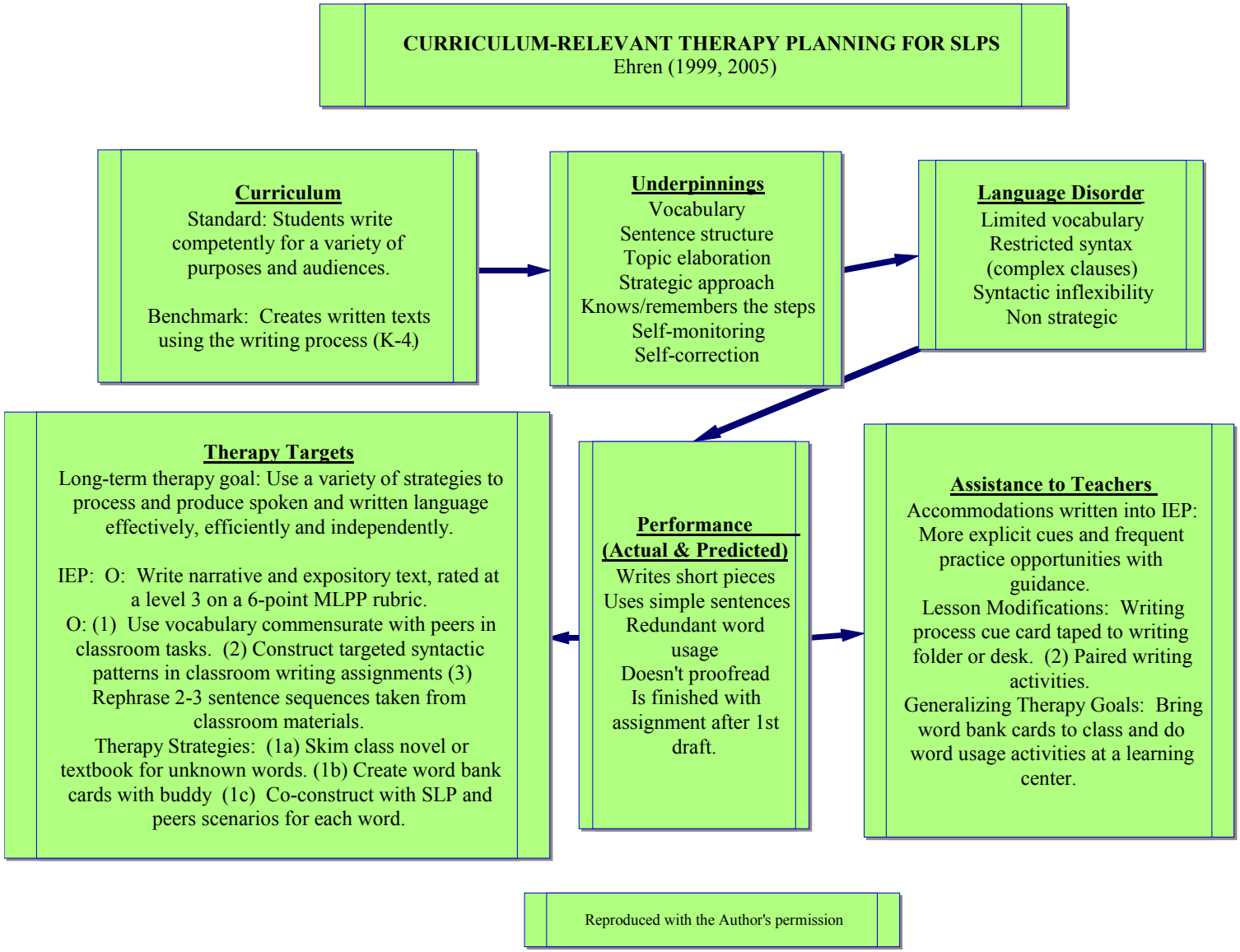
Speech Production/Perception
- ☐ has problems saying common words with difficult sound patterns (e.g., animal, cinnamon, specific)
- ☐ mishears and subsequently mispronounces words or names
- ☐ confuses a similar sounding word with another word (e.g., saying "The Entire State Building is in New York")
- ☐ combines sound patterns of similar words (e.g., saying "escavator" for escalator)
- ☐ shows frequent slips of the tongue (e.g., saying "brue blush" for blue brush.)
- ☐ has difficulty with tongue twisters (e.g., she sells seashells)

Comprehension
- ☐ only responds to part of a multiple element request or instruction
- ☐ requests multiple repetitions of instructions/directions with little improvement in comprehension
- ☐ relies too much on context to understand what is said
- ☐ has difficulty understanding questions
- ☐ fails to understand age-appropriate stories
- ☐ has difficulty making inferences, predicting outcomes, drawing conclusions
- ☐ lacks understanding of spatial terms such as left-right, front-back
- ☐ lacks interest in books and shared reading activities

Expressive Language
- ☐ talks in short sentences
- ☐ makes errors in grammar (e.g., "he goed to the store" or "me want that")
- ☐ lacks variety in vocabulary (e.g., uses "good" to mean happy, kind, polite)
- ☐ has difficulty giving directions or explanations (e.g., may show multiple revisions or dead ends)
- ☐ relates stories or events in a disorganized or incomplete manner
- ☐ may have much to say, but provides little specific detail
- ☐ has difficulty with the rules of conversation, such as turn taking staying on topic, indicating when he/she does not understand
- ☐ does not readily engage in pretend play

Other Important Factors
- ☐ has a prior history of problems in language comprehension and/or production
- ☐ has a family history of spoken or written language problems
- ☐ has limited exposure to literacy in the home
- ☐ lacks interest in books, shared erading activities, or pretend play

Catts, H. (1997). The early identification of language based reading disabilities: A checklist. *Language Speech and Hearing Services in Schools, 28,* 86-89.


CURRICULUM-RELEVANT THERAPY PLANNING FOR SLPS
Ehren (1999, 2005)
Curriculum
Standard: Students write competently for a variety of purposes and audiences.
Benchmark: Creates written texts using the writing process (K-4)
Underpinnings
Vocabulary
Sentence structure
Topic elaboration
Strategic approach
Knows/remembers the steps
Self-monitoring
Self-correction
Language Disorder
Limited vocabulary
Restricted syntax (complex clauses)
Syntactic inflexibility
Non strategic
Therapy Targets
Long-term therapy goal: Use a variety of strategies to process and produce spoken and written language effectively, efficiently and independently.
IEP: O: Write narrative and expository text, rated at a level 3 on a 6-point MLPP rubric.
O: (1) Use vocabulary commensurate with peers in classroom tasks. (2) Construct targeted syntactic patterns in classroom writing assignments (3) Rephrase 2-3 sentence sequences taken from classroom materials.
Therapy Strategies: (1a) Skim class novel or textbook for unknown words. (1b) Create word bank cards with buddy (1c) Co-construct with SLP and peers scenarios for each word.
Performance (Actual & Predicted)
Writes short pieces
Uses simple sentences
Redundant word usage
Doesn't proofread
Is finished with assignment after 1st draft.
Assistance to Teachers
Accommodations written into IEP: More explicit cues and frequent practice opportunities with guidance.
Lesson Modifications: Writing process cue card taped to writing folder or desk. (2) Paired writing activities.
Generalizing Therapy Goals: Bring word bank cards to class and do word usage activities at a learning center.
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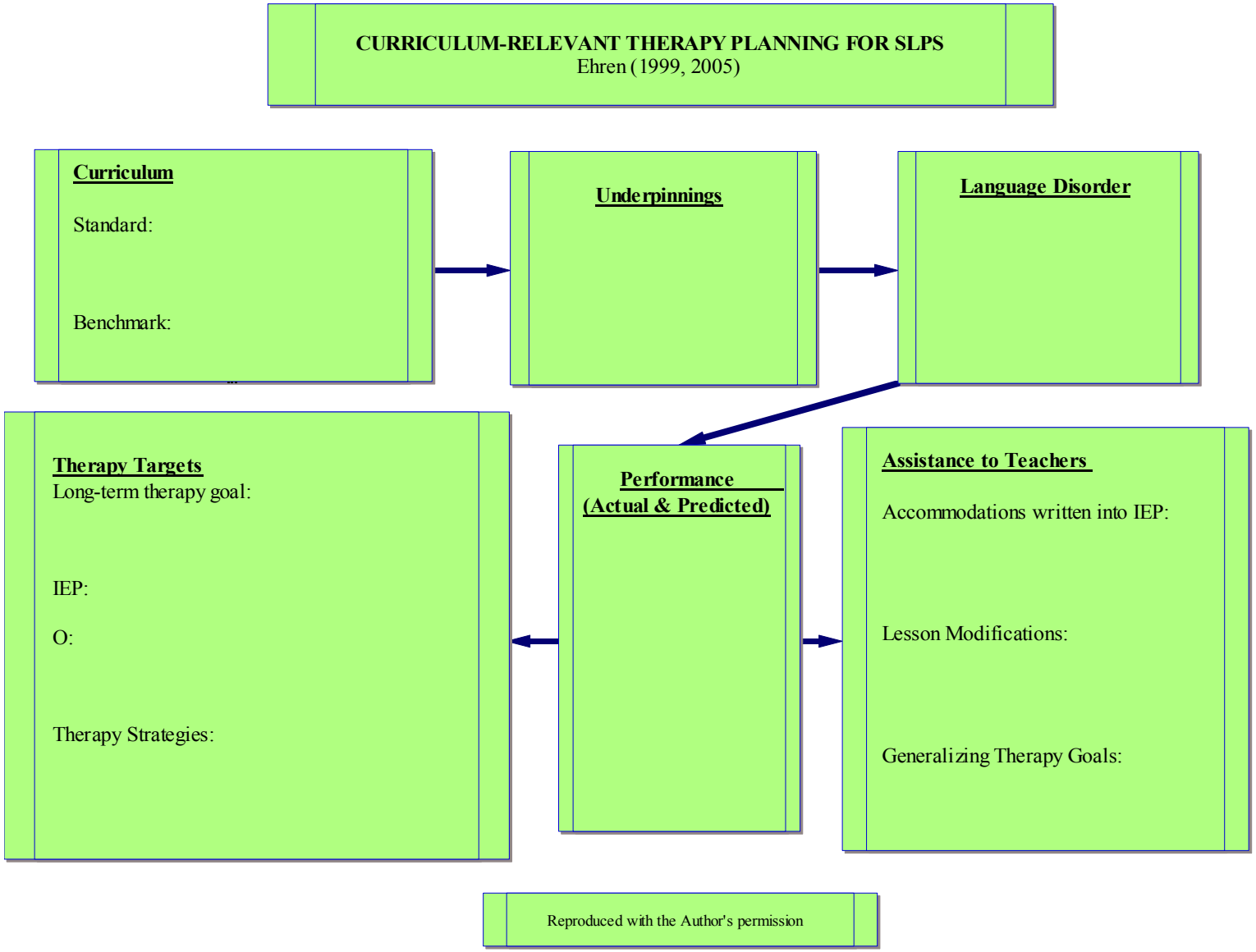
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Lesson Modifications:
Generalizing Therapy Goals:
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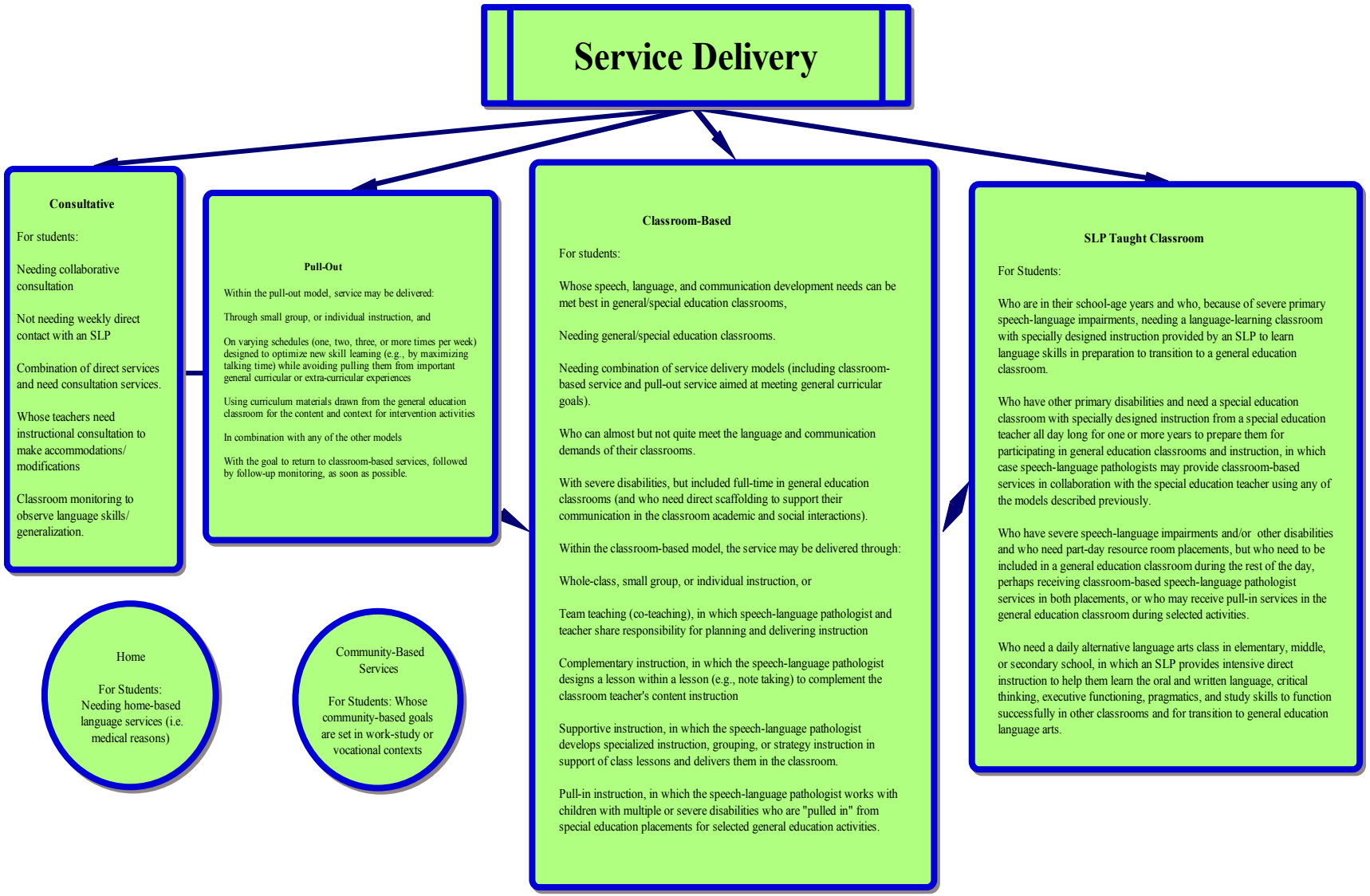

Service Delivery
Consultative
For students:
Needing collaborative consultation
Not needing weekly direct contact with an SLP
Combination of direct services and need consultation services.
Whose teachers need instructional consultation to make accommodations/ modifications
Classroom monitoring to observe language skills/ generalization.
Pull-Out
Within the pull-out model, service may be delivered:
Through small group, or individual instruction, and
On varying schedules (one, two, three, or more times per week) designed to optimize new skill learning (e.g., by maximizing talking time) while avoiding pulling them from important general curricular or extra-curricular experiences
Using curriculum materials drawn from the general education classroom for the content and context for intervention activities
In combination with any of the other models
With the goal to return to classroom-based services, followed by follow-up monitoring, as soon as possible.
Classroom-Based
For students:
Whose speech, language, and communication development needs can be met best in general/special education classrooms,
Needing general/special education classrooms.
Needing combination of service delivery models (including classroom-based service and pull-out service aimed at meeting general curricular goals).
Who can almost but not quite meet the language and communication demands of their classrooms.
With severe disabilities, but included full-time in general education classrooms (and who need direct scaffolding to support their communication in the classroom academic and social interactions).
Within the classroom-based model, the service may be delivered through:
Whole-class, small group, or individual instruction, or
Team teaching (co-teaching), in which speech-language pathologist and teacher share responsibility for planning and delivering instruction
Complementary instruction, in which the speech-language pathologist designs a lesson within a lesson (e.g., note taking) to complement the classroom teacher's content instruction
Supportive instruction, in which the speech-language pathologist develops specialized instruction, grouping, or strategy instruction in support of class lessons and delivers them in the classroom.
Pull-in instruction, in which the speech-language pathologist works with children with multiple or severe disabilities who are "pulled in" from special education placements for selected general education activities.
SLP Taught Classroom
For Students:
Who are in their school-age years and who, because of severe primary speech-language impairments, needing a language-learning classroom with specially designed instruction provided by an SLP to learn language skills in preparation to transition to a general education classroom.
Who have other primary disabilities and need a special education classroom with specially designed instruction from a special education teacher all day long for one or more years to prepare them for participating in general education classrooms and instruction, in which case speech-language pathologists may provide classroom-based services in collaboration with the special education teacher using any of the models described previously.
Who have severe speech-language impairments and/or other disabilities and who need part-day resource room placements, but who need to be included in a general education classroom during the rest of the day, perhaps receiving classroom-based speech-language pathologist services in both placements, or who may receive pull-in services in the general education classroom during selected activities.
Who need a daily alternative language arts class in elementary, middle, or secondary school, in which an SLP provides intensive direct instruction to help them learn the oral and written language, critical thinking, executive functioning, pragmatics, and study skills to function successfully in other classrooms and for transition to general education language arts.
Home
For Students: Needing home-based language services (i.e. medical reasons)
Community-Based Services
For Students: Whose community-based goals are set in work-study or vocational contexts

RESOURCES

The reference materials listed below include very useful resources. The two listed here are just two of the many practical books or articles.

Working with the classroom curriculum: A guide for analysis and use in speech therapy. (Prelock, Lukes Miller, & Reed, 1993)

Binging words to life: Robust vocabulary instruction. (Beck, Keown, & Kucan, 2002)

The ASHA documents related to the Roles of SLPs related to reading and written language include a great deal of information. They can be downloaded at asha.org.

ASHA Special Interest Division 1, Language Learning and Education
ASHA member and students may want to consider joining the related Special Interest Division and receive newsletter with articles on this topic, members-only e-mail listservs, and Web forums. This Special Interest Division is a vehicle for ASHA members to promote activities related to: (1) the linguistic knowledge and communicative interaction of infants, children, and youth from diverse cultures; (2) how knowledge, interactions, and culture affect language learning and literacy; (3) the ways in which contexts, such as school events, influence children's communication; and (4) assessment and intervention approaches for people with developmental disabilities or speech-language-hearing disorders.

REFERENCES

American Speech-Language-Hearing Association (1993, March). Definitions of communication disorders and variations. *Asha*, 35(Suppl. 10), 40-41.

American Speech-Language-Hearing Association (1999). Guidelines for the roles and responsibilities of the school-based speech-language pathologist. Rockville, MD: Author.

American Speech-Language-Hearing Association. (2001) Roles and responsibilities of speech-language pathologists with respect to reading and writing in children and adolescents: Position statement, guidelines, and technical report. *Asha Suppl. 21* pp. 17-28.

American Speech-Language-Hearing Association. (2003). IDEA and your caseload: A template for eligibility and dismissal criteria for students ages 3 through 21. Rockville, MD: Author.

Apel, K. (1993, November). *Index of state's definition of language impairment and qualification for service* [Handout]. Presentation at the annual convention of the American Speech-Language Hearing Association, Anaheim, CA.

Applebee, A. N. (1978). *The child's concept of story*. Chicago, IL: University of Chicago Press.

ASPIIRE (2000). *Developing educationally relevant IEPs: A technical assistance document for speech-language pathologists*. Reston, VA: The Council for Exceptional Children.

Bear, D., Invernizzi, M., Templeton, S., & Johnston, F. (2004) 7th ed. Upper Saddle River, NJ: Pearson Education, Inc.

Beck, I.L., McKeown, M.G., & Kucan, L. (2002). *Bringing words to life: Robust vocabulary instruction*. New York, NY: The Guildford Press.

Catts, H. (1997). The early identification of language based reading disabilities: A checklist. *Language Speech and Hearing Services in Schools, 28,* 86-89.

Disney, S., Plante, E., Whitmire, K., & Spinello, E. (2003). *Educationally relevant assessments*. Rockville, MD: ASHA.

DuFour, R. & Eaker, R. (1998). *Professional learning communities at work: Best practices for Enhancing student achievement*. Alexandria, VA: Association for Supervision and Curriculum Development.

Edwards, C. (1991). Assessment and management of listening skills in school-aged children. *Seminars in Hearing Disorders, 12(4),* pp. 389-401.

Ehren, B. J. (2000). Maintaining a therapeutic focus and sharing responsibility for student Success: Keys to in-classroom speech-language services. *Language, Speech, and Hearing Services in Schools,* Vol. 31, 219-229.

Ehren, B. J. (2005). Partnerships for promoting academic achievement for struggling learners. A presentation to the Macomb/St. Clair Speech-Language-Hearing Association. Clinton Township, MI.

Ehren, B. J. (Ed) (2005). Responsiveness to Intervention and the Speech-Language Pathologist, *Topics in Language Disorders, vol. 25*:2.

Ehren, B. J. & Nelson, N.W. (2005). The responsiveness to intervention approach and language intervention. *Topics in Language Disorders, vol. 25*, pp. 120-131.

Esterreicher, C., (1995). *Children's narratives developmental stages and strategies, scamper strategies: FUNdamental activities for narrative development*. Eau Claire, WI: Thinking Publications.

Estomin, E. (2006). Caseload to workload: Establishing our roles in school settings. Presentation to the Macomb/St. Clair Speech-Language-Hearing Association, Clinton Township, MI.

Falk-Ross, F.C. (2002). *Classroom-based language and literacy intervention: A programs and case studies approach*. Boston, MA: Allyn and Bacon

Fitzpatrick, (1997). *Phonemic awareness: Playing with sounds to strengthen beginning reading skills*. Cypress, CA: Creative Teaching Press, Inc.

German, D.J. (1993). *Word finding intervention program: Remediation, compensatory modification, and self-advocacy*. Tucson, AZ: Communication Skill Builders.

Grinzinski, Yolande, F., & Holzhouser-Peters, L. (2001). *Write on target: Using graphic organizers to improve writing skills.*

Harvey, S. & Goudvis, A. (2000). *Strategies that work: Teaching comprehension to enhance understanding*. Portland, ME: Stenhouse Publishers.

Holzhauser-Peters, L., & Huseman, D., (1995). *Communication assessment in the school environment.* Phoenix, AZ: ECL.

Hoskins, B. (1990). Collaborative consultation: Designing the role of the SLP in a new educational context. *Best Practices in School Speech-Language Pathology*, 1, (*pp.* 29-36). San Antonio, TX*:* The Psychological Corporation.

Kratcoski, A. (1998). Guidelines for using portfolios in assessment and evaluation. *Language, Speech, and Hearing Services in Schools, 29, 3-10.*

Individuals with Disabilities Education Improvement Act of 2004 (IDEA), 20 U.S.C. § 1400 *et seq*. (2004).

Lidz, C. (1991) *Practitioners guide to dynamic assessment*. New York, NY: Guilford.

Merritt, D.D. & Culatta, B. (1998). Dynamic assessment, language processes, and curricular content. In D. D. Merritt& B. Culatta (Eds.), *Language intervention in the classroom* (pp. 99-142). San Diego, CA: Singular Publishing Group.

Michigan Department of Education (1999). Michigan curriculum framework. www.michigan.gov/mde

Michigan Department of Education (2002). Michigan Literacy Progress Profile (MLPP). www.michigan.gov/mde

Michigan Department of Education (2005). Grade Level Content Expectations (GLCEs). www.michigan.gov/mde

Moore-Brown, B.J. & Montgomery, J.K. (2001). *Making a difference for America's children: Speech-language pathologists in public schools*. Eau Claire, WI: Thinking Publications.

Naremore, R., Densmore, E., & Harman, D. (2001). *Assessment and treatment of school age language disorders: A reference manual.* San Diego, CA: Singular.

National Association of State Directors of Special Education, Inc. (2005). *Response to intervention: Policy considerations and implementation*. Alexandria, VA: Author, 1-60.

Nelson, N. W. (1989). Curriculum-based language assessment and intervention. *Language, Speech, and Hearing Services in Schools, vol.* 20, pp. 170-184.

Nelson, N. W. (1994). Curriculum-based language assessment and intervention across the grades. In G. P. Wallach & K. G. Butler (Eds.), *Language learning disabilities in school-age Children and adolescents: Some principles and applications* (pp. 104-131). New York, NY: Macmillian.

Nelson, N.W. (1998). *Childhood language disorders in context: Infancy through adolescence.* Boston: Allyn & Bacon.

Nelson, N.W., Bahr, C.M, VanMeter, A.M., & Kinnucan-Welsch, K. (2004). *The writing lab approach to language instruction and intervention*. Baltimore, MD: Paul H. Brookes Publishing.

Norris, J. & Hoffman, P. (1993). *Whole language intervention for school age children.* San Diego, CA: Singular Pub. Group.

Ohio Department of Education. (1991). *Ohio handbook for the identification, evaluation and Placement of children with language problems*. Worthington, OH: Author.

Ohio Model Competency-Based Program. (2000). *Performance objectives summary: Grades pre K-12, SEO-SERRC.* Athens, OH: Author.

Payne, R.K. (2003). *A Framework for Understanding Poverty, 3rd edition*. Highlands, TX: aha! Process, Inc.

Prelock, P.A., Holland, A.L., & Ratner, N.B. (2006). Language, social, and cognitive communication in children with autism spectrum disorders. *Seminars in Speech and Language*, Volume 27 (1).

Prelock, P.A., Lukes Miller, B.E., & Reed, N.L. (1993). *Working with the classroom curriculum: A guide for analysis and use in speech therapy*. Tucson, AZ: Communication Skill Builders (pp. 50-56).

Richard, G.J. (2001). *The source for processing disorders: auditory language*. East Moline, IL: Lingui Systems, Inc.

Semel, E. Wiig, E. & Secord, W.A. (2003) *Clinical evaluation of language fundamentals, 4th* ed. San Antonio, TX: The Psychological Corporation.

Singer, B.D. & Bashir, A.S. (1999). What are executive functions and self-regulation and what do they have to do with language-learning disorders? *Language, Speech, and Hearing Services in the Schools, vol.* 30(3), pp. 265-273.

Singer, B.D. & Bashir, A.S. (2004) EmPOWER: A strategy for helping students with language disorders learn to write expository text In E. Silliman & L. Wilkinson (Eds.), *Language and literacy learning*. New York: Guilford Press.

Spaulding, T. J., Plante, E., Farinella, & K. A. (2006). Eligibility criteria for language impairment: Is the low end of normal always appropriate? *Language, Speech, and Hearing Services in Schools, vol.* 37, pp. 61-72

Staskowski, M. & Rivera, E. (2005). Speech-Language pathologists' involvement in

responsiveness to intervention activities: A complement to curriculum-relevant practice. *Topics in Language Disorders, vol. 25,* pp. 132-147.

State of Connecticut Department of Education (1999). Guidelines for speech and language programs. Middletown, CT.

Strong, C. (1998). The strong narrative assessment procedure. Eau Claire, WI: Thinking Publications

Swank & Catts (1999). Phonological awareness and written word decoding. *Language, Speech, and Hearing Services in Schools, pp. 9-14.*

Tattershall, S. (2002). *Adolescents with language & learning needs: A shoulder to shoulder collaboration*. Albany, NY: Delmar.

Throneburg, R N., Calvert, L K., Sturm, J J., Paramboukas, A A., Paul, P J. (2000). A Comparison of Service Delivery Models: Effects on Curricular Vocabulary Skills in the School Setting. *American Journal of Speech and Language Pathology,* 9, pp. 10-20.

Troia, G. (2005). Responsiveness to Intervention: Roles for speech-language pathologists in the prevention and identification of learning disabilities. *Topics in Language Disorders, vol. 25*, pp. 106-119.

Wade, S. (1990). Using think alouds to assess comprehension. *The Reading Teacher*, 43, pp. 442-451.

LANGUAGE SERVICES FOR ADOLESCENTS

INTRODUCTION

This section discusses special issues the SLP should take into consideration when working with the adolescent population. Each of the topics discussed in this section should be incorporated into what is already recommended in the guidelines for **all** school-age language students. The organization of this section will essentially follow a similar sequence as the school-age language section of this document.

Overview of Adolescent Language Characteristics

Research has demonstrated that language continues to develop into the adolescent and adult stages of life (Larson & McKinley, 2003). Biological, sociological and cognitive dimensions continue to grow and expand during this period of development. Specific areas related to language which continue to develop are self-esteem, self-concept, and cognition. According to Larson & McKinley (2003), cognitive development during the adolescent stage of life includes increases in:

- Metacognition
- Metalinguistics
- Abstract thinking and reasoning skills
- Problem solving skills
- Deductive and inductive reasoning skills
- Hypothesis formulation and testing hypothesis'

During language development, the sources of input for language learning changes as well (Nippold, 1998). Throughout the early years, humans learn language primarily through spoken communication. However, during the school-age and adolescent years, language is learned from written communication in addition to the spoken modality. This emphasis for learning language through a written format requires the student to be more independent with their own language learning rather than relying upon a communication partner. Adolescent students are also required to use more metalinguistic skills to enhance their communication. This means that they must think about their own language learning and apply overt strategies to comprehend increasingly abstract concepts. In contrast to younger, school-age children, adolescents are required to comprehend and use abstract linguistic concepts, interpret context clues and figurative language. Adolescents will also begin to use more complex syntax in written discourse despite using simpler syntax in social language situations (Nippold, 1998).

Characteristics of Language Disorders in Adolescents

Given the extent of normal adolescent language growth, it is clear that the types of language deficits an SLP will encounter at the secondary level may be very different than the elementary level. Larson and McKinley (2003) compiled a list of language expectations by teachers, parents and peers. In general, adolescents are expected to be competent communicators who can listen, speak, read, and write fluently in conjunction with the ability to be skilled in abstract language and reasoning skills. Specific difficulties may arise in several areas which negatively impact a student's success in the curriculum. These difficulties can include:

Issues related to cognitive skills

- Typically remain concrete thinkers
- Unable to view more than one solution to a problem
- Have a limited fund of strategies for finding, choosing, and exploiting data
- Difficulty putting concepts in a hierarchy

Issues related to nonverbal communication skills

- Can break rules for social norms (i.e. personal space, facial expressions)

Issues related to verbal communication skills

- Difficulty comprehending more advanced social jargon, syntactic structures and multiple step directions
- Speak in sentences which are fragmented or give unclear oral directions
- Word retrieval issues
- Difficulty understanding how to diplomatically phrase questions or answers in classroom situations
- Poor oral narrative organization
- Difficulty following the rules of a conversation
- Judgments appear arbitrary and not well thought out
- Difficulty grasping the message of an oral lecture

Issues related to metalinguistic skills

- Problems with comprehension of semantic categories, relationships and labels for curriculum related concepts
- A lack of communication breakdown awareness or the strategies needed to fix them

Issues related to reading and writing

- Poor decoding and encoding skills
- Lack of strategies for reading across several curricular contexts
- Typically do not plan or edit writing
- Problems generating a written language message well

Determination of eligibility should not be made when concerns are just one or two of the suggested problems above (Larson & McKinley, 2003). A comprehensive analysis of the curriculum expectations, student skills and adverse educational effect should be conducted per the recommended guidelines in the Language section of this document.

SLP Roles with Adolescents

A student-centered approach is strongly recommended when working with adolescents. SLPs should involve the student in **all** aspects of assessment and intervention as much as possible. Adolescents in particular often demonstrate a resistance to authority (Tattershall, 2002). In order for the SLP to obtain genuine gains, it is necessary for the student to be accountable for their own learning process. Tattershall (2002) recommends a "shoulder to shoulder" approach which fosters real collaboration and mutual respect between the SLP and student. In this approach, the SLP becomes the guide for the student to learn how to be an active participant in their own

learning and does not don the traditional "teacher" role. This might involve different interview questions during the assessment phase or different teaching models during intervention. For example, the SLP might sit next to the student rather than across the table and jointly problem solves how to complete an assignment. In this manner, the student begins to focus on their own learning with guidance from the SLP for comprehending the language demands of the curriculum.

PRE-REFERRAL AND INDENTIFICATION CONSIDERATIONS FOR ADOLESCENTS

In contrast to elementary mass screening procedures, identification of adolescents with a language impairment often involve teacher or parent referral (Larson & McKinley, 2003). In order for referrals to be more precise, it is recommended that the SLP attempt to in-service school staff about oral and written language disorders specific to the adolescent population. In this manner, teachers are able to be more accurate and specific about the types of problems they observe in students.

Most identification activities would follow the same sequence previously mentioned in the School-age Language section of this document with a few minor considerations. A comprehensive educational history should be available in the permanent record. The SLP should explore the student record for patterns in their education which correspond to the initial referral problem. For example, the SLP might note that a student has had past special education services or that they consistently receive below average grades in a particular subject area that is highly language loaded. An in-depth analysis of a student's educational history will assist the SLP in establishing adverse educational trends related to the student's learning.

Typically, standardized screening measures available for the adolescent population are rare and have a tendency to globally measure language ability. However, adolescent language development is more subtle and intricate in nature. Adolescents may possess enough social language skills to handle a screening but may lack the more complex linguistic features necessary to access the curriculum; especially in the written format. Alternative screening measures such as curriculum-based language assessment, dynamic assessment, language samples, and portfolio reviews may provide more useful information about the student's language abilities.

During the pre-referral phase, the SLP should carefully consider the impact of teacher presentation style and classroom routines as it relates to language (Larson & McKinley, 2003). Teachers may present classroom material with complex language, lengthy directions or using a rapid rate of speech. This may negatively impact a student's ability to access the curriculum. The SLP may ask the question: is the communication breakdown occurring in the student's comprehension of the message or the teacher's presentation of the material? The SLP should explore this matter further when gathering information about the student's language problems. Very practical recommendations for teacher accommodations and modifications may stem from these observations. In addition, the SLP should explore the student's knowledge about differing classroom routines. Various student questionnaires are available commercially for SLPs and no attempt will be made to include a specific form. However, Larson and McKinley (2003) recommend analyzing student responses for two primary types: answers which suggest the

student is unaware of the classroom routine or answers which suggest that the teacher does not keep a predictable routine. This information may be useful when recommending classroom accommodations and modifications as well.

ASSESSMENT CONSIDERATIONS FOR ADOLESCENTS

Historically, there have been inadequate diagnostic measures which are appropriate for the adolescent population (Wallach & Butler, 1994). Tests which are standardized for the adolescent population typically measure distinct skills in restricted contexts that do not match the curriculum context in which the student must function. Standardized measures should be interpreted with caution and should **not** be the sole source of information when identifying language impairment in an adolescent. Careful selection of assessment materials which align with the curriculum as much as possible is recommended.

Assessment activities should be similar to the activities previously described in the School-age Language section of this document. However, curriculum-based language assessment and dynamic assessments may provide the SLP with more useful information than standardized measures. Since adolescents are now required to develop language skills through a written format, increased attention to literacy issues is warranted. Use of rubrics can assist the SLP in where the student is breaking down. The SLP may choose to utilize a teacher's classroom rubric or even the MEAP writing rubric when evaluating a student's language skills in oral or written form. Following a student-centered approach, Tattershall (2002) also recommends extensive use of student interviews and questionnaires to gain a deeper understanding of the problem. The input forms in the language section (page L-13-17 are particularly useful for adolescents.

The SLP should assess the adolescent in several different settings to gain a more precise picture of their language abilities. These settings might include differing academic classes, social time (i.e. elective classes, extra-curricular activities, lunch), and school-based vocational opportunities. Multiple settings will provide the SLP with a greater knowledge of the differing language demands throughout the student's educational experience.

INTERVENTION CONSIDERATIONS FOR ADOLESCENTS

As with any student diagnosed with language impairment, intervention planning should be curriculum-based (Wallach & Butler, 1994). Goals should focus on the area(s) of difficulty for the student. Tattershall (2002) strongly emphasizes a strategies-based type of intervention rather than teaching discrete skills. Language learning strategies may prove more useful to the student overall. Strategies can be generalized to several areas of the curriculum by the student rather than a specific subject area. Utilizing a strategies-based approach also provides more flexibility in the types of curriculum the SLP employs during intervention. For example, a student who demonstrates poor oral and written narrative organization may practice strategies using a social studies report assignment or a science laboratory summary.

Another significantly different aspect of language intervention at the secondary level is a focus on counseling. Since student motivation can be an issue with the adolescent population, counseling students during intervention becomes important. Counseling should only address problems with their specific communication issues (Larson & McKinley, 2003). Other areas of difficulty should be addressed by more qualified professionals. Counseling can provide the SLP

valuable information about the student's perception of their communication disorder. It allows the SLP to support the student by problem solving solutions together. This aspect of intervention can facilitate the language intervention session and begin a discussion about the purpose of intervention.

Service Delivery Considerations for Adolescents

Stemming from this flexibility, service delivery models should reflect the type of intervention needed for the student. Wallach and Butler (1994) caution against "importing" traditional elementary pull-out models to the secondary level. Several service delivery models should be evaluated and employing flexibility between the types of models is recommended. See the service delivery models section in School-age Language for a complete explanation of the SLP's options. Consultation is an important service delivery option in any secondary setting. With each student having multiple teachers, it is essential that the SLP schedule time for collaborating with other school professionals to discuss language instruction needs and monitoring of student progress. Another such model which is specific to secondary level is the Daily Language Course for credit. This type of model serves a dual purpose. It can simplify scheduling of intervention activities for the SLP as well as increase motivation because it would allow the student to earn course credit pursuant to their course of study. Dependent upon district and state requirements, this course may count for English Language Arts or elective credit. Overall, it is recommended that a combination of service delivery models be utilized for the adolescent population to create an environment in which the student can be most successful.

Grading Considerations for Adolescents

The academic grading of a student with language impairment receiving course credit can be done in several ways. Since grading is intrinsic to the student's educational experience then grading by progress can be a viable option for adolescents with language impairment (Larson & McKinley, 2003). Larson and McKinley (2003) offer several suggestions which can assist the SLP with this issue:

- Use a point system which incorporates points given for participation and work completed and points taken away for inappropriate behaviors.
- For a pull-out model, have a percentage of the student's grade come from intervention with the SLP for the class from which they are pulled.
- Employ a pass/fail method

Whichever grading option an SLP employs, tracking progress on the student's goals is the same as discussed in the School-age Language section. The SLP may choose to add a communication progress report as it relates to their class schedule in order for the student and parents to further comprehend the link between the student's goals and the curriculum (Larson & McKinley, 2003).

TRANSITION CONSIDERATIONS FOR ADOLESCENTS

There are three primary transition periods for a student in their educational career. These periods include: elementary to middle school, middle to high school, and high school to post-secondary options. According to Larson and McKinley (2003), retaining students on a speech and language caseload for at least a short period of transition is optimal so that they make a smooth transition to handle the higher-level language demands of their new environment. This may be especially important when students encounter their first transition period from elementary school to middle

school. However, each student should be evaluated for dismissal on an individual basis. Decisions about a student's future educational success should be based on a variety of data sources rather than a belief that because the student is language impaired they are predisposed to have difficulty at the next level. SLPs need to consider the language demands for each transition level. For transition planning to post-secondary options, the SLP should be cognizant of the whether the student will pursue higher education or employment opportunities. When planning for employment opportunities, it is recommended that the SLP assess the types of communication behaviors necessary to be successful in that career (Larson & McKinley, 2003). For higher education transition planning, the SLP may assist the student in the selection of a school which best meets their personal and academic needs. Additionally, the SLP may collaborate with the student's counselor or transition team to assist with college admissions requirements. Later intervention planning may then include communication goals specific to the type of transition that will be made by the student. Finally, it is recommended that the SLP and team assist the student in advocating for themselves under laws which protect their rights.

DISSMISSAL CONSIDERATIONS FOR ADOLESCENTS

Essentially, dismissal from speech and language services for adolescents is the same for all school-age students. As discussed in the section above, transition periods need to be considered carefully before a decision to dismiss is made. The criteria for appropriate dismissal procedures can be found in the School-age Language section of this document.

REFERENCES

Ehren, B. (2002). Speech-Language Pathologists contributing significantly to the academic success of high school students: A vision for professional development. *Topics in Language Disorders, 22*, pp. 60-81.

Larson, V. L. & McKinley, N. L. (2003). Communication solutions for older students: Assessment and intervention strategies 9 to 19 years. Eau Claire, WI: Thinking Publications.

Nippold, M. (1998). *Later language development: The school-age and adolescent years (*2nd ed.). Austin, TX: Pro-Ed.

Tattershall, S. (2002). Adolescents with language & learning needs: A shoulder to shoulder collaboration. Albany, NY: Delmar.

Wallach, G. P. & Butler, K. G. (Eds.) (1994). Language learning disabilities in school-age children and adolescents: Some principles and applications. New York, NY: Macmillan.

LANGUAGE SERVICES FOR PRESCHOOL CHILDREN

INTRODUCTION

This section provides information specific to children in their preschool years, ages 3-6, with language as their primary concern or disability. This section should be used in conjunction with the more detailed School Age Language section of this document. It is important to note that service delivery for preschool aged children may vary depending on the SLPs work setting and district policies. Service delivery when SLPs are able to collaborate with a preschool program will different than practices when preschool children are brought by the parent for speech and language services separate from a program. When students are brought fro evaluations, SLPs may only have a one to two hour period of time to determine intervention needs. Following determination of eligibility, the parent may bring the child for weekly intervention or the SLP might make a referral to a special education preschool. If the SLP will not be providing services within a special education preschool environment skip to the Pre-Referral/Referral section of the document.

PREVENTION

Collaborating to Create Language and Literacy Based Preschool Environments

Some SLPs who work with preschool age children have opportunities to collaborate with preschool programs. One of the roles and responsibilities of a school-based SLP is to educate general or special education teachers and parents/caregivers of preschool children regarding typical language development. This becomes possible when SLPs work in a building where preschool programs are operated or when their districts allow them to perform community out-reach activities. In-servicing preschool teachers, daycare center staff, parents/caregivers, pediatricians, and health department/medical personnel regarding typical language development milestones are appropriate prevention activities.

Oral language is the foundation for successful language and pre-literacy skills. Preschool programs include language and communication as an essential part of their curriculum. It is important for teachers/professionals to include a speech-language pathologist as a key member of the curriculum team. SLPs provide ways to incorporate listening, speaking, reading and writing into the preschool curriculum as well as information regarding typical and disordered language.

SLPs model appropriate ways to provide a language and literacy rich environment at home and in the preschool classroom. This may be accomplished by incorporating language during other interactions such as daily routines, social greetings, play skills, and motor activities. SLPs collaborate with preschool teachers and daycare providers to incorporate daily language-based activities within the classroom. SLPs also suggest ways to provide a literacy rich environment by suggesting that the children have books to use independently as well as activities and other materials for pre-reading and writing enrichment.

SLPs play an integral role in the acquisition of phonological and phonemic awareness skills. These skills are facilitated through daily literacy activities such as finger plays, rhymes, songs, and stories. SLPs are responsible for demonstrating and educating preschool teachers and parents/caregivers with strategies to elicit verbal or nonverbal expression of these skills.

Augmentative communication strategies, materials, and/or devices are often helpful for children in special education preschool settings. SLPs provide information and training for teachers to use these strategies when supporting the emergence of speech/language skills. For example, picture communication symbols may support a preschooler's receptive and/or expressive communication in the classroom. For more information regarding specific AAC needs refer to the Augmentative and Alternative Communications Section.

PRE-REFERRAL/EARLY INTERVENING/REFERRAL PROCESS

Typically, a parent/caregiver, preschool teacher, daycare provider, or pediatrician is the first person to become concerned about the preschooler's communicative development. Parent/caregivers will often consult with an SLP to decide whether a concern warrants further evaluation. Often parental concerns are the result of a lack of understanding about the variances that occur in typically developing language proficiency. Therefore, an informal interview should be completed to determine if the concerns are typically of language development or if a comprehensive evaluation is warranted. If a formal evaluation is not necessary at the time of concern, SLPs may provide suggestions to be carried out at home or in the classroom in an effort to promote the continuation of language development. The team may decide to make a more formal plan for Early Intervening Services. In this case, refer to the Language section for the form and instructions (page L-8).

Early intervening may implemented, with progress monitoring and adjusted as needed. If the student begins to progress adequately, then the parent/teacher are advised how to continue to support the student. The SLP may consult as the treatment or consultation period is ended to promote continued progress. In this example no referral is necessary.

If the team determines that the student is not making adequate progress based on data collected, then the plan is redesigned as needed. The team may decide to alter the strategies and continue early intervening. The SLP/teacher team may find that the student is not making adequate progress and the team, the team may initiate an Evaluation Review, if appropriate, that may lead to a formal evaluation for speech and language services. District procedures are followed to decide upon and begin, a formal evaluation if needed.

Evaluation Review/Consent

The team reviews all of the pertinent data collected to this point, including results of the pre-referral interventions. The team decides what additional information is needed in order to determine the presence of a disability and adverse educational effect. A plan is made and agreed upon. Parental consent is gained for the plan (Evaluation Review, if appropriate) and the proposed evaluation (initial consent) (following the district's procedures).

INITIAL ELIGIBILITY ASSESSMENT

A worksheet on the following page, the Preschool Language Eligibility Guide Summary outlines the procedures in a formal assessment. The assessment section of this document is organized by this table, as each row in the Summary Guide is a heading in the text. This is followed by an explanation of suggested assessment activities and the sequence in which they

may be carried out. The primary goal of the *initial assessment* is to both determine eligibility and to identify an appropriate treatment plan. This means that the SLP and team must determine:

- Whether a language impairment exists,
- Whether the language impairment adversely affects educational performance (academic, nonacademic, or extracurricular), and
- How intervention should be designed and implemented in order to help the student to progress in the general curriculum.

These activities are described in the sequence provided by the Preschool Language Eligibility Guide Summary on the next page.

Once the decision is made to do a comprehensive evaluation the SLP should obtain written consent and continue to gather pertinent information.

ASSESSMENT CONSIDERATIONS

Similar to the language assessment of school-aged children, the primary goal of the initial assessment for the preschooler is to determine eligibility and to identify an appropriate treatment plan. Language assessment is the same across all ages; however, there are some special considerations and differences in collecting the information for a younger child. Oftentimes, communication concerns are recognized before other co-occurring impairments. Therefore, the SLP is in a unique situation in being the first to identify additional areas of concern regarding development. At any point during the assessment process, the SLP should initiate consultation from other disciplines (e.g., psychologist, social worker, pediatrician).

Ideally assessment decisions would be based upon multiple observations/interactions with a child across various settings. However, this is not always possible and oftentimes SLPs have been limited to approximately one hour to complete preschool assessments. In this situation, ten to fifteen minutes would be used for parent interview, fifteen to twenty minutes reserved for play-based interactions, and thirty to forty minutes devoted to the administration of standardized assessment. Obviously, the more time you can spend with the preschooler is beneficial; however, not always available.

PRESCHOOL LANGUAGE ELIGIBILITY GUIDE/TEAM SUMMARY

Student _____ Birth date_____ SLP_____ Date_____

Attach documentation as applicable.		*Does not support Eligibility*	*Supports Eligibility*
Gathering Input	**Parent** Conduct a ten to fifteen minute interview regarding the child's use of language, concerns, and health history. Use the Communication Means and Communication checklist to gather information regarding the child's language within the home environment.		
	Teacher Interview, checklist, or comments		
	Other Pertinent Information Review educational and medical records regarding student		
Play Activities/ Communication Samples Play with the child for ten to fifteen minutes using developmentally appropriate toys.	**Language Subsystems** Make notes regarding the child's language skills in regards to phonology, syntax, morphology, semantics and pragmatics.		
	Evidence of Communicative Frustration Does the preschooler demonstrate struggle in an effort to communicate? Does the preschooler refuse to communicate, tantrum, etc.?		
	Dynamic Assessment Does the preschooler's language improve with minimal scaffolding or accommodation (e.g., given picture symbols or speech scripts to model) or does the preschooler continue to have difficulty?		
Test Profile			
Observation of Parent-Preschooler Interactions Observe how the preschooler's language is different when interacting with a parent. This may be done through observations of the child and parent coming and going from the therapy room or by spending time observing them in a short play based interaction.			
Consideration of Cultural / Linguistic Differences Complete the process in the Culturally and Linguistically Diverse Section if indicated			
Consideration of Environmental or Economic Differences Provide documentation from team reports, teacher, and parent Reviews if needed.			

Summary of Disability	**Summary of Adverse Educational Effect**
Team comments about the presence or absence of disability.	Team comments about the presence or absence of adverse effects on social, vocational, or academic performance based upon all of the above assessment components.

Summary of Eligibility in Language
Team comments and decision regarding the student's eligibility

Comments:

Gather Input

Parent

Parents provide important information about their child's use of language and their concerns related to communication. They also provide developmental and medical history and information about child's health, hearing, and vision. They report how the preschooler uses language to manipulate his home environment. The way a preschooler expresses his needs and wants within the home is oftentimes different than when in a therapy environment. Comparing the communication profiles within different environments and across communicative partners can be beneficial when creating treatment plans. The SLP may utilize the Communication Means and Functions forms following this section to obtain this information regarding the preschooler's language skills (pages PL-14-15). A parent input form is included to assist with gathering this information on the following page (Page Pl-6)

Teacher (When Possible to Obtain)

If the student attends a preschool program, it is helpful to gather information regarding the preschooler's communication within the classroom environment. This may be accomplished in a variety of ways such as: sending a teacher input form through U.S. mail, inviting the teacher to attend the evaluation, or conducting a telephone interview. A teacher input form is included on page PL-8.

LANGUAGE
Parent Input Form

Child's Name: _____ Birthdate:_____
Home Telephone: _____ Cell Phone:_____
Address: _____
Home School: _____Teacher's Name_____ Date:_____

Name of Parents: _____
Father's Occupation: _____ Mother's Occupation: _____
Siblings (Names and Ages): _____

Child's Physician's Name: _____ Telephone: _____
Referred By: _____

Birth History
Please describe the Mother's health during pregnancy: _____
_____
List any medications taken by the child's mother during the pregnancy: _____
_____
Length of pregnancy: _____ Duration of labor: _____ Type of birth:_____
Age of mother at birth: _____ Age of father at birth:_____
List any unusual circumstances about the birth: _____
_____
Has the child had any illnesses (please indicate severity, age, and side-effects)? _____
_____

Developmental History
Please indicate the approximate age at which your child began to do the following:

	Age in Months		Age in Months
Rolled over		Feed self	
Sat unsupported		Dressed self	
Crawled		Became toilet trained	
Stood next to things		Spoke single words	
Walked		Spoke phrases	

Was your child a quiet baby or did your child babble and coo? _____
Did your child experience any feeding problems? _____
_____

Child's Name: _____ Birthdate:_____

Does your child have any difficulty walking, running, throwing, etc.? _____
_____

Has your child's hearing been evaluated? If so, when, where, by whom, and what were the outcomes:
Has your child's vision been evaluated? If so, when, where, by whom, and what were the outcomes: _____

Statement of Speech and Language Difficulty

Child's primary language: _____ Language spoken in the home: _____

Describe in your own words what problem your child is having with speech, language, and/or hearing: _____
_____
_____

When did your child's speech and language skills first become an area of concern? _____
_____

Have any of your child's relatives had speech and language difficulties? If so, who and what type of difficulty did they have? _____

How does your child typically communicate (e.g., gestures, single words, screaming, phrases, sentences)? _____
_____

Does your child have difficulty with the following?
Please answer by circling: N (Never), S (Sometimes) , F (Frequently), A (Always)

Listening

Understanding and following 1-2 step directions?	N	S	F	A	_____
Understanding age-level vocabulary (e.g. nouns and verbs)?	N	S	F	A	_____
Responding appropriately to WH questions (e.g., who, what)	N	S	F	A	_____
Responding appropriately to yes/no questions?	N	S	F	A	_____
Responding appropriately to choice questions?	N	S	F	A	_____
Responding to questions within expected time period?	N	S	F	A	_____
Difficulty attending to what is said?	N	S	F	A	_____
Ignoring distractions?	N	S	F	A	_____
Understanding basic concepts (e.g., on, off, before, after)?	N	S	F	A	_____
Listening to a complete storybook?	N	S	F	A	_____
Understanding new/novel ideas?	N	S	F	A	_____

Child's Name: _____ Birthdate:_____

Speaking

Using age-appropriate sentences (e.g. 3-5 words per sentence)?	N	S	F	A	_____
Using age-appropriate grammar skills (e.g. pronouns, articles)?	N	S	F	A	_____
Asking questions?	N	S	F	A	_____
Expressing daily needs (e.g., verbally or nonverbally)?	N	S	F	A	_____
Using a variety of vocabulary words (e.g. 50-100 words)?	N	S	F	A	_____
Expressing likes and dislikes?	N	S	F	A	_____
Retelling Stories?	N	S	F	A	_____
Sharing Ideas?	N	S	F	A	_____
Adding information?	N	S	F	A	_____
Sequencing Stories?	N	S	F	A	_____
Asking for help when needed?	N	S	F	A	_____

Socializing

Looking at people when talking or listening?	N	S	F	A	_____
Providing nonverbal feedback (e.g., head nods, gestures)	N	S	F	A	_____
Maintaining conversation?	N	S	F	A	_____
Understanding facial expressions, gestures, or body language?	N	S	F	A	_____
Greeting people?	N	S	F	A	_____
Using his/her own words or does he/she repeat what others say?	N	S	F	A	_____
Playing with other children?	N	S	F	A	_____
Initiating Conversation?	N	S	F	A	_____
Interacting with others?	N	S	F	A	_____
Following routines?	N	S	F	A	_____
Coping with changes in routine?	N	S	F	A	_____
Transitioning between activities?	N	S	F	A	_____

Behavior

Is your child easily frustrated because of lack of communication skills?	N	S	F	A
Is your child having behavior difficulties in structured situations?	N	S	F	A
Is your child having behavior difficulties in unstructured situations?	N	S	F	A
Is your child aggressive with your or the children in the classroom?	N	S	F	A

Does your child try to make himself/herself understood? _____ Yes _____ No
If yes, please describe._____

Child's Name: _____ Birthdate:_____

Medical and Therapeutic History

Has your child ever been diagnosed by a physician, neurologist, or psychologist as having any type of neurological impairment or syndrome? _____ If yes, please explain: _____

_____

_____

Please list any evaluations or therapies that your child has had and their outcomes (i.e., speech, occupational, or physical therapy, neurological examination, MRI, etc.):

Evaluation or Therapy	Date Started	Date Ended	Outcome

Does your child take any medications at home or during the school day?

Medication	Amount Prescribed/How Often (e.g. 15mg/2x day)	Taken at Home/School	For What Condition (e.g. ADD, Seizures)

Does your child have any known allergies? If so, please explain: _____

_____

Additional Comments:

_____

_____

_____

_____

_____ _____

Parent Signature Date

LANGUAGE - PRESCHOOL
Teacher Input Form

Child's Name:_____ Birthdate: _____Date: _____
Teacher: _____ Speech-Language Pathologist: _____

Please describe the child's strengths: _____

_____

Please describe the child's main difficulties:_____

_____

Hearing screened: _____ Date Passed _____ Date Failed
Vision screened: _____ Date Passed _____ Date Failed

Does your student have difficulty with the following?
Please answer by circling: N (Never), S (Sometimes) , F (Frequently), A (Always)

Listening		
Understanding and following 1-2 step directions?	N S F A	_____
Understanding age-level vocabulary (e.g. nouns and verbs)?	N S F A	_____
Responding appropriately to WH questions (e.g., who, what)	N S F A	_____
Responding appropriately to yes/no questions?	N S F A	_____
Responding appropriately to choice questions?	N S F A	_____
Responding to questions within expected time period?	N S F A	_____
Difficulty attending to what is said?	N S F A	_____
Ignoring distractions?	N S F A	_____
Understanding basic concepts (e.g., on, off, before, after)?	N S F A	_____
Listening to a complete storybook?	N S F A	_____
Understanding new/novel ideas?	N S F A	_____
Speaking		
Using age-appropriate sentences (e.g. 3-5 words per sentence)?	N S F A	_____
Using age-appropriate grammar skills (e.g. pronouns, articles)?	N S F A	_____
Asking questions?	N S F A	_____
Expressing daily needs (e.g., verbally or nonverbally)?	N S F A	_____
Using a variety of vocabulary words (e.g. 50-100 words)?	N S F A	_____
Expressing likes and dislikes?	N S F A	_____
Retelling Stories?	N S F A	_____
Sharing Ideas?	N S F A	_____
Adding information?	N S F A	_____
Sequencing Stories?	N S F A	_____
Asking for help when needed?	N S F A	_____
Socializing		
Looking at people when talking or listening?	N S F A	_____
Providing nonverbal feedback (e.g., head nods, gestures)	N S F A	_____
Maintaining conversation?	N S F A	_____
Understanding facial expressions, gestures, or body language?	N S F A	_____
Greeting people?	N S F A	
Using his/her own words or does he/she repeat what others say?	N S F A	_____
Playing with other children?	N S F A	_____
Initiating Conversation?	N S F A	_____

Child's Name:_____ Birthdate: _____Date: _____

Interacting with others?	N S F A	_____
Following routines?	N S F A	_____
Coping with changes in routine?	N S F A	_____
Transitioning between activities?	N S F A	_____

Behavior

Is your student easily frustrated because of lack of communication skills?	N S F A	_____
Is your student having behavior difficulties in structured situations?	N S F A	_____
Is your student having behavior difficulties in unstructured situations?	N S F A	_____
Is your student aggressive with your or the children in the classroom?	N S F A	_____

Does the child try to make himself/herself understood? _____ Yes _____ No
If yes, please describe._____

Please list any accommodation that your have tried in your classroom and their outcomes (i.e., increased wait time, visual strategies, behavior plans, etc.):

Interventions	Date Started	Date Ended	Outcome

Does your student take any medications at home or during the school day?

Medication	Amount Prescribed/How Often (e.g. 15mg/2x day)	Taken at Home/School	For What Condition (e.g. ADD, Seizures)

Does your student have any known allergies? If so, please explain: _____

Has your student had any private therapy that you know of (e.g., speech, occupation, or physical therapy)?
_____

Additional Comments:
_____
_____
_____

Play-Based Activities to Collect Further Assessment Information
Gathering and forming impressions regarding samples of the preschooler's oral language is another essential component of the evaluation. An oral language sample can provide the SLP with information regarding the preschooler's language subsystems, frustration when communicating, and communication when scaffolding is provided. The SLP plays with the child (e.g., ten to fifteen minutes) using developmentally appropriate toys.

Observing Language Subsystems and Utilizing Dynamic Assessment Through Play
During a play-based activity the SLP should take notes about all of the language subsystems (i.e., phonology, syntax, morphology, semantics, and pragmatics). When evaluating phonology skills the SLP is noting the level of intelligibility as well as phonemes/speech sounds that the child can and cannot produce. In regards to syntax, the SLP determines the preschooler's mean length of utterance and complexity of the utterance. Morphological markers are another subsystem of interest. Observation of the child's semantics can provide the SLP with the types of words the child is using (i.e., nouns, verbs, prepositions). It is just as important to collect information regarding pragmatic language including the ways the child communicates (e.g., crying, pointing, intonation) and the functions that the attempts serve (e.g., request, protest, greet, name, comment). For some children, the goal is to determine whether the preschooler has intent to communicate. If intent is demonstrated, how does the preschooler communicate (i.e., means)? If intent is not demonstrated, it would be important to provide the preschooler with opportunities to protest, request, and name objects during play. The SLP should continue to provide support and accommodations to the preschooler to see if communication functioning improves. Oftentimes, communication improves with scaffolding, when pictures symbols are introduced, or when language is made simpler and less complex. During this time, the SLP documents if the preschooler's language improved with such interventions or if the preschooler continued to have difficulty. Observing how the preschooler reacts to these scenarios is beneficial when treatment planning.

Evidence of Communicative Frustration
Play-based assessments can also give the SLP information regarding the preschooler's frustration level when trying to communicate. This can be a determining factor when qualifying a preschooler of this age for speech and language services.

Observation of Parent-Preschooler Interactions
Many children communicate differently (i.e., more or less language) when they are with familiar people such as their parents/caregivers or siblings. SLPs can observe these differences when the child is coming to and from the therapy room. They can also be observed by providing ten to fifteen minutes of play between the child and parent. The observation also allows the SLP an opportunity to suggest home intervention techniques.

Test Profile
Administering standardized assessment measures is another vital way in which to gather information about a preschooler's language skills. When choosing assessments, it is important to be certain that they are normed for the preschool population and thoroughly evaluate all of the language subsystems. Information from comprehensive assessments can reveal whether a preschooler is performing within the average range when compared to age-matched peers. It is

also important to look for variations with the preschooler's language profile. Variations within a language profile suggesting deficits within a language subsystem should be further explored.

Consideration of Cultural and Linguistic Differences
When a preschooler's native language is something other than English, it is important to consider that the language or cultural differences may be the root of the educational (developmental) difficulties. Refer to the Culturally and Linguistic Diverse Language Section for guidelines in this area.

Consideration of Environmental or Economic Differences
Children who are considered "at risk" due to environmental and/or economic differences may not present with a language disorder, but rather need additional language stimulation. Provide documentation from team reports, teacher, and parent reviews if needed. The SLP could provide recommendations on how to increase experiences to promote language stimulation where/when appropriate.

Adverse Educational Effect
A culmination of information gathered from all the above sources should be used to assist in the final determination of whether the preschooler's language concerns have adverse effect on educational (developmental) performance. For the preschooler, parent and/or teacher input would be used to assess the adverse effect on educational (developmental) performance. When considering eligibility for a preschool adverse educational effect, consider the following:

1. Results of assessment demonstrated language skills below the level expected for the preschooler's age.
2. Parent education is not sufficient to ameliorate the problem.
3. The child is not able to perform and demonstrate educational and developmental skills as peers in the classroom.

INTERVENTION AND SERVICE DELIVERY
Once a preschooler has qualified for language intervention, services can be provided in a variety of ways. Service delivery models may include direct services on an individual, small group, or classroom basis. In addition, consultative services include a variety of possibilities such as spending time with the parents/caregivers/family members, classroom teachers, or daycare providers. Therapy can also be provided through inclusion and/or pull-out services. An optimal way to provide services would be for the SLP to collaborate with all others involved in the education (development) of the preschooler (i.e., parents/caregivers, teachers, daycare providers, etc.). This would allow the SLP to provide home intervention techniques/strategies for carryover to maximize success across situations/environments. Unfortunately, SLPs cannot always readily collaborate with teachers or daycare providers, especially for children solely receiving speech and language services on an individual or small group basis. These children are typically dropped off and picked up for their speech and language intervention while having preschool placements outside the district or no other placements at all. In this situation, SLPs can provide the parent/caregiver with intervention techniques/strategies to share with all other teachers/providers if they desire or the SLP may also have the parent sign a release of

information in order to contact outside teachers/providers to share intervention techniques/strategies.

It is essential that the SLP select developmentally appropriate speech and language goals/objectives that are attainable and measurable. Effective interventions, strategies, and techniques need to be implemented to promote language development and growth. The SLP needs to carefully track the progress of each individual preschooler they serve, and use these results to make changes to intervention programs as the data indicates. At this age, preschoolers are constantly changing; therefore, goals need to be modified as needed.

Although the preschooler does not yet attend a general education setting, it is imperative for the SLP to foster the development of school readiness skills when appropriate. The goal is for the preschooler to eventually attend a general education classroom program and have speech/language/communication skills to be successful in lifelong communication.

DISMISSAL CRITERIA

A preschooler should be dismissed from therapy once he/she has reached the developmental milestones in all of the language domains and no longer has impairments that affect communication for his/her developmental level or it is determined by the team . Formalized assessments, parent/teacher input forms, and informal observations should all be performed before dismissal of services is rendered. Refer to the Preschool Language Eligibility Summary to use as a guide to determine if dismissal is appropriate.

COMMUNICATION MEANS

Student _____ Birth date_____ SLP_____ Date_____

MEANS		DESCRIPTION
Crying, tantrums/self injury		
Proximity		Physical closeness to others and/or objects
Passive gaze		Eye contact without attempts to direct the gaze of others
Active gaze		Eye contact with attempts to direct the gaze of others
Grabs/reaches		
Vocalizations/Verbalizations		Includes a wide range of vocal acts and/or noises
Self-removal		Running away/disappearance-can be used as a form protest
Enactment (rituals)		Reenactment of partial or entire behavior sequences association with a desired location
Pulling others' hands		Example: Requesting to be tickled by placing other hands on the desired location
Touching/moving others' face/body		Similar physical manipulation of others
Giving/showing objects		Handing a toy to someone in an effort to establish attention and reference
Pointing		Distinct from reaching and actual physical contact
Intonation		Variations in pitch, volume, duration
Aggression		
Echolalia		Delayed or immediate literal repetition
One-word speech or sign		
More complex speech or sign		

Which means are used most often, e.g., does he/she usually use single words or does he/she usually point and make sounds? _____

_____

What combinations of means are used? _____

_____

COMMUNICATION FUNCTIONS

Student _____ Birth date_____ SLP_____ Date_____

What are the reasons this student currently communicates? Check all that apply. In typical development children use a variety of these functions across all three areas from the least social, regulating behaviors, to the most social, establishing joint attention.

Regulate Behaviors

_____ Request Objects

_____ Request Action

_____ Protest Reject

_____ Direct Action

Social Interaction

_____ Greet

_____ Seek Attention

_____ Maintain Attention

_____ Name/Label

_____ Respond/Acknowledge

_____ Request Permission

_____ Direct Attention

_____ Confirm/Affirm

Establish Joint Attention

_____ Describe

_____ Relay Information

_____ Comment

_____ Request

LANGUAGE SERVICES FOR INFANTS AND TODDLERS

SLPs using this section should also refer to the language section for general guidance.

PREVENTION/IDENTIFICATION

One important role of an SLP is to educate parents and/or caregivers about typical language development of infant/toddlers. Usually, in this age group the home is the educational environment. Therefore, an SLP may need to be creative as to how to educate parents of infant/toddlers most effectively and efficiently. An SLP may choose to do this in a variety of ways. Such ways may include, but are not limited to: speaking to parents of infants/toddlers at community events (e.g., elementary school meetings, church meetings, etc.), providing in-services for professionals that work with this age-population (e.g., day care providers, medical professionals, etc.) and/or providing adequate information/handouts to local pediatrician's offices, daycare centers, etc.

When a parent/caregiver or pediatrician becomes concerned about the infant/toddler's communicative development they will usually seek out the professional advice of an SLP. When the SLP is connected with the family of an infant/toddler the SLP begins by informally interviewing and/or completing an input form with the parent to obtain pertinent information about the infant/toddler's environment, health, and development (i.e. play, social, motor, and language). Parents may need to be educated and/or be provided with examples of typical language development in order for them to provide the most helpful information. A checklist that may be helpful for organizing interview questions is included on page IL-2, "Toddler Speech/Language Summary." This may be filled out in part at this stage and in more detail should the child progress to further assessment.

Based upon parent/caregiver's input, as well as observations of the infant/toddler's communicative performance, the SLP may determine that the infant/toddler has typical developing language that should continue to develop appropriately within the infant/toddler's current environment. The SLP should explain his/her findings to the parent/caregivers, as well as provide valuable information about how to continue to foster the infant/toddler's effective language use at home.

Early Intervening

An SLP may determine that the infant/toddler demonstrates slight delays/difficulties with communicative skills; however, many of the precursors are present and the parent/caregiver is a good communication facilitator. In such a case, the SLP may suggest a home program with activities that the parent/caregiver could incorporate into their daily routine to promote language growth. The SLP provides information about language development and specific strategies to use for that child (e.g., modeling typical language structures, expanding language, etc.). The SLP suggests a time frame for which to discuss progress. Communication between the SLP and parent/caregivers is a key component if this option is selected. This would allow the SLP to determine the efficacy and guide the parents as needed. At some point, the parent and SLP may determine that assistance is no longer necessary or that a more formal assessment is needed.

TODDLER SPEECH/LANGUAGE CHECKLIST

Name_____Birthdate/Age:_____ Speech-Language Pathologist _____Date:_____

Language Comprehension

__Attends to an activity/object for up to 2 minutes
__Follows simple commands when used with gestures
__Comprehension strategies used:
__ looks at object mom looks at
__ imitates ongoing action
__ acts on objects at hand
__Understands single words for familiar objects (at least 5)
__Understands single words for pictures (at least 5)
__Knows names of familiar people (i.e., Where's mama)
__Locates an object in view when asked ("get the ball")
__Responds to "no, no"
__Performs at least three different actions
__Follows simple commands without any gestures
__Understands words for objects that are out of view
__ Understands possession ("Mom's nose," "bears cup")
__ Understands parts of a whole (door of the car)
__ Understands agent+action+object (make baby kiss bear)
__ Understands concept of "one"
__ Understands "big" vs "little"
__ Understands spatial concepts (on, off, in back of)
__ Understands pronouns (he, she)
__ Responds to simple <u>what</u>, <u>what doing</u> and <u>where</u> questions
__ Understands early attributes (dirty, broken, mine/yours)
__ Follows 2-step related directions
__ Identifies at least 3 different colors
__ Follows commands - two familiar attributes (big blue ball)
__ Identifies at least 3 body parts

Language Production

__ Social Interaction and turn taking
__ Imitates turn taking
__ Responds to initiations
__ Takes at least 3 turns in a sequence
__ Waves hi/bye
__ Uses social smile
__ Participates in social games (pattycake, peek-a-boo)
__ Vocalizes:
__ Occasionally
__ Frequently
__ Maintains appropriate eye contact
__ Communicates purposefully through nonverbal means
__ Communicative intents observed:
__ requests __ commands __ protests
__ greetings __ answers __ acknowledges
__ questions __ other
__ Messages sent by:
__ vocalizations __ gestures
__ touching objects __ actions
__ Combines vocalizations & gestures when communicating
__ Shakes head to indicate: __ no __ yes
__ Uses single words to communicate needs:
__ has 10 or less words __ has 26-50 words
__ has 11-25 words __ has more than 50 words
__ Imitates 2-3 word phrases
__ frequently __ occasionally
__ Asks for help with personal needs using words/phrases
__ Uses at least 2 different simple sentence types
__ Grammatical markers used: __verb + ing __plural-s
__ possessive –s __ past tense -ed
__Converses in complete sentences:
__ occasionally __ frequently
__ Uses pronouns: __ I __me __ you __she/he
__ Uses spatial concept words (on,in)
__ Names at least 3 colors
__ Asks questions using <u>what</u> and <u>where</u>
__ States first / last name
__ Tells personal narrative
__ Uses complex sentences
__ Uses single words: __ occasionally __ frequently
__ Uses jargon with intonation variations
__ Imitates new words: __ occasionally __ frequently

Play Skills

__ Undifferentiated actions (shake, bang, throw, mouth)
__ Explores environment and objects
__ Actions directed to others (feeds mom/doll, phone to doll's ear)
__ Early differentiated action (push buttons, in/out, spinners)
__ Appropriate use of familiar toys/objects (single schemes)
__ Length of time toys used: __ brief __ extended
__ Combines 2 objects together in play (stirs in pot)
__ Performs action on self (feeds self, phone to ear)
__Sequences of actions used with different toys sets:
__ two sequences __ multiple sequences (3+)
__ Engages in role-play (pretends to be Batman, mom, doctor)
__ Uses figure/doll/puppet as participants in play:
__ in single actions __ in multiple sequences

Social Play:

__ initiates play with others
__ engages in roll play with other children
__ plays with other children
__ brings toys to show parent
__ participates in action turn taking
__ prefers to play alone
__ plays near others

Speech

Consonants Produced (should be produced by age indicated)

2; 0-2;5	__ /m/	__/p/ __/b/ __/w /__/n/
2;6-3;0	__/h/	__/j/ as in "yes"
	__/t/	__/d/
	__/k/	__/g/
	__/f/	__/s/ (tongue may pop out between teeth)

Comments:

Columbus Speech and Hearing Center United Way Foundation Columbus, Ohio

Determining if a Formal Assessment is Needed

The initial parent interview may reveal that the student should be assessed formally as the first step. In other cases, the SLP and team may determine after a period of early intervening through a home program, that formal assessment is warranted. Once it is determined that a formal assessment is needed, the SLP must obtain written consent and explain the referral process.

A worksheet on the following page outlines the procedures in a formal assessment. This worksheet could be used by the MET team to record how eligibility decisions were made. Each row of the table is considered a check is placed under either, "supports eligibility' or 'does not support eligibility." For example the team's assessment might reveal that a child is communicating with a high level of success during informal tasks despite very low scores or vice versa. Each row of the table is described in more detail on the following page.

INFANT/TODDLER ELIGIBILITY GUIDE/TEAM SUMMARY

(Birth to 3 years)

Student _____ **Birthdate**_____ **SLP**_____ **Date**_____

Attach documentation as applicable.		*Does Not Support Eligibility*	*Supports Eligibility*
Gathering Input	**Parent Concerns** Interview, checklist, or comments Hearing Screening Required Familial History Medical History Motoric Development (Gross, Fine, and Oral) Communication Development		
Observation of Parent-Child Interactive Play Observe how the child's language is different when interacting with a caregiver (e.g., use more/less words, gestures more/less, increased MLU, etc.)			
Communication Samples During Dynamic Play Play with the child: Does the child's speech/ language improve with minimal scaffolding, imitation, modeling?	**Use (Pragmatics)** Means & Functions Discourse – attend to speaker, initiate, turn taking		
	Vocabulary (Semantics) What types of words – names, nouns, verbs, prepositions, etc.		
	Form (Syntax, Morphology) MLU		
	Intelligibility (Phonological Processing/Articulation) **Speech –** Motor & Functioning		
Evidence of Communicative Frustration Does the child demonstrate struggle in an effort to communicate? Does the child refuse to communicate, tantrum, retreat to passivity, etc.?			
Consideration of Cultural / Linguistic Differences Complete the process in the Culturally and Linguistically Diverse Section if indicated			
Consideration of Environmental or Economic Differences Provide documentation from team reports and parent input reviews if needed.			
Test Profile	Test scores below age expectancies		
	Variation within language test profile		

Summary of Disability Team comments about the presence or absence of disability.	**Summary of Adverse Educational Effect** Team comments about the presence or absence of adverse effects on communication, social, and pre-academic performance based upon all of the above assessment components.

Summary of Eligibility in Language
Team comments and decision regarding the child's eligibility.

Comments:

ASSESSMENT CONSIDERATIONS

The following sections each represent a row on the assessment summary worksheet on the following page and provide suggestions for how each part of the assessment may be carried out. Often, communication concerns are recognized before other co-occurring impairments. Therefore, the SLP is in a unique situation in being the first to identify additional areas of concern regarding development. At any point during the assessment process, the SLP should initiate consultation from other disciplines (e.g., psychologist, social worker, pediatrician, occupational therapist, physical therapist, etc.) and coordinate their involvement with the infant/toddler.

Gather Input

Once the formal consent is obtained, the SLP determines whether enough information regarding the infant/toddler's language was collected during the pre-referral process and obtains additional information if necessary. A language assessment should begin with a comprehensive interview with parents/caregivers to explore their concerns, familial history of communication disorders, and the child's medical and developmental history.

Also, interviews often offer the most relevant input as the SLP can dialogue with the parents/caregivers about their concerns for their infant/toddlers. A checklist to frame the initial interview and observation is included on page IL Particular attention needs to be paid to how the infant/toddler uses language to manipulate his/her home environment. Comparing the communication profiles within different environments and across communicative partners can be beneficial when creating treatment plans.

Observation of Parent-Child Interactive Play

As with all language evaluations, observe the child's interaction skills in a naturalistic environment during play with the parent/caregiver and/or sibling because, many children communicate differently when they are with familiar people. Typically an infant/toddler's language behavior's change with interaction, i.e. more/less words, more/less communicative attempt, increased/decreased MLU, etc. Therefore, observations of play between comfortable communicative partners can provide an SLP with valuable information. It also provides the SLP with the opportunity for suggesting home intervention techniques.

Communication Samples and Observations During Dynamic Play

When an infant/toddler plays they naturally use the language of which they are capable. Play allows an infant or toddler to learn and/or relate to his/her world comfortably. Within this framework the SLP gets more valid information that is reflective of the infant/toddler's true communicative performance.

Throughout the play-based assessment, the SLP can provide support and/or accommodations with the infant/toddler to determine if communication functioning improves. Oftentimes, communication improves with scaffolding, modeling, when picture symbols are introduced, or when language is made simpler and less complex. During this time the SLP would want to document if the infant/toddler's language improved with such interventions or if he/she continued to have difficulty.

A. Communication Means and Function (Pragmatics)

During a play activity, it is vital to collect information regarding the way the child communicates (e.g., crying, pointing, intonation) and the functions that it serves (e.g., requesting, protesting, greeting, naming, commenting). Refer to the Communication Means and Functions form attached. The goal is to determine whether the infant/toddler has intent to communicate. If intent is demonstrated, how does the child communicate (i.e., means)? If intent is not demonstrated, it would be important to provide the child with opportunities to protest, request, and name objects during play. Observing how the child reacts to these scenarios would be beneficial when planning treatment. The infant or toddler's parents could also complete the Communication Means and Functions forms. Completion of these forms would allow the SLP to compare how the child's communication skills differ across individuals (e.g., parents/caregivers, extended family, etc.) and environments.

B. Vocabulary (Semantics)

Does the use words during play and do they demonstrate appropriate or inappropriate use of their vocabulary (i.e., developmental milestones)? Can the child point to pictures when asked? Can the child follow directions in play activities?

C. Form (Syntax)

Mean length of utterance should be assessed to determine if appropriate for child's age as well as how well the infant/toddler understands when others talk.

D. Intelligibility (Phonology)

Is the child understood by familiar and unfamiliar listeners in and out of context? When assessing the intelligibility of an infant/toddler it is important to determine if the infant/toddler is understood by a familiar listener in context and if a referent needed or not. If the infant/toddler is understood it should be noted if contextual cues were needed. If an infant/toddler is described and/or is evidenced as being "frequently unintelligible" by a familiar listener, it would be beneficial to determine the percentage of intelligibility. If intelligibility is a concern, refer to the Articulation section for guidelines in this area.

COMMUNICATION MEANS

MEANS		DESCRIPTION
Crying, tantrums/self injury		
Proximity		Physical closeness to others and/or objects
Passive gaze		Eye contact without attempts to direct the gaze of others
Active gaze		Eye contact with attempts to direct the gaze of others
Grabs/reaches		
Vocalizations/Verbalizations		Includes a wide range of vocal acts and/or noises
Self-removal		Running away/disappearance-can be used as a form protest
Enactment (rituals)		Reenactment of partial or entire behavior sequences association with a desired location
Pulling others' hands		Example: Requesting to be tickled by placing other hands on the desired location
Touching/moving others' face/body		Similar physical manipulation of others
Giving/showing objects		Handing a toy to someone in an effort to establish attention and reference
Pointing		Distinct from reaching and actual physical contact
Intonation		Variations in pitch, volume, duration
Aggression		
Echolalia		Delayed or immediate literal repetition
One-word speech or sign		
More complex speech or sign		

Which means are used most often, e.g., does he/she usually use single words or does he/she usually point and make sounds? _____

_____

What combinations of means are used? _____

_____

COMMUNICATION FUNCTIONS

What are the reasons this student currently communicates? Check all that apply. In typical development children use a variety of these functions across all three areas from the least social, regulating behaviors, to the most social, establishing joint attention.

Regulate Behaviors

_____ Request Objects

_____ Request Action

_____ Protest Reject

_____ Direct Action

Social Interaction

_____ Greet

_____ Seek Attention

_____ Maintain Attention

_____ Name/Label

_____ Respond/Acknowledge

_____ Request Permission

_____ Direct Attention

_____ Confirm/Affirm

Establish Joint Attention

_____ Describe

_____ Relay Information

_____ Comment

_____ Request

Evidence of Communicative Frustration
Communicative frustration is a determining factor when qualifying an infant/toddler for speech-language services. An infant/toddler who struggles to communicate may fall back to more immature responses by crying, tantrummng, etc. The infant/toddler may also retreat to passivity and/or ignore their communicative partner.

Consideration of Cultural/Linguistic Differences
When an infant/toddler's native language is something other than English, it is important to consider that the language or cultural differences may be impacting his/her language development. Refer to the Culturally and Linguistically Diverse Section for guidelines in this area.

Consideration of Environmental or Economic Differences
Children who are considered "at risk" due to environmental and/or economic differences may not present with a language disorder, but rather need additional language stimulation. Provide documentation from team reports, teacher, and parent reviews if needed. The SLP could provide recommendations on how to increase experiences to promote language stimulation where/when appropriate.

Test Profile
Administering standardized assessment measures is another way in which to gather information about a child's language skills. When choosing assessments, it is important to be certain that they are normed for the 0 – 3-year population. Information from comprehensive assessments can reveal whether an infant/toddler is performing within the average range when compared to age-matched peers. It is also important to look for variations within the infant/toddler's language profile that may suggest deficits within a language subsystem, which should be explored further.

Summary of Disability
Once all information has been obtained, the team members involved with the infant/toddler review information and comment as to the presence and/or absence of a disorder. Consideration must be given to the age, cultural, environmental and health factors, which may be contributing to the language problem.

Summary of Adverse Educational Effect
A culmination of information gathered from all the above sources should be used to assist in the final determination of whether the infant/toddler's language concerns have adverse effect on educational (developmental) performance. For the preschooler, parent and/or teacher input would be used to assess the adverse effect on educational (developmental) performance.

Summary of Eligibility in Language
When considering eligibility for a preschool adverse educational effect, consider the following:

1. Results of assessment demonstrated language skills below the level expected for the infant/toddler's age.
2. Parent education is not sufficient to ameliorate the problem.
3. Child is unable to express wants and needs or exchange information effectively.
4. Child is unable to respond appropriately to parents' verbal requests.

INTERVENTION

Once a child has qualified for language intervention, services can be provided in a variety of ways. Service delivery models may include direct services on an individual and/or small group basis; and/ or consultative services which could include a variety of possibilities such as spending time with the parent/caregivers.

1. Intervention may follow one of several models once eligibility has been determined, (i.e., consultation, collaboration, direct services).
2. Services may be provided in the child's home or at a school center with parents actively involved.
3. The child's parent/caregiver should be actively involved in all aspects of intervention. This enables parents/caregivers to learn and use strategies necessary for optimal communication across environments.
4. Intervention should focus on functional communication skills.

Additional considerations

- Help the families to achieve a significant amount of interaction time throughout their day by teaching them strategies.
- Interaction, reciprocity, and receptive language are excellent foci of therapy
  Goals to increase reciprocity for a young child might include having the child engage in multiple activities, taking as many turns as possible, aiming for 3-5 back and forth turns per activity.
- When comforting a small child, it is suggested that the SLP/teacher get close to the child's level on the floor and offer a hug/reassurance and gently turn their child around so they can "play". It is often helpful to recommend this strategy to parents whose first inclination is to pick up their children up when they are upset.
- Teach families to use nondirective, balanced and matched communication (MacDonald, 2004 See Handout on page IL 9.
- Teach families to use specific action needed and use noun-verb combinations for directives to increase comprehension and build vocabulary. (Use "Feet go on floor" instead of Get down, Use Put toy on shelf instead of Clean up).

DISMISSAL CRITERIA

An infant/toddler should be dismissed from therapy once he/she has mastered the skills in all of the language domains that are appropriate for an infant and toddler and no longer has impairments that affect communication. Assessments, observations, and parent/caregiver input should all be performed before dismissal of services is rendered.

1. Results of language assessment indicate age-appropriate receptive/expressive language skills.
2. Child has achieved goals and objectives.
3. If progress is not being made due to health, attendance, lack of progress, despite documented use of a variety of therapy techniques.

BALANCED, MATCHED, NONDIRECTIVE COMMUNICATION

How Adults Can Build Balanced Partnerships with Children

1. Occassionally, physically prompt child to show how to initiate or take a turn.
2. Wait expectantly for child to initiate contact.
3. Say or do one thing at the child's level; then wait.
4. Give the child the time needed to take a turn.
5. Give the child some control in the interaction.
6. Some of the time, keep the child for one more exchange.
7. Share the choice of activities and topics with the child.
8. Keep interactions going back and forth by responding in a meaningful way to the child's behaviors and communications.

Balance

Act and communicate as much as child does.

- Respond to child
- Initiate contacts
- Communicate for a response, then wait
- Sustain joint activities

How Adults Can Build Matched Partnerships with Children

1. Respond to movements with similar movements and occasionally add a sound.
2. Respond to sounds with similar sounds and occasionally a simple word like "Hi," or a meaningful sound like "Vrrroooom."
3. Respond to a word with one or two words as though translating the child's meanings into adult language and extending the child's ideas briefly.
4. Respond to words with short phrases.
5. Frequently act like the child in spontaneous contacts.
6. Show the child a next developmental step by adding a sound, word, or communication to the child's turn.

Match

Act and communicate in ways the child can do

- Match actions, sounds, words
- Show child how next to communicate
- Be child-like

How Adults Can Build Nondirective Relationships With Children

1. Limit Questions and commands to authentic ones.
2. Communicate by using comments, a powerful general strategy in motivating a child to communicate.
3. Wait and expect: Give children time and signals to interact.
4. Expect children to communicate with others, at least some of the time.
5. Match the children's language level and ideas.
6. Build a habit of keeping the children for more than one turn.
7. Allow children to communicate from their interests and experiences much of the time, but also expect the children to communicate about the adult's interests some of the time.

Nondirectiveness

Follow the child's lead and allow him/her to share in the direction of the interaction.

- Follow child's lead
- Comment more than using questions or commands
- Limit questions to authentic ones

How adults Can Become Emotionally Attached to Children

1. Balance turns with the child.
2. Match the child's interests and communications.
3. Respond sensitively to the child's emerging communications and behaviors that may become communications.
4. Be nondirective with the child; share the lead in play and in conversations, allowing communication from the child's agenda and interests.

Emotional Attachment

Become spontaneously rewarding by engaging the child more for the fun of it than to get something done.

- Actively enjoy the child
- Be animated.
- Show child-like play style.

MacDonald, J. (2004). *Communicating Partners: 30 Years of Building Responsive Relationships with Late-Talking Children including Asperger's Syndrome, and Typical Development.* London : Jessica Kingsley Publishers.

RESOURCES

Communicating Partners Website http://www.jamesdmacdonald.org
Aimed at Helping Parents Help Children. Programs for Parents, Therapists & Educators by Dr. James D. MacDonald
Includes information, articles and more for families

Hanen Centre
Specialize in family-focused early language intervention programs and learning resources for parents and professionals.
http://www.hanen.org/

Hodgdon, L. (1995). *Visual strategies for improving communication.* Troy, MI: Quirk Roberts Publishing.

Manolson, A. (1992). *It takes two to talk: A parent's guide to helping children communicate* (3rd edition). Toronto: Toronto Hanen Centre Publication

Prizant, B. & Wetherby, A. (1990). Toward an integrated view of early language and communication development and social-emotional development. *Topics in Language Disorders, 10*, p. 1-16.

Prizant B. M. and Meyer, E.C. (1993). Socio-emotional aspects of communication disorders in young children and their families. *American Journal of Speech-Language Pathology, 2*, p. 56-71.

Sussman, F. (2000). *More than words program: Helping parents promote communication and social skills in children with autism spectrum disorder*. Toronto, ON: Hanen

Weissman, J. (1988). *Games to Play with Babies*. Overland Park, KS: Gryphon House.

Wetherby, A. & Prizant, B. (1993). *Communication and symbolic behavior scales* (normed edition). Chicago, IL: Applied Symbolic.

CULTURALLY AND LINGUISTICALLY DIVERSE POPULATIONS CONSIDERATIONS FOR LANGUAGE

INTRODUCTION

In order to qualify students for services under Federal law (IDEA 2004) and state special education rules, the student's communication difficulties must not be due to cultural or linguistic differences. ASHA's definition of Communication Disorders and Variation (ASHA, 1993) stipulates that "a region, social, or cultural/ethnic variation of a symbol system should not be considered a disorder of speech or language. ASHA practice documents and the writings of experts in this practice area are all resources for practices related to treating and assessing children with communication difficulties who are culturally and linguistically diverse. These guidelines are intended to provide only basic information and considerations for assessment and treatment in this practice area and a framework for practice. It is recommended that the reader refer to the law, rules, and other referenced documents for further elaboration.

CULTURAL COMPETENCE OF THE SLP

The ability to distinguish a communication disorder from a difference due to linguistic variability is related to the cultural competence of the SLP. Cultural competence refers to sensitivity to both cultural and linguistic differences. The SLP needs to become aware of his/her own cultural values and standards which could impact the assessment and intervention process (ASHA, 2005). Currently a majority of SLPs have Euro-centered values and standards. It is necessary to understand the history and social customs of the student's culture as well as having an understanding of the impact of bilingualism. The following guidelines are offered by Taylor, Payne, Anderson, and Owen (2001) to facilitate interacting with clients from different cultures:

1. Each encounter is a social situated communicative event subject to cultural rules governing such events by both participants.
2. Children perform differently under differing conditions because of their unique cultural and linguistic backgrounds
3. Different modes, channels, and functions of communication may evidence differing levels of linguistic and communicative performance.
4. Ethnographic techniques (using the focus of the informant's perspective to discover the culture of the family, with the acceptance of the world as defined by the informant) and norms should be used for evaluating behaviors and making determinations of the primary language.
5. Possible sources of conflict in assumptions and norms should be identified prior to interaction and action taken to prevent them from occurring.
6. Learning about cultures is ongoing and should result in constant reevaluation and revision of ideas and in greater sensitivity.

SECOND LANGUAGE LEARNING

There are increasing numbers of students in Michigan schools for whom English is a second language. These students may be bilingual or even multilingual. In some cases, the student may have limited English skills or may have limited skills in both languages.

Second language learning may be simultaneous or successive. It is important for the SLP to understand the processes of acquiring more than one language. Without such understanding the SLP may mistakenly

identify a child as having a language delay or disorder when there is none. Alternatively, the SLP may fail to recognize a true disorder. Characteristics of second language learning described by Roseberry-McKibbins (2002) include:

- Interference (Transfer) – The first language influences use of English.
- Interlanguage – Changes in language rules as the new language is learned.
- Silent period – Listening to the new language with little output
- Code switching (Using both English and native language)
- Language loss – Decrease in use of first language sometimes results in loss of skills as English is being learned.

Before an assessment is initiated one must consider the length of exposure to English. Acquisition of any language progresses along a continuum as persons learn to read, write, speak and listen. Longitudinal research on how bilingual students acquire English language skills indicates that conversational skills often approach native proficiency with about two years of exposure to English. This is referred to as the Basic Interpersonal Communication Skills (BICS). Basic Interpersonal Communication Skills develop more informally through conversation and social interaction. English speaking children develop Basic Interpersonal Communication Skills in early childhood while at home.

In contrast, bilingual students may require five to seven years to develop the formal academic language skills, referred to as Cognitive Academic Language Proficiency (CALP). Academic proficiency refers to listening, speaking, reading and writing abilities as they are applied in the content areas. Cognitive Academic Language Proficiency develops formally through instruction of literate language in the school setting. English speaking children develop their CALP throughout Elementary and Middle School.

STUDENTS WHO ARE BIDIALECTAL

Students who use a dialect of English other than Standard American English are called bidialectal. For example students whose family uses African American English or Southern dialect of English are expected to use Standard American English in school, are bidialectal. Students may be bidialectal in other language as well. For example, in French, the Belgian dialect is different than the dialect of French spoken in Paris, France. One must be sure, that what appears to be a communicative disorder of a bidialectal student is not simply a variation of the communication system shared by a common regional, social, or cultural/ethnic factor not representative of the group's language (ASHA, 2003).

THE USE OF INTERPRETERS

Interpreters should be used to assist the SLP and team throughout the pre-referral and assessment process, unless a speech-language pathologist is fluent in the student's native language. The person used as an interpreter should be fluent in both oral and written modalities of the languages spoken by the student. The interpreters facilitate communication with the family, participate in gathering background and assessment data, and help communicate assessment results and interpretations during meetings. Persons who can act as interpreters are often available through local and/or county bilingual programs.

There are some important considerations for the use of interpreters. The interpreter must be present during assessment and parent conferences. The role of the interpreter must be defined for the family. Prior to the assessment the SLP should meet with the interpreter and discuss the assessment, including the following:

- Discuss roles and responsibilities during assessment.
- Review key concepts, phrases, words, and procedures that will be used.
- Remind the interpreter that he/she must not alter, omit, or add to the communication.
- Ask the interpreter if specific concepts/words are not translatable.
- Ask the interpreter about cultural considerations for the testing event.

After any sessions with the student, ask the interpreter to meet with you. Discuss behaviors, outcomes, questions, and problems observed during the session (Fradd, McGee, & Wilen, 1994; Kayser, 1995; Mattes & Omark, 1991).

It should be noted that if the speech and language pathologist uses an English standardized assessment tool with an interpreter or any other adaptations of the procedures, then the standardized score(s) can not be used to make eligibility decisions. However, the speech and language pathologist may report on communication behaviors seen during the assessment. Any standardized test adaptations and use of an interpreter should be described in the report.

CLD CONSIDERATIONS FOR SERVICE DELIVERY RELATED TO LANGUAGE

This section outlines suggested activities to guide teams in determining whether a student may present with a language difference or a disorder. The following chart may be used during the prereferral activities, when deciding whether an evaluation is appropriate, and again later, if an evaluation is completed. Each of the activities is described in more detail after the chart.

CULTURALLY AND LINGUISTICALLY DIVERSE GUIDE/TEAM SUMMARY

Student _____ Birth date_____Date_____
Speech-Language Pathologist _____Team Members_____
Native Language_____Other Languages Spoken_____
Dialects Spoken_____Languages Spoken in Home_____

		Suggests Speech or Language DIFFERENCE	Suggests Speech or Language Disorder
Input	**Teacher(s)** ☐ interview/observations		
	Bilingual Staff Interview Obtain information about the student and the culture		
	Parent Complete parent interview (with interpreter, if needed. To obtain socio-cultural history, developmental history, and information about language competence		
	Student interview/comments		
	Review of Pertinent Information Educational achievement and other records such as: MLPP, DIBELS, student permanent record (CA-60)		
Observations	**Family-Student Observation – if available** Observe the student interacting with family		
	Classroom Observation Observe the student participating in the curriculum		
Curriculum Presentation/Student-teacher interaction Determine whether the student is responding to the presentation format of the classroom or curriculum materials. Does the student expect a different presentation given their cultural background? Is this mismatch causing learning or language difficulties? (For example, students from Asian cultures may need to learn that it is expected to ask questions and to interact in a group).			
Further classroom adaptations/modifications Select additional classroom accommodations and modifications to support the student during a trial period.			
Dynamic Assessment /Trial Intervention Assist the student with the task during single or over multiple sessions. How well does the student perform with help? Does the student experience success with minimal scaffolding or accommodation (e.g., given a strategy, can do it independently) or does the student continue to have difficulty?			

REFERRAL Decision
Together with the student's team, decide whether the student is suspected of having a disability beyond a language difference and needs a formal evaluation. If a formal evaluation is completed, now turn to the appropriate section of these guidelines and follow those procedures along with the considerations below.

Assessment Considerations for Students suspected of having a Disability
Complete the Eligibility Guide/Team Summary in the section

☐ Use of an interpreter for bilingual students
☐ Extended case study
☐ Application of Interpreter Guidelines
☐ Alternative assessments/inventories
☐ Language sampling in multiple settings/partners
☐ Application CLD criterion to standardized test selection/use

PRE-REFERRAL INFORMATION: ACTION STEPS

Teams should complete many activities to determine whether the student appears to have a language disorder rather than a language difference and determine whether a complete assessment is warranted (if the student is suspected of having a disability).

Gather Information

The first step in determining whether or not the student has a communication disorder or difference involves gathering information related to development history, social-cultural history, language competency as reported by others, and school performance in the school setting. This data can provide the speech and language pathologist (SLP) information on the parent's language origin, traditions, values, as well as viewpoints on language development, assimilation, and other relevant background information.

It will be important to determine the student's proficiency in the native language and whether there is evidence of language disorder in both English and the student's native language. Gathering information from teachers, bilingual staff and parents about the student's patterns of language use in both languages, how the student's language compares to multi-lingual siblings and peers will be helpful. The SLP looks for language patterns that are not representative of the speaker's native language/dialectal patterns. Some language variation patterns may be the result of normal features of first language learning, i.e. code switching, grammatical errors, word retrieval difficulty, etc.

Teacher Interview

Complete a teacher interview to learn about the student's language proficiency across languages, participation in the classroom and curricular tasks and the impact of his or her culture and linguistic differences in the classroom.

Questions to consider when looking at the curriculum and classroom demands on the student according to Kayser (1998) might include:

- Is the curriculum known to be effective for linguistically diverse students?
- Is there evidence that the child did not learn what was taught?
- Is there evidence of systematic efforts to identify the source of difficulty and take corrective action?
- Have alternative programming been implemented? How for long? Was it successful? Does the program need further modifications or alterations?
- Is the language concern still present, even thou alternative measures have taken place and are not representative of the student's linguistic culture?

There are additional questions to ask teachers on a sample teacher interview form on page CLD-L6

Bilingual Staff Interview

Complete an interview with bilingual staff to learn about the student's speech proficiency across languages, cultural background, and other relevant information, such as sound production in the native language. There is a form that may be used for this purpose on page CLD-L-7

Parent Interview

Complete a parental interview with the help of an interpreter to learn about the student's language proficiency across languages, cultural background, and other relevant information. There is a form that may be used for this purpose on page CLD-L-8.

CULTURALLY AND LINGUISTICALLY DIVERSE TEACHER INTERVIEW

Student _____ Birth date_____Age_____Date_____
Teacher _____Speech-Language Pathologist _____
Native Language_____Other Languages Spoken_____
Dialects Spoken_____Languages Spoken in Home_____

What are your major concerns with the student's communication in the classroom? _____
_____

Give examples of the concerns: _____

Are the child's difficulties, the result of adaptation to a different culture in the classroom environment?
_____ Yes _____No

Students in the beginning stage of learning another language may be in what is called the "silent period."
How long has the student been exposed to the second language? _____

What language does the child feel comfortable using in social contexts? _____

What language does the child feel comfortable using in academic contexts? _____

Has language dominance been determined? (From parents' perspective, or bilingual staff's perspective?)
_____ Yes _____No Comments_____

Does the child receive ESL support in the classroom? _____ Yes _____No

How has that support benefited the student's learning in your classroom? _____
_____

What other interventions measures have you tried? _____
_____

Did the interventions work? How long has the intervention program been in place? _____
_____

Has the child participated in reading interventions? _____ Yes _____No

How do the student's communication skills compare with other student's with his or her linguistic background? _____
_____
Does the child initiate verbal interactions with peers? _____ Yes _____No
Does the child initiate or organize play activities with peers? _____ Yes _____No
Does the child demonstrate facial, eye contact, and gestures deemed culturally appropriate by peers?
_____ Yes _____No Describe _____

CULTURALLY AND LINGUISTICALLY DIVERSE BILINGUAL STAFF QUESTIONNAIRE

Student's Name:_____ Birth date/Age: _____/__Date:_____
Staff Member's Name and Title:_____

Does the student demonstrate language competencies in their native language?
_____ Yes _____No Describe: _____

Does the student demonstrate narrative language competencies comparative of their peers?
_____ Yes _____No Describe: _____

Dialect variation_____Primary language spoken in home? _____

What are the parent's perspectives about using English at home, or school? _____
_____

What are the student's perspectives about using English at home, or school? _____
_____

What support services do you provide for the student? _____
_____

What strategies have you found to be useful for developing academic successful for this student?
_____

Does the child follow directions? _____ Yes _____No Describe: _____

Can the child pronounce words, so that his or her speech is understood in their primary language?
_____ Yes _____No describe: _____

Does the child initiate verbal interactions with peers_____ Yes _____No
Describe: _____
Does the child initiate or organize play activities with peers? _____ Yes _____No
Describe: _____
Does the student demonstrate facial expressions, eye contact, and gestures deemed appropriate by peers?
_____ Yes _____No Describe: _____

Can the child tell stories that are representative of their peers in their primary language?
_____ Yes _____No Describe: _____
Does the student use code-switching (moving from one language to another, inside a sentence or across sentences) in the classroom? _____ Yes _____No
Describe: _____
Have you observed the student using code-switching in social situations (e.g. lunch room, playground)?
_____ Yes _____No Describe: _____

CULTURALLY AND LINGUISTICALLY DIVERSE PARENT INTERVIEW

Student _____ Birth date_____Age_____Date_____

Parents' Names: _____ Speech-Language Pathologist_____

Person Interviewing: _____ Interpreter: _____

Native Language_____Other Languages/Dialects Spoken_____

1. At what age did the child begin speaking? _____
2. What was the child's first language? If not English, when did the child begin speaking English?

_____

3. What language is used most often by your child at home? _____
4. What language is used most often by the child's brothers, sisters, and friends? _____
5. What language do you use most often when you talk to your child? _____
6. What language do you use most often when you talk to your spouse? _____

	First Language	English
7. How often does your child speak each language at home?	Frequently Sometimes Not at all	Frequently Sometimes Not at all
8. How often does your child hear others use each language at home?	Frequently Sometimes Not at all	Frequently Sometimes Not at all
9. How often does your child talk with people who speak each language outside of the home?	Frequently Sometimes Not at all	Frequently Sometimes Not at all
10. How often do you read stories to your child in each language?	Frequently Sometimes Not at all	Frequently Sometimes Not at all
11. Do other children make fun of the child's speech?	Yes /No _____	Yes /No _____
12. Do adults understand what the child says?	Yes /No _____	Yes /No _____

	First Language	English
13. Does your child have problems understanding remembering new words?	Yes /No _____	Yes /No_____
14. Does your child pause, repeat words or parts of words?	Yes /No _____	Yes /No_____
15. Does your child follow directions?	Yes /No _____	Yes /No_____
16. Does your child use complete sentences?	Yes /No _____	Yes /No_____
17. Does your child use gestures to communicate?	Yes /No _____	Yes /No_____
18. Can your child pronounce so that most of his speech is understood?	Yes /No _____	Yes /No_____

19. How does your child relate with children who speak the native language? _____

_____

20. How does the parent feel about the child's speaking ability? _____

_____

21. How does the child's speaking ability compare to younger siblings? _____

_____

22. How does the child's speaking ability compare to other children of the same age? _____

_____

23. Has your child's voice ever sounded strained, hoarse, raspy, or nasal voice quality? _____

If yes, When and for how long?_____

Please describe _____

_____ _____

Parent Signature Date

Classroom Observations
Use this as opportunity to further assess peer interactions, language development and proficiency, cultural and linguistic differences, and environmental and community factors evident in the classroom as well look at the curriculum demands on the student (Ortiz, 2002). Classroom observations can also validate concerns expressed by staff.

Student Participation and the Cultural Perspective
Throughout this process of gathering information about the student's difficulties in class, investigate each issue as it may relate to the student's cultural background. Communication behaviors are perceived from a person's values, attitudes, and history within their own cultural system. What is perceived to be a communication disorder in one culture may not be a communication disorder in another culture and the communication behavior may in fact have an altogether different meaning. These factors must be considered, when determining a language disorder or a language difference. For example: A student's reluctance to initiating conversations, or answering questions in the classroom may be seen as a red flag to a teacher and the communication behaviors may be perceived as a possible language concern, but in that student's culture initiating conversations with an adult may be considered rude or disrespectful.

The pragmatic rules of discourse and narratives differ from culture to culture. Topic selection, eye gaze, and gestures are all culturally determined. Traditional teacher curriculum presentations such as teacher led discussions, and the question-answer formats may be a foreign concept to culturally diverse populations.

Suggest Additional Classroom Accommodations
Students with cultural differences may benefit from accommodations that the teacher may not have tried. During this information gathering process, the team should select and make additional adaptations and modifications to the general education program. The district may have resources for additional adaptations and modifications or a use a resource like *The Learning Strategies Handbook,* (Chamot, 1999). Some accommodations frequently used for this population include (Roseberry-McKibbins, 2001):

- Slow down the rate of speech. When students are learning another language, they need time to process and comprehend information presented.
- Use shorter sentences. This also allows students to process and comprehend information.
- Repeat, rephrase, and restate information
- Supplement auditory presentations with visuals.
- Allow extra time after answering questions
- Use nonverbal communication such as gestures and facial expressions to emphasize information for comprehension.
- Emphasize key words with exaggerated intonation and increased volume.
- Match the student with a peer buddy.
- Periodically review adaptations and modifications and continue or change, as needed.

Table 2 – Phonological and Language Features of Dialects/Languages Encountered in the U.S.

	African-American English	Native-American English	Spanish	Vietnamese
Phonological Features	***Three major phonologic rules:*** -the silencing or substitution of the medial or final consonant in a word. -the silencing of unstressed initial phonemes and unstressed initial syllables. -the silencing of the final consonant in a consonant cluster at the end of a word. ***Evidenced specifically in the following:*** -Voiceless th replaced with /t/ or /f/ in all positions (thought -tought, nothing - nofin', bath -bat). -Voiced th replaced with /d/ in initial position, and /d/, /v/, or /f/ in medial and final position (this -dis, bathing -bavin'). -/r/ and /1/ deleted in medial and final position (poor-po; help -hep), /r/ deleted in initial consonant blends (protect - p'otect). -Voiced stops devoiced or unreleased in medial and final position, with lengthened vowel preceding (bed -bet or be' with prolonged e). -/v/ sometimes replaced with /b/ in all positions (valentine -balentine, stove - stobe). -/m/ and /n/ deleted in final position with nasalization of preceding vowel. -ing replaced with /n/ in medial and final position (sing -sin', swinging -swinin'). -/z/ omitted or replaced with /d/ before nasal sound (wasn't -wud'n). -Short e vowel replaced with short i vowel before nasals (pen- pin). -Consonants /w/ and /d/ omitted in specific words in initial position (was -'as, one - 'un, don't- 'on't). -Unstressed initial syllables dropped (about - bout, because- cause). -Final consonant omitted in final consonant clusters (nest- nes, slept -slep).	-American Indian languages can be divided into approximately 60 different language families. -Dialects retain the phonemic patterns, phonological rules, and stress patterns of the tribal language. -Dialects retain intonation patterns of the tribal language.	Characteristics: -Phonology is made up of 19 consonants and two semivowels. -Many Spanish consonants are unaspirated. -There are no equivalents to certain English consonants such as *th* and *sh*. -Only 6 consonants /n, r, 1, s, z, d/ occur in final position. -Spanish clusters are fewer and less complex; common ones include consonant plus III and consonant plus /r/. -/s/ cluster does not appear in initial word position, and final consonant clusters are rare. ***Differences evidenced in:*** -Voiceless *th* replaced with /t/ or /s/ in all positions (thumb -tumb, mouth- mous). -Voiced *th* replaced with /d/ or /z/ in all positions (they -dey). -/z/ replaced with /s/ in all positions. -*sh* replaced with *ch* or vice-versa in all positions (shoe -choe, chicken- shicken, watches - washes). -/v/ replaced with /b/ in all positions (very -bery). -*j* replaced with /j/ or vice-versa in initial position Gello -yellow). -/r/ distorted in all positions, often resembling a trilled /r/ in initial position. -Final consonants often devoiced or omitted. -Omission or distortion of final consonant clusters. -Addition of schwa vowel before /s/ or omission of /s/ in initial consonant clusters (study- estudy, spoon -poon). -Short English vowels that don't occur in Spanish may be substituted with a long vowel equivalent (witch -weach).	Characteristics: -Alphabet consists of 23 consonants and 12 vowels, including vowel clusters, diphthongs, and triphthongs. -Final consonants limited to either voiceless stops or nasals and often unreleased. -No consonant clusters or blends exist in Vietnamese. -Predominantly a monosyllabic language; syllabic stress for contrastive purposes not used. -Tonal language consisting of six tones that convey meaning. -Three main dialects: Northern, Southern, and Central. ***Differences evidenced in:*** -Omission or distortion of final consonant sounds (most final consonants produced in English, including b, d, g, s, z,f, v, r, l,j, th, sh, ch). -Voiceless th replaced with /t/ or /s/ (thumb -tumb or sumb). -Voiced th replaced with /d/ or /z/. -sh and ch sounds replaced with /s/ (shoe or chew -sue). -/t/ and /k/ unaspirated in initial position. -Simplification of clusters and blends; may add a schwa vowel between consonants. -Speakers may attempt to use Vietnamese tonal system with English words or use a monotone; may struggle with English intonation patterns that define sentence types and convey communicative intent.

	African-American English	Native-American English	Spanish	Vietnamese
Grammatical /Lexical Features	-Nonobligatory regular past tense -ed (I walk to school yesterday). -Irregular past tense not always inflected (I see last week). -Nonobligatory regular and irregular present tense third person -s (she eat, he do). -Less frequent and nonobligatory use of *will* (I be going to drive, I gonna drive, I be home soon). -*Been* used for action in distant past (He been gone). -Nonobligatory copula and auxiliary be verbs when contractible (She sick). -Habitual state of verbs marked with uninflected *be* (She be workin'). -Use of *be* as main verb for is, are, or am (I be here, he be busy). -Use of double modals (We might could go). -Neutralization of subject-verb agreement (They was there). -Nonobligatory possessive -'s where word order expresses possession (the boy hat). -Nonobligatory plural -s with numerical quantifier (ten dollar, fifty cent). -Use of indefinite *a* instead of *an* when appropriate (a apple). -Pronominal apposition where pronoun immediately follows noun (Mama she mad). -Nonobligatory relative pronouns (He the one did it-omission of *who*). -Reflexive pronouns regularized (hisself, theirself). -Demonstrative *them* or *them there* substituted for *these, those*. -Use of double/triple negatives permitted. -*Ain't* used as negative marker. -Same form for direct and indirect questions (Where it is?). -Use of *do* for conditional *if* (I ask did she go). -Endings -er and -est can be added to most adjectives (worser, baddest). -*More* and *most* combined with superlative and comparative markers (most baddest). -Lexicon contains many differing vocabulary words and expressions.	-Dialects carry over syntactic forms and morphological rules from the tribal language. -Constructions found in other nonstandard forms of English can also be found in Native American dialects (*ain't*, uninflected forms of be, etc.).	-Nonobligatory regular past tense -ed (1 talk to him yesterday). -Nonobligatory regular present tense third person singular -s (he eat). -Use of *go* to instead of *am going to* (1 go to dance). -Occasional use of *have* instead of copula *be* form (1 have ten years). -Nonobligatory *do* insertion in questions (You like apples?). -No noun-verb inversion in questions; intonation used to depict question (Felipe is leaving?). -Post noun modifier used in place of possessive -'s (the pencil of my sister). -Possessive pronoun not used with body parts (1 cut the finger). -Nonobligatory plural-s (Girl are singing). -Subject pronouns omitted when subject identified in previous sentence (Mother is sad. Is sick). -Articles often omitted (Go to store). -Use of *no* before verb (She no eat candy). -*No* used for *don't* in negative imperatives (No throw food). -Less frequent use of comparative -er (more pretty). -Word order errors such as adjectives following nouns (house white).	Data not specific to Vietnamese only. The following is data typical of Asian English: -*Be* verbs may be omitted or improperly inflected (I going). -Auxiliary *be* and *do* omitted or uninflected (He not going). -Past -ed may be omitted (He want), over generalized (He eated), or doubly marked (He didn't saw). -Past participle may be unmarked (I have eat), over generalized (He has wented), or *have* auxiliary may be omitted or uninflected (He been there, He have one). -Noun-verb agreement may be in error (She have). -Plurals may be omitted with quantifiers (two shoe) or over-generalized (four sheeps). -Subject-object pronoun confusion (Her here). -Errors of possessive marking (him book). -Demonstrative pronoun confusion (those horse). -Errors on comparatives (gooder). -Use of double negatives. -Simplified negative marker (He no want). -No reversal of auxiliary verb in questions (You are going?). -Auxiliary omitted in questions (You like baseball?). -Omission or misuse of prepositions (She is at room). -Omission of conjunctions (You I leave now). -Omission or overuse of articles (Go to store, go to the home). -Word order errors including adjectives following nouns (shoe red), possessives following nouns (hat mine), subject-verb-object order (He gave out them).

Sources: Adapted from Battle, D.E. (1998). *Communication disorders in multicultural populations* (2nd ed.). Boston: Butterworth-Heinemann; Hwa-Froelich, D., Hodson, B.W., & Edward, H.T. (2002, August). Characteristics of Vietnamese phonology. *American Journal of Speech-Language Pathology, 11,* 264-473; Paul R. (1995). *Language disorders from infancy through adolescence: Assessment & intervention*. St. Louis, MO: Mosby-Year Book, Inc.; Shipley, K.G., & McAfee, J.G. (1998). *Assessment in speech-language pathology: A resource manual* (2nd ed.) San Diego: Singular Publishing, Inc.

Dynamic Assessment

Dynamic assessment is cited as one of the preferred approaches to evaluating children from culturally or linguistically diverse (CLD) backgrounds as suggested by Pena, Iglesias and Lidz (2001), who have done extensive research in this area. This approach is another way to assess language development of students using a test-teach-retest method. This approach is fluid, interactive, and responsive. Dynamic assessment utilizes an assessment/intervention method known as the Mediated Learning Experience. The Mediated Learning Experience emphasizes the SLP deliberately teaching a strategy, observes the child respond to that teaching, and modifies the instruction or teaching according to the child's need. Using mediated learning experiences to assess the student performance can provide a wealth of information of the student's language development.

The major outcomes of dynamic assessment will help the SLP determine a language disorder versus a language difference. For example; students who make changes in their language development as a result of using the test-teach-retest method during a brief intervention session would most likely have a language difference. If the student still has difficulty responding to brief mediating intervention sessions, then it is probably wise to do further assessment, as these children most likely may have a language disorder.

Components

Internationality is a strategy focused on teaching, and creating an awareness in the child. For example the SLP may begin a mediate session on Folk Talks with an emphasis on character information. Miller, Gillam, and Pena (2001) suggest that the SLP introduce the instruction with the intent to teach. "Today, we're going to talk about telling stories." When people talk about stories, they usually talk about the characters. The SLP takes notes on what did he/she do to support the child? How did the child respond?

Meaning is another MLE strategy. The SLP will focus on what is important in the lesson or experience. You help the child figure out what is important, as well as ignore the irrelevant details. SLP states, "Information about a character is important because it tells the listener who they are as well as what they look like." Again, the SLP notes, what did you do to support the child's learning, and how did the child respond.

Transcendence helps the child hypothesize. The strategy takes the story beyond the events and descriptions. The SLP may say, "How would you change the story, if there were ……?", or "If you had different characters, would like do the same things, or would they act differently?" What did you do to support the child? How did the child respond?

Competence teaches the child to evaluate and plan, and transfer a particular skill. The focus is on teaching the child to find importance in their learning, and discuss the skill in relationship to the task at hand, and future usage of the skill. "We have been talking about describing the characters. Why is it important to do that? The next time you tell a story, what are you going to remember to put in it? We have been talking about describing characters in your own stories. How are you going to remember to describe characters in your stories? What did you do to support the child? How did the child respond?

This is an example of teaching narratives to children, but the SLP can implement these strategies in other tasks using the Mediated Learning Experience.

Referral Decision
Decide whether or not to refer a student for assessment, using the data gathered in the pre-referral process, if the student is proficient in his/her first language, then the SLP should not refer for a speech and language assessment. However, the SLP could offer other services such as consulting with the teacher and other staff about teaching strategies that the student utilized to achieve academic success in his/her academic performance during the dynamic assessment process.

When assessing the pre-referral data, if the SLP notes that there are concerns in the student's primary language, and mediated learning strategies aren't intense enough to have a significant impact on the student's learning, then a speech and language assessment may be warranted to see if the student has a language disorder or difference.

Characteristics if bilingual and bidialectal students with a language learning disability

Roseberry-McKibbins (1995) suggests the following characteristics of children who may have a language learning disability:

1. Nonverbal aspects of language are culturally inappropriate.
2. Student does not express basic needs adequately.
3. Student rarely initiates verbal interaction with peers.
4. When peers initiate interaction, student responds inappropriately.
5. Student replaces speech with gestures.
6. Peers give indications that they have difficulty understanding the student.
7. Student often gives inappropriate responses.
8. Student has difficulty conveying thoughts in an organized, sequential manner that is understandable to listeners.
9. Student show poor topic maintenance.
10. Student has word finding difficulties that go beyond normal second language acquisition patterns.
11. Student fails to provide significant information to the listener.
12. Student has difficulty with conversational turn-taking skills.
13. Student perseverates on a topic.
14. Student fails to ask and answer questions appropriately.
15. Student needs to have information repeated, after rephrasing, and restating.
16. Student echoes what he or she hears.

ASSESSMENT CONSIDERATIONS FOR CLD WHEN DETERMINING ELIGIBILITY
Speech-language assessment needs to be a multidisciplinary assessment and determining a language difference or disorder is a team decision. The team must keep in mind that the assessment is not to measure English proficiency but to determine if there is a language disorder. Second language learners often exhibit language differences and difficulty in academics. It is not legal to diagnose a student who has limited English proficiency as language learning disabled on the basis of English language testing only. (Roseberry-McKibbins, 1995)

Assessments involve many activities and it is particularly important that SLPs use non-standardized approaches as the primary assessment tool for assessing speech and language of culturally diverse populations. Some researchers refer to Naturalistic procedures (checklists, parent/teacher interviews, and language sampling), as a means to assess CLD students. This approach is considered more appropriate for describing the nature of the student's problem in addition to evaluating language change. Standardize testing has been discussed for identification purposes. Does the student have a language disorder? There are some standardized tools for specific populations, however consult the test manual for information regarding cultural bias, population, and statistical relevance for the area assessed. Remember the SLP focus is not to measure English proficiency but to determine if there is a speech or language disorder.

Language Dominance

Part of the assessment should explore where a student's proficiency lies in both languages. (Paul, 2007; Saad, 2002) describes the continuum as:

- Bilingual English proficient: Student is bilingual and is fluent in English, or has greater skills in English than the second language
- Limited English Proficient: Proficient in native language, but not English
- Limited in Both Languages: Communicatively Impaired

Based on the above, the clinician explores the child's language dominance which will suggest the language to be used for intervention when it can be provided:

- Limited English Proficient: Assessment and intervention is conducted, ideally in the student's native language.
- Limited in Both Languages: Assess both languages to determine language dominance and the language to be used for intervention.

Extended Case History

The case history can provide important information on language development, student's residency in the United States, language dominance, as well as exposure to primary and secondary language. It can also provide information on cultural beliefs about language development, peer communication interactions, and the student's academic history. This information can be obtained from the parent interview, data from the child study team, the student's academic record (C.A. 60 or 80) and questionnaires responses from the teacher, and the Bilingual staff.

Language Samples Across Settings and with Multiple Partners

Elicit language samples in English and in the first language with an interpreter. Language sampling across settings with various communication partners can best assist the SLP in determining the difference between a language disorder versus a language difference with C/L students. Multi-formats such as story re-telling, parent and/or interpreter/clinician/student interaction and play observation are some examples. Wordless books can provide information on narratives in language one and language two. The SLP can analyze the two narratives according to the narrative format of the student's culture as well as the story format grammar in the school's curriculum. The lunchroom and the playground activities provide excellence opportunities to obtain language samples in less formal settings.

In the classroom, using a dynamic language sampling approach helps determine between extrinsic and intrinsic factors affecting the student's language. Examples of extrinsic and intrinsic factors could include:

observing the ease of learning of the student during the test-teach-test method as well as how did scaffolding affect the student's performance on the task.

Curriculum Based Language Assessment (CBLA)
This is an effective process for this population once the understanding of the student's cultural and linguistic differences are taken into account. The SLP is able to determine whether or not the student has communication strategies, content, and form essential to perform in the classroom. (Discussed extensively in the Language section of this document on pages L-13 to L-14.)

Alternative Assessments/Inventories
Rating scales, checklists, and inventories of language skills can provide more information in language development, and language dominance thru parent, bilingual staff, and other informants. These assessment tools can provide information from the informant's perspective on whether or not the student is developing differently from their age peers with the same culture and linguistic backgrounds. A few examples of such inventories include:

Assessment Instrument for Multicultural Clients (Adler, 1991)
This rating scale has a five point rating to assess pragmatic usage, language structure, supra-segmentals and body language, voice, fluency, and auditory acuity and comprehension. This tool can be used with speakers of nonstandard dialects or speakers of more than one language.

Bilingual Verbal Abilities Test (Mattes & Omark, 1984)
A language inventory for elementary school age children. This inventory can be use for information about the student's primary and secondary language. Speech and Language Assessment for the Bilingual Handicapped.

Bilingual Vocabulary Assessment Measure (Mattes, 1995)
This test is a 48 item screening expressive vocabulary test. The items are representative of a variety of languages. The child is asked to name the item in their primary language and English. The intent was to select concepts that most children experience prior to kindergarten.

James Language Assessment Dominance Test (James, 1975)
This tool was designed for students in kindergarten and first grade. The test items are in English and Spanish. This is a single word test, using a question format. There is a home component to assess home language use.

Spotting Language Problems (Damico & Oller, 1985)
This tool assesses pragmatic language for students aged five years and older. The test is designed for student assessment of language proficiency in Spanish, Zuni, French, German, and Vietnamese. Components of this tool include: nonfluencies, revisions, inordinate delays, nonspecific referential terms, inappropriate responses, poor topic maintenance, and need for multiple repetitions.

Diagnostic Evaluation of Language Variation (DELV) (Seymore, Roper, & Villers, 2003).
This assessment tool was developed to distinguish disorder patterns of speech and language, from language variations. This assessment tool has a screening test as well as a norm-referenced component.

The DELV assesses the student's knowledge of those aspects of speech and language that are common across varieties of American English.

Standardized Test Selection and Use

There are important considerations for the selection and use of standardized tests with this population. In general, using standardized tests are problematic because of cultural and linguistic bias, difficulty in translation, and invalid normative data. However, in some cases, there may be a standardized test that can be used to provide **part** of the evaluation information.

One test that *may* be appropriate is the *Diagnostic Evaluation of Language Variation (DELV)* assessment tool (Seymore, Roper, & Villers, 2003). It was developed to distinguish disorder patterns of speech and language, from language variations and has normative data that may meet the needs in some situations.

Check the Normative Population

If possible use standardized tools that have been developed and normed for the culture, language, and dialect represented. Some standardized tests have some presentation of dialectal culture patterns, along with specific procedures for addressing differences. Some tests have versions in languages other than English. The test administrative manual should indicate not only the language but also the dialects used by the children used to gather the normative data.

Check for Test Bias

SLPs should check the potential test for bias. It is important to investigate cultural and linguistic variables that may affect comprehension of test questions. If possible, the examiner could assess other peers, representative of that culture group to see if they understand the test questions. These results could be compared to see if there was a language disorder or difference.

Some additional questions to consider when selecting an assessment:

- Is the student's culture adequately represented in the normative sample?
- Does the student have some familiarity with the language of the test?
- Does the student have some familiarity with situations presented in the test stimuli?
- Are the student's values different from those presented in the test?
- Is the vocabulary geographical or culture specific?
- Does the test display a potential for bias? Are the procedures for administration based on vocabulary and experiences of the majority culture?
- Are the picture stimuli of a specific geographical or majority culture?

Test Modification

Although alternative measures are favored due to test bias, some of the literature addresses test modification (Kayser, 1989). This alternative is limited in nature and involves the addition, modification or deletion of items with respect to the culture, logistic background of the population represented. Scores are not used for decision making because the modifications violate test reliability, validity, and could influence the outcome of the identification process. The student's performance on the test must be reported in a descriptive format. For use in this manner, modify standardized testing by eliminating potentially culturally biased items, reword instructions, allow extra time for responses, increase number of

practice items, record all responses, test beyond the ceiling, and ask for explanation of incorrect responses (Wyatt, 1998).

Another form of modification is to use the standardized test in a dynamic assessment or mediated learning experience format. Use the standardized tests for pre and post testing, giving instruction for a short period of time between tests in order to determine how much help a student needs to learn to label (Peña, Iglesias, & Lidz, 2001). Reducing test bias through dynamic assessment of children's word learning ability.

Lastly, the use of an English standardized assessment tool with an interpreter should be considered a modification of the test documented and then reported in a descriptive manner regarding communication behaviors seen during the assessment.

Determining Eligibility
Review all of the cultural, linguistic, medical, developmental, and academic information that has been gathered. Determination of a language difference versus a language disorder should be a team effort considering all the observations of parents, teachers, bilingual staff, and special education staff.

INTERVENTION
The optimal therapy situation would entail a speech and language pathologist who speaks the same language or dialect pattern of the student. Research states that a Culturally/Diverse (CD) student with a language disorder performs better with an intervention service delivery model in their primary language. However, in many cases this is not possible, so there are alternative approaches to services. A speech and language pathologist can take advantage of all services delivery models to provide services to CD students with a communication disorder.

The speech and language pathologist can provide a language framework using the primary language of the student with the help of resources such as ESL tutors, parents, and language materials. As the need for services to CD students continues to grow, more commercial products have been developed in some languages (e.g. Spanish products) to promote language development. These products are mentioned as a resource not as a substitution for a complete therapy program. Service delivery models as well as resources selected in any program should be based on the student need(s) addressed in the student's goals. The speech and language pathologist can provide insight into language acquisition with the aid of the ESL (English as a Second Language) or bilingual staff. The SLP with the aid of the bilingual staff or ESL staff can facilitate language skills in the classroom and at home with in-services and training programs. The SLP can utilize a team approach with the classroom room teacher, ESL, or bilingual staff members to develop curriculum based language activities that can be translated by the ESL/Bilingual staff for the CD students. Another alternative to facilitating the primary language of the CD student, would be to train an ESL tutor, community volunteer or aide who speaks the primary language of the student to promote language development in classroom situations with the SLP. The SLP can demonstrate techniques such as modeling, expansion, extensions, self-talk, and parallel talk with the ESL tutors, and parents, in the student's primary language.

It is important to keep records of development in both languages. The SLP can monitor or record development of growth in both languages. This information may be useful for the classroom teacher, when determine English intervention in the classroom. English intervention is recommended as a last resource. It may be a reality, if there are no other resources available and the parents are in agreement. If

this is the case, then language acquisition may develop utilizing the following approaches from *The Source for Bilingual Students with Language Disorder* (Roseberry-McKibbins 2001):

- Focused Stimulation. The SLP targets a structure or vocabulary word and models it in many situations.
- Expansion. The SLP expands the student's utterances using the correct grammatical structure
- Extension. The SLP comments on the student's response and supplies new semantic information

Many SLPs have concerns with responding to requests from teachers about what to do with students who use variant English dialectal patterns. If the student has language dialectal patterns representative of their cultural/ethnic background, then a communication disorder or delay is not present. Classroom success in school may be elevated when the student has the ability to master the code of the classroom language. The SLP can take a consultant role with the classroom teachers. For example: using Daily Oral Language exercises to promote written language skills.

Cole (1985) has developed a model for 'Teaching English as A Second Dialect or Language'. This model focuses on the following language facilitation techniques:

1. Modeling and Expansion
2. Script-Based approach
3. Literature-Based scripts
4. Dialect Stories
5. Situational contrastive Drills
6. Linguistic Contrastive Drills
7. Paraphrasing and Retelling
8. Role Projection

Making decisions about eligibility for students with cultural and linguistic diversity is challenging and should be approached with caution. There are many resources available to SLPs. A few of these are listed below.

RESOURCES

Anderson, R. (1996). Assessing the grammar of Spanish-speaking children: A comparison of two procedures. *Language, Speech, and Hearing in Schools* (27) 4, p. 333-344.

Battle, D. (2002). *Communication disorders in multicultural populations*. Woburn, MA: Butterworth-Heinemann.

Bradford, A.C., & Harris J. L. (2003). Cultural knowledge in African American children. *Language, Speech, and Hearing Services in Schools* (34) 1, p. 56-67.

Cheng, L.L. (2002). Asian and pacific American cultures. In D.E. Battle (Ed.) *Communication Disorders in Multicultural Populations* 3rd ed., p. 71-112. Boston: Butterworth-Heinemann.

Crowley, C. (2004). The ethics of assessment with culturally and linguistically diverse populations. ASHA Leader. 9(5) 6-7.

Craig, H. K., Thompson, C. A., Washington, J. A., & Potter, S. (2004). Performance of elementary-grade African American students on the Gary oral reading Tests *Language, Speech, and Hearing Services in Schools*, (35) 1, p. 141-154.

Damico, T.K., & Hamayan, E.V. (1992). *Multicultural language intervention addressing culturally and linguistic diversity*. New York: EDUCOM Association, Inc.

Dohority-Freeman, L. (1998). *Joyful fluency: Brain compatible second language acquisition.* San Diego, CA: The Brain Store.

Erickson J. & Omark, D. (1981). *Communication assessment of the bilingual bicultural child.* Baltimore: University Park Press.

Fiestas, C. E., & Pena, E. D., (2004). Narrative discourse in bilingual children: Language and task effects. *Language, Speech, and Hearing Services in Schools* (35) *2,* p. 155-168.

Fitzell, S. (2005). *Special needs in the general classroom: Strategies that make it work*. Cogent Catalyst Publications.

Gallagher, T. (1991). *Pragmatic of language clinical practice issues*. San Diego: Singular Publishing.

Goldberg, B. (1996). ASHA Tailoring to fit: Altering our approach to multicultural populations, (30) 2 p. 22-28.

Goldstein, B. & Washington, P. S. (2001). An initial investigation of phonological patterns in typically developing 4-year old Spanish-English bilingual children. *Language, Speech, and Hearing Services in Schools*, 32 (3), p. 153-164.

Harris, J.L. (2003). Toward an understanding of literacy in multicultural school–age populations. *Language, Language, Speech and Hearing Services in Schools*, 34 (1), p. 17-19.

Laing, A. C. & Kamhi, A. (2003). Alternative assessment of language and literacy in cultural and linguistically diverse populations, *Language, Speech and Hearing Services in Schools* 34 (1), p. 44-53.

Lund, N. J., Duchan J.F. (1993). *Assessing children's language in naturalistic contexts.* NJ: Simon & Schuster.

Mattes, L. (1995). *Bilingual vocabulary assessment measure academic communication associates.* Oceanside, CA: Academic Communication Associates.

Peña, Iglesias, & Lidz, (2001). The expressive one word vocabulary test. *American Journal of Speech-Language Pathology, 10*(2), p. 138-154.

Roseberry-McKibbins, C., (1995). *Multicultural students with special language needs: Practical strategies for assessment and intervention*. Oceanside CA: Academic Communication Associates.

Seymour, H.N., Roper, T.W. & de Villers, J. (2005). *Diagnostic evaluation of language variation: Norm referenced test*. Austin, TX: Psychological Corporation.

Stockman, I. (1996b). Phonological development and disorders in African American children. In A. Kamhi, K. Pollock, & J. Harris (Eds.), Communication development and disorders in African American Children: Research, assessment and intervention (pp. 117-153). Baltimore, MD: Brookes.

REFERENCES

Adler, S. (1991). Assessment of language proficiency of limited English proficient speakers: Implications for the speech-language specialist, *Language, Speech, Hearing in the Schools,* 22, (2) p. 12-17.

American Speech and Language Association (2001). *Guide to speech language pathology assessment tools for multicultural and bilingual populations*. Rockville, MD

American Speech and Language Association. (2003). IDEA and your caseload: A template for eligibility and dismissal criteria for students age 3-21. Rockville, MD.

American Speech and Language Association (2005). Cultural Competence. ASHA. *Supplement 25.* Rockville, MD.

Battle, D.E. (1998). *Communication disorders in multicultural populations* (2nd ed.). Boston: Butterworth-Heinemann.

Chamot, A., et al, (1999). *The Learning Strategies Handbook.* White Plains, NY: Addison, Wesley, Longman, Inc.

Cole, L. (1985). Response to Adler. *ASHA, April:47.*

Damico, J. & Oller, H. (1995). *Spotting language problems*. San Diego, CA: Los Amigos Research Associates.

Fradd, S.H., McGee, L., & Wilen, D.K. (1994). *Instructional assessment: An integrative approach to evaluating students*. Reading, MA: Addison-Wesley.

Hwa-Froelich, D., Hodson, B.W., & Edward, H.T. (2002, August). Characteristics of Vietnamese phonology. *American Journal of Speech-Language Pathology, 11, p.* 264-473.

Individuals with Disabilities Education Improvement Act of 2004 (IDEA), 20 U.S.C. § 1400 *et seq*. (2004).

James, P. J. (1975). *James language dominance test*, Austin, TX: Learning Concepts.

Kayser, H. (1998). *Assessment and intervention resource for Hispanic children*. San Diego, CA:

Singular Publishing.

Kayser, H. (1995). Cultural/linguistic variation in the United States and its implications for assessment and intervention in speech. *Language, Speech, Hearing Services in the Schools*, 27, p. 385-387.

Kayser, H. (1989). Speech and language assessment of Spanish-English speaking children. *Language, Speech Hearing Services in Schools*, 20, p. 226-244.

Mattes, L.J., & Omark, D.R. (1984). *Speech and language assessment for the bilingual handicapped* (2nd edition). Oceanside, CA: Academic Communication Associates.

Mattes, L. (1995). *Bilingual vocabulary assessment measure academic associates*. Oceanside, CA: Academic Communication Associates.

Miller, L., Gillam, R., & Pena, E. (2001). *Dynamic assessment and intervention improving narrative abilities*. Austin, TX: PRO-ED.

Ortiz, A. (2002). *English language learners with special education needs*. McHenry, IL: Center for Applied Linguistics and Delta Systems Co., Inc.

Paul, R. (1995). *Language disorders from infancy through adolescence assessment and intervention*. St. Louis, MO: Mosby-Year Book, Inc.

Pena, E.D., Iglesias, A., & Lidz (2001). Reducing test bias through dynamic assessment of children's word learning abilities. *American Journal of Speech-Language Pathology*, 10 (2), p. 138-154.

Roseberry-McKibbins, C. (2001). *The source for bilingual students with language disorders*. East Moline, IL: Lingui System.

Roseberry-McKibbins, C. (1995). Distinguishing language difference from language disorder in linguistic and culturally diverse students. *Multicultural Education*, 4, p. 12-16.

Saad, C. (2002) *No Hablo Espanol: Assessment Options for the Monolingual SLP*, ASHA, 11.

Seymour, H.N., Roper, T.W. & de Villers, J. (2003). *Diagnostic evaluation of language variation: Screening test*. Austin, TX: Psychological Corporation.

Shipley, K.G., & McAfee, J.G. (1998). *Assessment in speech-language pathology: A resource manual* (2nd edition). San Diego: Singular Publishing, Inc.

Taylor, O., Payne, K. & Anderson, N., in Owen, R.E. (2001). *Language development: An introduction* (5th edition). Needham Heights, MA: Allyn & Bacon.

Wyatt, T. A. (2002). Assessing the communicative abilities of clients from diverse cultural and language backgrounds in D. E. Battle (Ed.) *Communication disorders multicultural populations* (3rd edition), p. 415-460. Woburn, MA: Butterworth-Heinemann.

ARTICULATION/PHONOLOGY

DEFINITION

Students are found eligible as Articulation Impaired under Special Education Rule 340.1710:

Rule 340.1710 of the Michigan Special Education code provides the following definition of an articulation impairment as of May 20, 2005:
Rule 10.

(1) A "speech and language impairment" means a communication disorder that adversely affects educational performance, such as a language impairment, **articulation impairment**, fluency impairment, or voice impairment.

(2) A communication disorder shall be determined through the manifestation of 1 or more of the following speech and language impairments that adversely affects educational performance:
   (a) A language impairment which interferes with the student's ability to understand and use language effectively and which includes 1 or more of the following:
      (i.) Phonology.
      (ii.) Morphology.
      (iii.) Syntax.
      (iv.) Semantics.
      (v.) Pragmatics.
   (b) Articulation impairment, including omissions, substitutions, or distortions of sound, persisting beyond the age at which maturation alone might be expected to correct the deviation.
   (c) Fluency impairment, including an abnormal rate of speaking, speech interruptions, and repetition of sounds, words, phrases, or sentences, that interferes with effective communication.
   (d) Voice impairment, including inappropriate pitch, loudness, or voice quality.

(3) Any impairment under sub rule (2) (a) of this rule shall be evidenced by both of the following:
   (a) A spontaneous language sample demonstrating inadequate language functioning.
   (b) Test results on not less than 2 standardized assessment instruments or 2 subtests designed to determine language functioning which indicate inappropriate language functioning for the student's age.

(4) A student who has a communication disorder, but whose primary disability is other than speech and language may be eligible for speech and language services under R 340.1745 (a).

(5) A determination of impairment shall be based upon a comprehensive evaluation by a multidisciplinary evaluation team, which shall include a teacher of students with speech and language impairment under R 340.1796 or a speech and language pathologist qualified under R 340.1792.

An articulation impairment is the "atypical production of speech sounds….that may interfere with intelligibility" (ASHA, 1993, p.40).

ARTICULATION DISORDERS

Articulation errors are characterized by the omission, distortion, substitution, addition and/or incorrect sequencing of speech sounds. Such motorically-based errors are usually consistent.

Since the sounds produced are notably different from normative productions, errors are described as 'phonetic' in nature (Bauman-Waengler, 2000).

Articulation impairments may be functional or organic in etiology. Functional articulation disorders exist in the absence of any apparent cause and are related to deficiencies in the relatively peripheral motor processes (Bauman-Waengler, 2000). Examples include but are not limited to lateral or interdental lisps, distortions of "r", etc.

Articulation errors may also be due to identified physical or organic causes such as cerebral palsy, cleft palate, and/or hearing impairment, or they may result from TBI or other conditions/syndromes. A relatively small number of these disorders may fall under the rubric of 'developmental dysarthria' (Bowen, 2001). Dysarthric speech is characterized primarily by sound distortions and omissions which are consistent across speaking tasks. Consonants are affected more than vowels and are imprecise with similar production impairments in all positions. Other aspects of speech are also affected including prosody and rate.

Phonological Disorders.
Cognitively or linguistically-based sound production errors are termed phonological disorders. They result from impairments in the organization of phonemes and/or their application in speech. A child may be able to produce a sound correctly but not use it appropriately in required contexts. Alternatively, the child may display a reduced phonemic inventory. In either case, patterns of phonemic use are different from those normally noted at a particular age. Delays in lexical and grammatical development may also present in children with phonological disorders. Phonological disorders are considered 'phonemic' in nature because the sound errors are not due to inadequate production but to impaired use in specific contexts.

During this process the child may simplify the production of words that are too complex to produce fully and accurately, given the child's current motor capabilities. Phonological disorders result from deviations or delays in phonological processes. Impairments of phonology resulting in the perpetuation of these processes past an age when most children have stopped using them may result from difficulty in understanding and applying the phonological rules of the language. These errors are phonemic in nature.

While phonological process errors may be classified as language impairments, for the purposes of these guidelines they are included, along with articulation impairments, under the combined category of articulation/phonology which addresses all errors of sound production. Errors in sound production are generally classified as motorically-based or cognitively/linguistically based (Bernthal and Bankson, 1988). Motorically-based errors are generally called articulation impairments; cognitively/linguistically-based errors are referred to as impairments of phonological processes. Articulation errors may be characterized by the omission, distortion, substitution, addition and/or sequencing of speech sounds

Motor Speech Disorders
Dysarthria
Dysarthrias are speech disorders and should not be confused with language disorders such as aphasia, cognitive impairment or apraxia. Dysarthrias result from the disruption of muscular

control. Dysarthric errors result from a disruption of muscular control due to lesions of either the central or peripheral nervous systems. In this way, the transmission of messages controlling the motor movements for speech is interrupted. Because it involves problems with the transfer of information from the nervous system, dysarthria is classified as a neuromotor disorder. In dysarthria, errors are consistent and predictable with primarily distortions and omissions. There are few periods of clear speech. Given any speaking task or materials used, the student will usually exhibit the same amount and types of errors. Consonants are consistently imprecise, with the production of initial and final consonants equally impaired. Vowels are not affected as much as consonants. However, problems with tongue movement may lead to vowels which sound similar to each other.

All aspects of speech, including articulation, phonation, resonance, prosody, rate and respiration, may be affected by dysarthria, and diadochokinesis will be slow. However, a slow rate of speech will be normal within the limitations of the neuromuscular disorder. The student may have an articulation disorder, but the syllables will be produced in the correct order. Dysphagia frequently accompanies dysarthria.

Therapy for dysarthria is compensatory. If motor pathways are damaged, they cannot be repaired. The dysarthric student must learn to use techniques that increase the intelligibility of his/her speech. Augmentative communication should be considered.

Apraxia

Apraxia results from an impaired ability to generate the motor programming for speech movements. It is not a disorder in the transmission of messages to the speech musculature. Apraxia is a planning/programming problem, not a movement problem like dysarthria. Apraxia is a problem in assembling the appropriate sequence of movements for speech production or the execution of the appropriate serial ordering of sounds for speech. The primary disorder is an inability to program articulatory movements. Apraxia is always the result of a central nervous system lesion and is a cortical problem.

In apraxia, errors are inconsistent and unpredictable. Different error patterns occur in spontaneous speech versus repetition. Students' spontaneous speech contains fewer errors than does his/her speech in repetition tasks. When producing rote material or that which has become automatic, the student will speak clearly. Substitutions are the most common type of error. Approximations of the targeted phoneme are also expected. Other types of errors found in apraxic speech include repetitions, additions, transpositions, prolongations, omissions and distortions. Errors are often perseveratory in nature. As in stuttering, the anticipation of errors causes dysfluent speech. Apraxic speech is full of groping along with trial and error types of articulatory movements. This could be due to the anticipation of errors. For a student with apraxia, vowels may be easier to produce than consonants. Problems with voice and resonance are not symptomatic of this disorder.

Apraxia of speech may occur without concomitant swallowing problems. The movements of the velum, lips, tongue and jaw will only be impaired during speech. Diadochokinesis will be slow and abnormal, and syllables will be produced out of order.

Characteristics of apraxia in children according to Smit (2004)
- Significantly reduced intelligibility
- Severely limited consonant inventory with many omissions
- Reduced syllable inventory
- Assimilation and transposition errors
- Vowel errors
- Groping evident in articulation attempts
- Inconsistent production of the same word
- Performance reduces with increased sentence length and complexity
- Prosodic errors
- Better performance in single words than in sentences
- Isolated instances of well articulated words that are not evident again

Characteristics in the history of students with apraxia
- Poor feeding in infancy
- Drooling past an age typically seen
- Sensory aversions
- Relative quiet infancy
- Generally clumsy
- Slow progress in treatment

Nonspeech Characteristics
- Resists imitating modeled words
- Uses gestures to relay message
- Avoids speaking
- Relies on family members as translators

Concomitant Characteristics
- Receptive language skills above expressive language
- Poor vocabulary and wordfinding
- Symptoms of central neuromotor disorder: perseveration, difficulty inhibiting contradictory behaviors, fatigues easily

PREVENTION

SLPs have a role in educating school personnel and parents about normal articulation and phonological development. Teachers and parents may be interested in promoting articulation development by providing correct models, listening activities, and by discussing articulatory placements during instruction. For example, a kindergarten or first grade teacher may discuss tongue placement when introducing sounds for each letter or during phonological awareness activities. Increasingly, SLPs are providing phonemic awareness instruction to children, both with and without identified communication impairments, in the classroom as part of the prevention initiative. Mass articulation screenings have not been in practice in Michigan for some time. There is some discussion in the literature of this practice being renewed within an RTI framework applied to articulation (Moore-Brown & Montgomery, 2004). Generally, though, children's articulation and phonological disorders are identified through teacher and parent referral.

EARLY INTERVENING

When a teacher or parent has a concern about a student's articulation, they consult the SLP. School personnel often need this consultation to know whether a concern warrants further evaluation. The SLP listens to the student's speech, talks to the child's parents if needed, and together with the classroom teacher determines how the student's articulation difficulties are affecting educational performance. They decide whether

- It is clear that there is *not* an articulation disorder that is adversely affecting educational performance (e.g., speech patterns appropriate for student's age). No further actions are warranted.
- There appears to be difficulties. The team feels that with some consultation from the SLP or a short period of intervention, the problems may be resolved. The SLP suggests strategies for the student, teacher, and parent to use and follows up periodically. In other cases the SLP may elect to provide direct early intervening services. Some districts may develop programs for early intervening for articulation. The team may use the Early Intervening form on the following page to document this process of providing suggestions. This would enable the SLP to have a record of the early intervening for district planning or for documentation should the student later receive a formal assessment. See the following information for further description. At some point the team may feel that there is no longer difficulty, or that the student needs a complete speech and language assessment. In this case the SLP begins an Evaluation Review and obtains parental consent for evaluation as indicated.
- There appears to be an articulation disorder that is adversely affecting educational performance and needs long term direct intervention from the SLP. The SLP then begins an Evaluation Review process that may lead to parental consent for evaluation.

General Education Assistance Plan For Early Intervening Services

Name: _____ DOB: _____ Grade: _____
Meeting date: _____ Follow-up date: _____
Persons Attending the Meeting
Name:_____ Name:_____
Name:_____ Name:_____
Name:_____ Name:_____
Person(s) who referred: _____
Specific Concerns: _____
_____
Review of Pertinent Information
_____
_____

Current Accommodations and Modifications	Progress and Results	Time Frame

Hypothesis of Problem: _____
_____
_____
Pertinent Team Members Needed: _____
_____

New Early Intervening Plan	Who is Responsible	Time Frame	Response to Intervention

Parent Notification and/or Signature: _____Date:_____
Recommendations: _____
_____
_____

Guidelines Related to Early Intervening for Articulation

Specific Concerns
The SLP and the teacher document the specific concerns related to articulation, including how these difficulties are problematic in the classroom.

Review of Pertinent Information
The SLP/teacher team documents information about the student including: relevant developmental or medical history, family history, educational records, previous educational supports or placements and attendance. If it is indicated that the student speaks another language, the SLP should refer to the *Culturally and Linguistically Diverse for Articulation* section of this document and complete the process outlined in that segment.

Documentation of Current Accommodations and Modifications
The SLP/teacher team documents current accommodations and modifications being used with the child related to articulation. The student's responses to these attempts are examined as well as the length of time that these strategies have been implemented to determine the direction for further intervention.

Hypothesis of Problem
Based on an analysis of the student's background information and response to classroom accommodations and/or modifications, the SLP may have a hypothesis about how the student's articulation problem affects the student in the classroom and what might help the student.

Design of New Early Intervening Plan, Parent Notification and/or Signature, Implementation
The SLP/teacher team then designs a research-based early intervening plan. For example, the SLP may provide a home or school practice program. In other cases an SLP may actually provide direct early intervening services. These decisions are made with teams and administrators together. In times of high caseloads this can be viewed as a timesaving measure, if it prevents the students from needing direct intervention, thereby saving the time of the paperwork and meetings required once the formal process begins.

The SLP/team reviews with the parent the specific area(s) of difficulty the student is having, what has been attempted and aspects of the new early intervening plan. Policies and procedures related to how the parents are notified for early intervening vary across districts, SLPs should follow their district procedures.

Response to Intervention and Recommendations
If the student begins to progress adequately then the SLP begins to transfer the responsibility for strategy implementation to the teacher. The SLP may consult as the treatment period is ended to promote continued progress. In this example no referral is necessary.

If the team determines that the student is not making adequate progress based on data collected, then the plan is redesigned and another period of intervention is attempted. Throughout the trial intervention attempts, the SLP/teacher team reconvenes as needed and monitors progress using data to evaluate the student's response to intervention and the effectiveness of the strategies

being used. The team may decide to alter the strategies and continue early intervening. The SLP/teacher team may find that the student is not making adequate progress and the team, the team may initiate an Evaluation Review, if appropriate, that may lead to a formal evaluation for speech and language services.

Evaluation Review/Consent

The team reviews all of the pertinent data collected to this point, including results of the pre-referral interventions. The team decides what additional information is needed in order to determine the presence of a disability and adverse educational effect. A plan is made and agreed upon. Parental consent is gained for the plan (Evaluation Review, if appropriate) and the proposed evaluation (initial consent).

INITIAL ELIGIBILITY ASSESSMENT

A worksheet on the following page, the Articulation Eligibility Guide Summary outlines the procedures in a formal assessment. The assessment section of this document is organized by this table, as each row in the Summary Guide is a heading in the text. This is followed by an explanation of suggested assessment activities and the sequence in which they may be carried out. The primary goal of the *initial assessment* is to both determine eligibility and to identify an appropriate treatment plan. This means that the SLP and team must determine:

- Whether a articulation or phonological impairment exists,
- Whether the articulation or phonological impairment adversely affects educational performance (academic, nonacademic, or extracurricular), and
- How intervention should be designed and implemented in order to help the student to progress in the general curriculum.

These activities are described in the sequence provided by the Articulation Eligibility Guide Summary on the next page.

ARTICULATION ELIGIBILITY GUIDE/TEAM SUMMARY

Student _____ Birthdate_____ Date_____

Speech-Language Pathologist _____ Team Members_____

Medical History Input
Attach report or interview of students' doctor or other appropriate medical professionals

Hearing Screen	Pass_____	Fail_____
History of chronic otitis media	Yes _____	No _____
History of medical issues related to articulation	Yes _____	No _____

Attach documentation as applicable. *Collected in part during pre-referral phase		Does not Support Eligibility	Supports Eligibility
Response to Intervention If Early Intervening was implemented, that process showed the need for the formal assessment. The student's response documented on the Early Intervening Form may be transferred to the diagnostic report. *			
Input	**Teacher(s)** □ Interview □Observations and comments *		
	Parent □ Interview and comments *		
	Student □ Interview and comments *		
	Review of Pertinent Information □CA-60 review □ report cards Educational achievement and other records □Curriculum-based assessments □Other/Trial therapy outcomes		
Consideration of cultural / linguistic differences * If the student uses dialect or languages other than Standard American English, complete the process in the Culturally and Linguistically Diverse Articulation Section, CLD-A			
Consideration of environmental or economic differences Provide documentation from team reports, teacher, and parent reviews (if needed)			
Connected Speech Samples Consider evidence of a disorder and adverse educational effect	**Sound Production** Listen for types of errors present in discourse		
	Intelligibility Does intelligibility impede educational performance?		
Speech-motor Functioning □ Oral-peripheral examination □ Evidence of Speech/Motor Disorders □ Diadochokinetics (i.e dysarthria, apraxia)			
Articulation Test Assess articulation and compare to standards set for that assessment instrument			
Phonological Process Test/Checklist/Analysis Assess the presence of phonological processes and compare to standards set for that assessment instrument			
Stimulability Is the student stimulable for specific phonemes?			

Summary of Disability Comments about the presence or absence of disability.	**Summary of Adverse Educational Effect** Comments about the presence or absence of adverse effects on social, vocational, or academic performance based upon **all** of the above assessment components.
Summary of Eligibility in Articulation Comments and decision regarding the student's eligibility.	

Input

Teacher Input

Gathering information from teachers about the students' use of articulation and phonology to participate in the classroom is an important aspect of the assessment. This should be one of the first activities. To accomplish this in a meaningful way, the SLP should interact with the teacher as other information is collected and impressions are made. Interviews with the teacher can be achieved through the use of a formatted interview or checklist. However, it is suggested that the use of these items be only a guide during the interview and that other pertinent questions may arise which should be explored. An example of a Teacher Input form is on page A-11.

Parent Input

Gathering input from the students' parent(s) is another important component. Interviews often provide the most relevant information as the SLP can talk with the parents about their communication concerns for their child and how those issues are making school difficult. There are a variety of parent checklists or interview formats that would fit this purpose. An example of a Parent Input form for articulation is on page A-12.

Student Input

It is also important to identify how the student feels about his/her communication difficulties and their effect on school performance (as appropriate). This is particularly important for older students and adolescents. An example of a Student Input form for articulation is on page A-13.

Review of Pertinent Information

The review of pertinent information should consider educational achievement, CA-60 information, report cards, curriculum-based assessments, outcomes of trial therapy, and other records/documentation deemed appropriate.

ARTICULATION
Teacher Input Form

Student's Name:_____ Date:_____
Teacher's Name:_____ Birthdate/Age:_____/_____

What are your concerns regarding your student's articulation skills? Please check all that apply.
_____ Student deletes sounds when speaking
_____ Student changes sounds when speaking
_____ Student distorts sounds when speaking
_____ Other inappropriate use (explain)_____
_____

Is your student aware of his/her speech difficulty? _____ Yes _____No

Does your student appear to be frustrated by his/her speech difficulty?
_____ Never _____Sometimes _____Always

Does your student avoid speaking?
_____Never _____Sometimes _____Always

Have your student's parents expressed concerns regarding your student's articulation skills?
_____ Yes _____No

Is it difficult to understand you student? ____Never ____Sometimes ____Always

Is your student hard to understand?

_____ all of the time	_____ in context	_____ out of context
_____ most of the time	_____ in context	_____ out of context
_____ some of the time	_____ in context	_____ out of context

How do your student's articulation difficulties impact his/her reading, writing, or other academic skills? _____

_____

How do your student's articulation difficulties impact him/her socially and/or vocationally?
_____

_____

_____ _____
Teacher Signature Date

ARTICULATION
Parent Input Form

Student's Name:_____ Date:_____
Parent's Name:_____ Birthdate/Age: _____/_____

Medical History: (i.e. ear infections, tonsils & adenoids, allergies, developmental milestones such as cooing, babbling, quiet, etc.) Explain:_____
_____
_____

What are your concerns regarding your child's articulation skills? Please check all that apply.
_____ Child deletes sounds when speaking
_____ Child changes sounds when speaking
_____ Child distorts sounds when speaking
_____ Other inappropriate use Explain: _____
_____

Is your child aware of his/her speech difficulty? _____ Yes _____No

Does your child appear to be frustrated by his/her speech difficulty?
_____Never _____Sometimes _____Always

Does your child avoid speaking?
_____Never _____Sometimes _____Always

Is it difficult to understand your child?
_____Never _____Sometimes _____Always

Is your child hard to understand?

_____ all of the time	_____ in context	_____ out of context
_____ most of the time	_____ in context	_____ out of context
_____ some of the time	_____ in context	_____ out of context

How do your child's articulation difficulties impact him/her? _____
_____

Comments: _____

_____

_____ _____
Parent Signature Date

ARTICULATION
Student Input Form

Student's Name:_____ Date:_____
Parent's Name:_____ Birthdate/Age: _____/_____

Medical History: (i.e. ear infections, tonsils & adenoids, allergies, developmental milestones such as cooing, babbling, quiet, etc.) Explain:_____
_____
_____

What is your concern regarding your articulation skills? Please check all that apply.
_____ Delete sounds when speaking
_____ Change sounds when speaking
_____ Distort sounds when speaking
_____ Other inappropriate use. Explain: _____
_____

Do you think you have a speech difficulty? _____Yes _____No

Are you frustrated by your speech difficulty?
_____ Never _____Sometimes _____Always

Do you avoid speaking?
_____Never _____Sometimes _____Always

Are you told that you are difficult to understand?
_____Never _____Sometimes _____Always

Is it hard for people to understand you?

_____ all of the time	_____ in context	_____ out of context
_____ most of the time	_____ in context	_____ out of context
_____ some of the time	_____ in context	_____ out of context

How does your articulation difficulty impact you educationally? _____
_____

How does your articulation difficulty impact you socially and/or vocationally?_____
_____

Comments: _____

_____

_____ _____
Student Signature Date

Consideration of Cultural/Linguistic Differences
When a students' native language/dialect or the language/dialect spoken in the home is other than Standard American English, it is important to consider the impact of these linguistic or cultural differences. These differences may be at the root of the child's articulation and educational difficulties. The SLP should first complete the process in the Culturally and Linguistically Diverse – Articulation (CLD-A) section of these guidelines if it is indicated that the student speaks a dialect or language other than Standard American English.

Consideration of Environmental or Economic Differences
It is important to consider a student's environment or economic situation during the assessment process. An SLP should provide documentation as to the impact of environmental or economic differences which may impact the child's articulation and/or phonology. This documentation may be in the form of team reports or various interviews made with teacher(s) and parent(s).

Connected Speech Samples
Connected speech samples are important to consider, because they provide functional data as to how effectively the student communicates a message. This provides documentation about whether the student's speech is adversely impacting educational performance. The sample should be analyzed for the student's sound production (articulation errors and phonological processes) as well as speech intelligibility. Connected speech samples are typically elicited through casual conversation or narrative retellings or other curricular tasks, or unstructured situations (play, lunchroom, etc).

Sound Production
The SLP listens/analyzes the connected speech sample for the articulation errors or phonological patterns present. Compare the student's sound productions at the word and sentence levels from the articulation test to the input from teacher, parent, and student.

Intelligibility
Assessment of intelligibility is important in determining the educational impact (i.e., social, vocational, or academic) of the articulation or phonological disorder.

1. Collect connected speech sample
2. Write out each word in each utterance (use phonetics, if possible)
3. Use a dash (--) to indicate each unintelligible word.
4. An utterance is considered intelligible only if the entire utterance can be understood.
5. Calculate intelligibility for words and utterances.

Example: Utterances	# of Intelligible Words	Total Words	# of Intelligible Utterances	Total Utterances
1. hi went hom	3	3	1	1
2. ar ju – tu go	4	5	0	1
3. -- -- ϴm	1	3	0	1
4. pwiz pwe wrf mi	4	4	1	1
5. ar want tu go hom	5	5	1	1
Totals	**171**	**201**	**3**	**5**

Intelligible words:	17 = 85%	Intelligible utterances:	3 = 60%
Total words:	20	Total utterances:	5

Speech-Motor Functioning

Assess the students' oral structures and motor movements following standard procedures for an oral mechanism exam. This is necessary for the determination of a motor speech disorder (i.e., apraxia vs. dysarthria). Several informal checklists are available. In addition, there are standardized protocols which exist to assist SLPs in oral-motor assessment.

Oral-Peripheral Examination

The oral-peripheral examination is a necessary element of a comprehensive speech evaluation and should include the following elements: color of structures, height and width of palatal arch, asymmetry of the face and palate, deviations, enlarged tonsils, missing teeth, mouth breathing, poor intraoral pressure, short lingual frenum, gag reflex, and/or weakness. An example of an oral-facial examination form is provided by Shipley & McAfee (1992) in the text Assessment in Speech-Language Pathology: A Resource Manual.

Diadochokinetics

According to Shipley & McAfee (1992), diadochokinetic syllable rates are used to assess a student's ability to make rapidly alternating speech movements. There are two major ways to collect these measures. First, the SLP can count the number of syllable repetitions a student produces within a specific number of seconds. Second, the SLP can time how many seconds it takes the student to repeat a specific number of syllables. Once the SLP obtains this data, the data then should be compared to normative data to determine if the student's ability in this area is within the average range.

Evidence of Motor-Speech Disorders (i.e. dysarthria, apraxia)

An important consideration for eligibility should be based on the results of an oral-motor exam that assesses the structure and function of the speech system. "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" (ASHA, 2003, p. 26).

Articulation Assessment

Articulation Test

Formal assessment should include both articulation and phonology. Norm-referenced tests which are both valid and reliable as determined by research should be administered. Selecting tests with appropriate sensitivity and specificity data (80%) is recommended. A SLP should use caution in the interpretation of standardized scores to determine need for service. Although some assessments will reveal standardized scores below the average range for single sound errors, services may not be necessary if there is not adverse educational effect. It is important to consider ALL aspects of the Articulation Eligibility Guide Summary to determine the need for services.

Developmental Norms

Developmental norm charts are provided in these guidelines as examples of the data that may be referenced. Although useful, they should be interpreted with caution and not be the sole determining factor for eligibility consideration. There were some important factors influencing the selection of these developmental norms. The age of acquisition of phonemes and of "suppression" of phonological processes is variable as indicated by inconsistencies across sound development charts (Templin, 1957, Sander, 1972, Smit et al, 1990). Some research identifies the age at which the average population achieves a specific sound (Templin, 1957). However, this does not take into account the normal variation in sound development. The use of these norms could result in over identification (an 'average' age would be the age when 50% of the students have acquired the sound. Other research studies report the age at which most (90%) children have acquired the sound.

The articulation sound chart that appeared in the previous version of these guidelines was based on a 90% criterion. The study that was used to make that chart was replicated in Iowa and Nebraska in 1990 (Smit, Hand, Freilinger & Bird, 1990). A chart that includes this updated normative data has been provided in Table A-1. Another set of normative data that considered when 90% of the population achieved a specific sound is normative data from *The Clinical Assessment of Articulation and Phonology (CAAP)* in Table A-2 (Secord & Donohue, 2002). The CAAP was also chosen as a reference because the standardization research was recently completed and represents a large normative sample (n=1,707).

Developmental Norms

Iowa/Nebraska 1990

(Smit, Hand, Freilinger, Bernthal, & Bird, 1990)

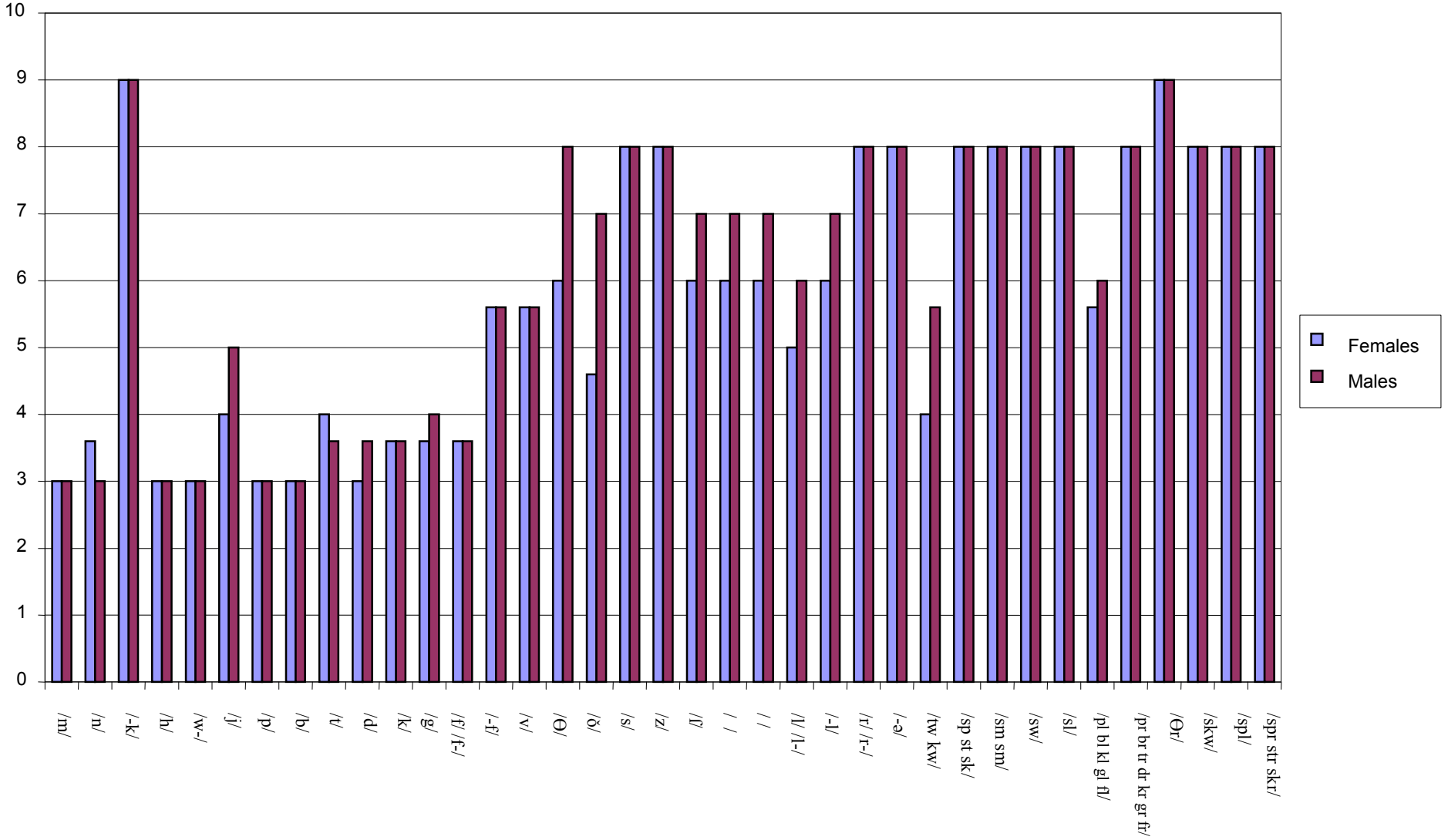
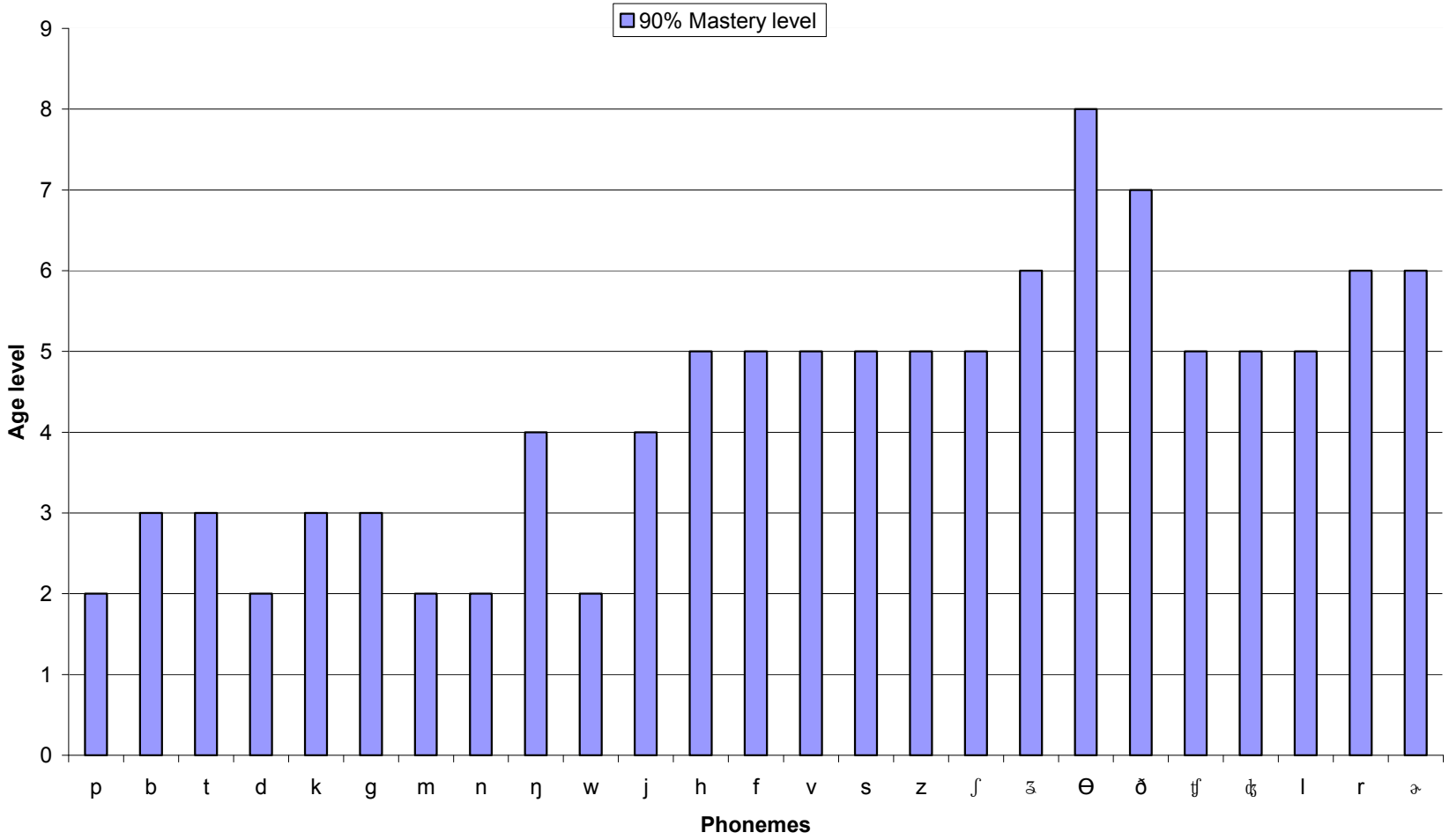


Table 7

Articulation Developmental Norms
Based on Normative Data from the Clinical Assessment of Articulation & Phonology (CAAP)
(Secord& Donahue, 2002)



Articulation Considerations for Speech Dialect
Refer to the Culturally and linguistically diverse-Articulation section that follows this section for guidelines and data to consider whether speech errors are differences or impairment.

Lateralization
According to research by Smit et al (1990), "lateralization of /s,z/ does not undergo spontaneous improvement with age" and therefore "should not be considered developmental." Smit et al (1990) also recommend that "a child exhibiting inconsistency (i.e., if the /s,z/ could be produced in any context) would not usually be considered for intervention unless the so-called inconsistency was governed by a phonological rule or was powerfully conditioned by phonetic context." In determination of eligibility, further investigation is warranted regarding stimulability and prognosis for treatment, response to early intervening, and adverse educational effect.

Single Sound Errors
When single sound errors are identified, the adverse educational effect should be considered very seriously. In these cases, early intervening, provided either directly or indirectly through a home program, may result in improved articulation. Some districts have reported success in reducing the number of articulation referrals for students with 1-2 sound errors by providing short term intervention.

Dentition, Tongue Thrust, Swallowing
Students who have differences in dentition or tongue thrust must have a speech disorder that adversely affects school performance to be considered for eligibility for articulation (ASHA, 1999). Dentition and tongue movements should be evaluated and can impact articulation and intervention.

Phonological Process Test/Checklist/Analysis
Age and phonological development must be taken into consideration in decisions, but should not be the only criteria in diagnosis and intervention (Bernthal & Bankson, 2004). Developmental norms based on broad age ranges provide some useful information. An example of developmental norms from recent research is in Table A-3.

Description & Examples of Phonological Processes

Final Consonant Deletion - the deletion of the final consonant or consonant cluster in a syllable or word. Suppressed by age 3;2 (Grunwell, 1997; Khan-Lewis, 1984)

Example: /pɪg/ = /pɪ/, /bɛd/ = /bɛ/, /keʤ/ = /ke/

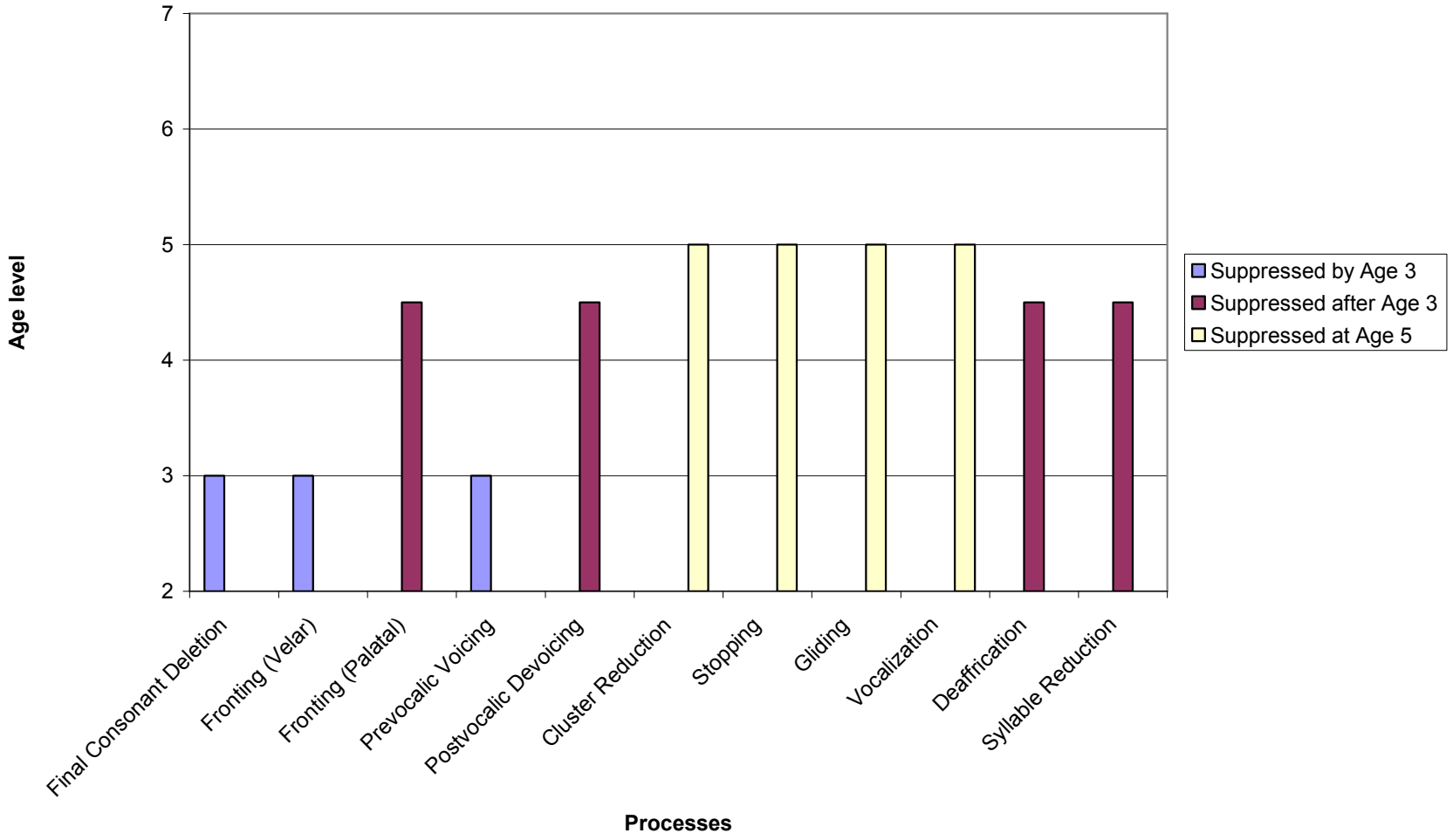
Fronting (Velar and Palatal) – the substitution of sounds in the front of the mouth, usually alveolars, for velar or palatal sounds. Suppressed by age 3;3 (Grunwell, 1997; Ingram, 1989)

Example: /keʤ/ = /teʤ/, /get/ = /det/, /fiʃ/ = /fis/

Prevocalic Voicing – the voicing of an initial voiceless consonant in a word. Suppressed at approximately age 4 (Ingram, 1989).

Example: /pɪg/ = /bɪg/, /tiϴ/ = /diϴ/, /kɪŋ/ = /dɪŋ/

Phonological Process Ranges: Based on the Cinical Assessment of Articulation and Phonology Normative Data



Cluster Reduction – the deletion of one or more consonants from a two- or three- consonant cluster. Suppressed by age 3;9. (Grunwell, 1997)

Example: /klaʊn/ = /kaʊn/, /flæg/ = /fæg/, /glʌv/ = /gʌv/

Stopping – the substitution of a stop consonant for a fricative or affricate. Suppressed by age 3;7. (Grunwell, 1997)

Example: /maʊs/ = /maʊt/, /ʃɪp/ = /tɪp/, /naɪf/ = naɪp/

Syllable Reduction – the deletion of a syllable from a word containing two or more syllables. The deletion usually occurs in the unstressed syllable. Suppressed by age 4. (Grunwell, 1997)

Example: /kəmpjutɚ/ = /pjutɚ/, /daɪnəsɔɚ/ = /daɪnsɔɚ/, /ɛləfənt/ = /ɛlfənt/

Stimulability

According to Rvachew (2005), "Stimulability reflects a child's ability to correctly imitate a given phoneme when provided with the instruction to 'watch and listen' followed by models of the phoneme, usually in the context of nonsense syllables or simple real words." SLPs should assess stimulability because it provides clear indications of intervention success and will assist in planning intervention approaches. According to recent evidence-based research, treatment of stimulable targets results in greater intervention success (Rvachew, 2005). The author also reports that treatment of the least stimulable targets resulted in a minimal rate of intervention success. In addition, Rvachew (2005) suggests that "…a target selection strategy that begins with the most stimulable and earliest developing phonemes will facilitate spontaneous emergence of unstimulable phonemes". Therefore, consideration of stimulability factors is necessary when making a determination of eligibility.

Summary of Disability

When all of the relevant information has been gathered and reviewed, the team considers whether the assessment documentation supports the identification of an articulation disability. The team seeks to identify whether the students articulation/phonology abilities are appropriate for his/her age. A student's overall intelligibility should be an important factor in the determination of a disorder.

Summary of Adverse Educational Effect

Based on the information gathered, the team decides whether the student is experiencing an adverse educational effect as a result of an articulation impairment. If it is determined that the articulation impairment negatively impacts the student's ability to be successful in the general education environment (nonacademic and academic communication and classroom participation), special education certification should be considered. If there is not an adverse education effect, the student is not eligible for special education services even if the child demonstrates an articulation impairment.

Summary of Eligibility in Articulation

If there is documented evidence of an articulation or phonological disorder **and** an adverse impact on educational performance, in the absence of cultural/linguistic or environment/economic

differences, then the student should be considered eligible as speech and language impaired in the area of articulation. **Both** the presence of a disability and adverse educational effect **MUST** be addressed to be considered eligible. Only one of these criteria cannot justify eligibility according to IDEA 2004.

INTERVENTION

Goal Setting

Once the decision to service a student is made, the next step is to determine goals and objectives for intervention as well as how these goals and objectives will be achieved. Diagnostic information obtained from the assessment will serve as the basis for developing such goals. Long term goals for a child with poor intelligibility might focus on overall intelligibility of conversational speech. Stimulability of sounds and frequency of occurrence of phonological patterns will be important considerations for making these determinations. In addition, phonological processes which occur frequently versus inconsistently would be another factor in deciding appropriate intervention goals.

Treatment Approaches

It is critical that the determination of a treatment approach is based on the nature of the student's disorder. Therapeutic approaches must be chosen from those that have proven efficacy studies to support them. Motor-based approaches are significantly different from phonologically-based approaches. Students will demonstrate the most improvement and carryover when the proper treatment approaches are utilized. The SLP should select a treatment approach that will target the specific goals and objectives of treatment. The method of intervention is critical for progress. A number of well-researched treatment approaches which are commonly utilized by SLPs have been cited below.

Treatment Approaches for Phonological Disorders

1. Minimal pairs

   This approach can be used with children with moderate to severe phonological disorders and poor speech intelligibility. In this approach, the SLP selects words which differ by only one phoneme to draw the child's attention to the fact that meanings are signaled by the difference between the chosen phonemes. The reader can reference the works of Weiner (1981), Williams (2000), and Geirut, (1989) for more information.

2. Phonological cycles approach

   This approach uses three key elements which include auditory bombardment of phonological targets at the beginning and end of sessions, use of minimal pairs to teach production and "cycling" of the phonological targets. The reader can reference the works of Hodson and Paden (1991) for more information.

Treatment Approaches for Articulation

Articulation treatment can be based on a continuum moving from establishment to transfer to maintenance. Establishment of correct sound production includes perceptual and production training. The target behavior is elicited through imitation using context, phonetic placement, and successive approximation. During transfer, correct production moves from simple to complex words and sentences practiced in a variety of phonetic contexts and speaking environments.

Maintenance focuses on self-monitoring and retention of correct production. (Bernthal & Bankson, 1981)

Motor Speech Disorders: Apraxia and Dysarthria
Treatment of motor speech disorders may include a variety of techniques to shape speech sound production. Phonological techniques may also be used in conjunction with a motor programming approach (Smit, 2004). Uses of techniques which incorporate working on one sound at a time have not proven effective in helping students with complex motor speech disorders. However, working in a hierarchy with production of syllables, then C-V or C-V-C words, then phrases, then sentences may be part of an accepted motor programming approach. Therapy to remediate motor speech disorders may be drill oriented with a limited amount of stimuli presented at once depending on the student's severity of speech. Combining drill with functional vocabulary and use of common phrases may be helpful to in reducing a student's frustration when unable to communicate their wants and needs.

> Treatment approaches for motor speech disorders may include sensory/oral motor exercises, use of touch cueing to shape speech sound production, and use of intonation patterns to stimulate and produce speech based on familiar vocabulary and phrasing. A sensory/oral motor approach may include tools and exercises to decrease oral sensitivity and increase strength and agility of oral structures for respiration, phonation, and articulation. Unfortunately, there is little evidence that oral motor exercises improve speech production. "There is evidence from the few studies that have incorporated controls that these exercises do not, in fact, improve speech." Forrest (2002); Smit (2004). During a touch cue approach, the SLP provides cues to the student's motor programming system by touching or molding the articulation placement and manner of sound production. One such approach is Prompts for Restructuring Oral Muscular Phonetic Targets (PROMPT – Hayden, 1984; Square, 1999). A treatment approach that incorporates use of intonation would include asking the student to produce familiar functional words and phrases that have particular stress patterns and rhythm. A modified Melodic Intonation Therapy approach has been used in which the student works on needed words and phrases using carefully chosen stimuli with specific prosodic linguistic features that may facilitate production of a particular message (Helfrich-Miller, 1984).

Supplemental Strategies
To increase overall communication when a child is making slow progress in treatment, and there is a significant impact on academic and social communication due to poor speech intelligibility, strong consideration should be given to use of augmentative/alternative devices (AAC). Examples of augmentative communication include using picture symbols or sentence strips with picture symbols, or the use of voice output devices.

Service Delivery
The team determines which service delivery options will be employed to accomplish goals and objectives. The following options can be combined and should be reviewed and changed over time, as the child's needs change (ASHA, 2003, p.29). These options can include the following:

1. *Pull-out*

   A traditional approach provided by pulling student(s) out of the classroom and working on specific articulation errors in the speech therapy room or alternative setting(s).

   - *Individual*
     Provide services individually to work on specific articulation errors in various settings.
   - *Small Group*
     Provide services in a small group of 2-4 students who are working on specific articulation errors in various settings.

2. *Classroom-based*

   Provide services in the classroom. Group activities that would provide opportunities for the student to practice articulation skills: during oral reading, class discussions, oral presentations.

3. *Collaborative*

   SLP collaborates with classroom teacher to utilize vocabulary, spelling words and classroom themes to provide the speech student with an opportunity to practice articulation skills with words relevant to the curriculum.

4. *Consultative*

   Consult with student's teacher about their progress, including the effect articulation errors have on a student's writing, reading and spelling. Inservice teachers about the articulation errors observed in the speech of the hearing impaired student, students with cleft palate, dysarthria or apraxia. Consultative services could also include training parents and providing a comprehensive home program specific to that student.

Block Scheduling

Block scheduling is the provision of more intense direct services followed by the provision of indirect service in a rotating manner. For example, the SLP may see the student directly for two weeks and then have the student on a home program for the other two weeks of the month, in rotations. Many SLPs report that their students progress more quickly using this approach.

Flexible Scheduling

Flexible scheduling is the alteration of the frequency of services weekly and/or monthly and takes into account indirect services and compliance activities. It is described in the Workload Implementation Guide (ASHA, 2003). Scheduling in this manner provides opportunities for individual therapy and a combination of service delivery models. In addition, flexible scheduling allows for indirect services and the scheduling of compliance activities (Estomin, 2006). The student may be seen directly for the first and third week of the month, but would be serviced in the classroom the second week of the month, and then consultative services with the teacher the fourth week of the month.

Building in Sufficient Practice

The SLP should strive to design a speech intervention program that involves daily opportunities for the student to practice with materials that are relevant to the curriculum for the generalization of

speech. The SLP may explore such opportunities as utilizing peer tutors and other school personnel to facilitate daily practice. Parent involvement in the home practice of speech material should also be a primary component to build in sufficient practice. It is important that these individuals have a great deal of contact with the SLP and be able to provide feedback regarding the student's performance. The SLP can collaborate with the classroom teacher to utilize curriculum which provides the student speech practice that is relevant to his or her education.

Tracking & Reporting Progress

The SLP should follow a method of intervention for a pre-determined interval of time to assess its effectiveness in increasing the student's speech intelligibility. Typically, this time interval is a card marking period. However, the SLP may prefer a shorter or longer interval for the student to learn a new strategy. IDEA 2004 states that student progress should be reported at least as often as general education reports student progress. Progress can be reported on the goal page of the Individualized Education Plan (IEP) or other progress reports deemed appropriate by the individual SLP and their district.

An example of progress monitoring is the use of three minute spontaneous speech probes administered at two-week intervals during therapy. The student is engaged in conversation for three minutes during which time the SLP counts the target phoneme(s) as correct or incorrect. The SLP's verbal output is limited to the amount necessary to keep the student conversing and is included in the total three minutes. The percentage of correct productions is then computed (Diedrich and Bangert, 1980).

Evaluating Progress and Adjusting Approach

Progress should be evaluated for evidence of improvement in articulation skills. If no progress is noted, the method of intervention should change for the next marking period or pre-determined time interval. This process of adjusting intervention strategies when no improvement is seen should continue for a specified period of time. If progress is seen with a particular intervention, this warrants further use of such a strategy. However, if after several adjustments in intervention methods, the student continues to make no progress, a re-evaluation of service may be warranted.

DISMISSAL CRITERIA

Please refer to the introduction to this section, SLI as a Primary Disability, for guidelines related to dismissal, pages SLI-7, SLI-8.

SLPs should keep in mind that there is research that suggests that students who are dismissed at 75-85% accuracy in conversational speech often go on to fully correct, suggesting that this is an appropriate time for dismissal (Diedrich, 1980).

REFERENCES

American Speech-Language-Hearing Association. (2003). *IDEA and your caseload: A template for eligibility and dismissal criteria for students ages 3 through 21*, p.14 (ASHA, 2003X)

American Speech-Language-Hearing Association Ad Hoc Committee on Service Delivery in the Schools (1993). Definitions of communication disorders and variations. *ASHA, 35* (Suppl. 10), 40-41.

Bauman-Waengler, J. (2000). *Articulatory and phonological impairments: A clinical focus*. Boston: Allyn & Bacon.

Bernthal, J.E. & Bankson, N.W. (1988). The case for individual variation in the management of children with articulation disorders. In H. Winitiz (Ed*.) Treating articulation disorders: For clinicians by clinicians* (p 117-130). Baltimore, MD: University Park.

Bernthal, J.E. & Bankson, N.W. (1993). *Articulation and phonological disorders,(3rd edition)*. Englewood Cliffs, NJ: Prentice-Hall.

Bernthal, J. W. & Bankson, N. W. (2004). *Articulation & phonological disorders (5th Edition).* Boston, MA: Pearson Education, Inc./Allyn & Bacon.

Diedrich, W.M. (1980) *Articulation Learning, Boston, MA : College-Hill Press.*

Edwards, M.L. & Shribery, L.D. (1983). *Phonology applications in communication disorders*. San Diego, CA: College Hill.

Estomin, E. (2006). *Caseload to workload: Establishing our roles in school settings.* Presentation to the Macomb/St. Clair Speech-Language-Hearing Association, Clinton Twp., MI.

Goldman, R. & Fristoe, M. (2000) *Goldman Fristoe Test of Articulation.* Circle Pines, MN: American Guidance Service.

Grunwell, P. (1997). Natural Phonology. In M. Ball & R. Kent (Eds.), *The new phonologies: Developments in clinical linguistics*. San Diego: Singular Publishing Group, Inc.

Hayden, D. (1984). The prompt system of therapy: theoretical framework and applications for developmental apraxia of speech. *Seminars In Speech And Language, 5 (2), 139-155.*

Helfrich-Miller, K. (1984). Melodic intonation therapy with developmentally apraxic children. *Seminars in Speech and Language*, *5, 119-125.*

Ingram, D. (1989a). *First language acquisition*. Cambridge: Cambridge University.

Khan, L. M. L., & Lewis, N. P. (1984). A practical guide to phonological assessment and the development of treatment goals. *Communicative Disorders*. *9, 51-66.*

Robbins, J. & Klee, T. (1987). Clinical assessment of oropharyngeal motor development in young children. *Journal of Speech and Hearing Research, 52*, 271-277.

Roseberry-Kibler, J.A, (2002). Classroom interactions in urban schools: a descriptive study. *Dissertation abstracts international section A: Humanities and social sciences, 63(4-A),* 1254.

Rvachew, S. (2005). Stimulability and treatment success. *Topics in Language Disorders, 25* (3), 207-219.

Secord, W.A. & Donohue, J.S. (2002). *Clinical assessment of articulation and phonology.* Greenville, SC: Super Duper Publications.

Shipley & McAfee, (1992). *Assessment in speech-language pathology: A resource manual.* San Diego, CA: Singular Publishing Group, Inc.

Shriberg, L.D. & Kwiatowski, J. (1982), Phonological disorders II: A conceptual framework for management. *Journal of Speech and Hearing Disorders*, 47, 242-256.

Smit, A.B. (1986). Ages of speech sound acquisition: Comparisons and critiques of several normative studies. *Language, Speech, and Hearing Services in Schools, 17,* 175-186.

Smit, A.B. (1993). Phonologic error distributions in the Iowa-Nebraska articulation norms Project: Word-initial consonant clusters. *Journal of Speech and Hearing Research, 36,* 931-947.

Smit, A.B. (1993). Phonologic error distributions in the Iowa-Nebraska articulation norms Project: Consonant singletons. *Journal of Speech and Hearing Research, 36,* 533-547.

Smit, A.B. (2004). *Articulation and phonology resource guide for school-age children and adults.* Manhattan, Kansas: Thomson Delmar Learning.

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

Square, P. (1999). Treatment of developmental apraxia of speech. In A. Caruso & E. Strand (Eds.), *Clinical management of motor speech disorders in children* (pp.149-185). New York: Thieme.

Winitz, H. (1969). *Articulatory acquisition and behavior*. New York: Appleton-Century Crofts.

CULTURALLY AND LINGUISTICALLY DIVERSE POPULATIONS CONSIDERATIONS FOR ARTICULATION

INTRODUCTION

In order to qualify students for services under Federal law (IDEA 2004) and state special education rules, the student's communication difficulties must not be due to cultural or linguistic differences. ASHA's definition of Communication Disorders and Variation (ASHA, 1993) stipulates that "a region, social, or cultural/ethnic variation of a symbol system should not be considered a disorder of speech or language. ASHA practice documents and the writings of experts in this practice area are all resources for practices related to treating and assessing children with communication difficulties who are culturally and linguistically diverse. These guidelines are intended to provide only basic information and considerations for assessment and treatment in this practice area and a framework for practice. It is recommended that the reader refer to the law, rules, and other referenced documents for further elaboration.

CULTURAL COMPETENCE OF THE SLP

The ability to distinguish a communication disorder from a difference due to linguistic variability is related to the cultural competence of the SLP. Cultural competence refers to sensitivity to both cultural and linguistic differences. The SLP needs to become aware of his/her own cultural values and standards which could impact the assessment and intervention process (ASHA, 2005). Currently a majority of SLPs have Euro-centered values and standards. It is necessary to understand the history and social customs of the student's culture as well as having an understanding of the impact of bilingualism. The following guidelines are offered by Taylor, Payne, Anderson, and Owen (2001) to facilitate interacting with clients from different cultures:

1. Each encounter is a social situated communicative event subject to cultural rules governing such events by both participants.
2. Children perform differently under differing conditions because of their unique cultural and linguistic backgrounds
3. Different modes, channels, and functions of communication may evidence differing levels of linguistic and communicative performance.
4. Ethnographic techniques (using the focus of the informant's perspective to discover the culture of the family, with the acceptance of the world as defined by the informant) and norms should be used for evaluating behaviors and making determinations of the primary language.
5. Possible sources of conflict in assumptions and norms should be identified prior to interaction and action taken to prevent them from occurring.
6. Learning about cultures is ongoing and should result in constant reevaluation and revision of ideas and in greater sensitivity.

DIALECTS / ENGLISH AS A SECOND LANGUAGE

Most articulation tests are normed with students who use Standard American English. Students who use a different dialect of English such as African American English or Southern dialect of English may have phonological differences. Many of these related to vowels and dipthongs, as well as some consonants, such as post-vocalic /r/. Caution should also be used when students

learn English as a second language, as there may be sounds that are not produced in their first language that might explain the phonological differences (Smit, 2004). One must be sure, that what appears to be a communicative disorder of a bidialectal student is not simply a variation of the communication system shared by a common regional, social, or cultural/ethnic factor not representative of the group's language (ASHA, 2003).

THE USE OF INTERPRETERS

Interpreters should be used to assist the SLP and team throughout the pre-referral and assessment process, unless a speech-language pathologist is fluent in the student's native language. The person used as an interpreter should be fluent in both oral and written modalities of the languages spoken by the student. The interpreters facilitate communication with the family, participate in gathering background and assessment data, and help communicate assessment results and interpretations during meetings. Persons who can act as interpreters are often available through local and/or county bilingual programs.

There are some important considerations for the use of interpreters. The interpreter must be present during assessment and parent conferences. The role of the interpreter must be defined for the family. Prior to the assessment the SLP should meet with the interpreter and discuss the assessment, including the following:

- Discuss roles and responsibilities during assessment.
- Review key concepts, phrases, words, and procedures that will be used.
- Remind the interpreter that he/she must not alter, omit, or add to the communication.
- Ask the interpreter if specific concepts/words are not translatable.
- Ask the interpreter about cultural considerations for the testing event.

After any sessions with the student, ask the interpreter to meet with you. Discuss behaviors, outcomes, questions, and problems observed during the session (Fradd, McGee, & Wilen, 1994; Kayser, 1995; Mattes & Omark, 1991).

It should be noted that if the speech and language pathologist uses an English standardized assessment tool with an interpreter or any other adaptations of the procedures, then the standardized score(s) can not be used to make eligibility decisions. However, the speech and language pathologist may report on communication behaviors seen during the assessment. Any standardized test adaptations and use of an interpreter should be described in the report.

These are just a few of the considerations for students with cultural and linguistic differences. There are additional considerations in the language, articulation, fluency and voice sections of this document.

This section outlines suggested activities to guide teams in determining whether a student presents with a speech difference or a disorder. The following chart may be used during the prereferral activities, when deciding whether an evaluation is appropriate, and again later, if an evaluation is completed. Each of the activities is described in more detail after the chart.

CULTURALLY AND LINGUISTICALLY DIVERSE ARTICULATION GUIDE/TEAM SUMMARY

Student _____ Birth date_____ Date_____
Speech-Language Pathologist _____ Team Members_____
Native Language_____ Other Languages Spoken_____
Dialects Spoken_____ Languages Spoken in Home_____

		Suggests Speech DIFFERENCE	Suggests Speech Disorder
Input	**Teacher(s)** ☐ interview /observations		
	Bilingual Staff Interview Obtain information about the student and the culture		
	Parent Complete parent interview (with interpreter, if needed. To obtain socio-cultural history, developmental history, and information about language competence		
	Student interview /comments		
	Review of Pertinent Information Educational achievement and other records such as: MLPP, DIBELS, student permanent record (CA-60)		
Observations	**Student Observation** Listen to the student		
	Classroom Observation Observe the student participating in the curriculum		

Referral Decision:
Together with the student's team, decide whether the student is suspected of having a disability beyond a speech difference and needs a formal evaluation. If a formal evaluation is completed, use the remaining portions of the articulation section of these guidelines and follow those procedures along with the considerations below.

Indepth Analysis of speech sound errors and phonological processes as related to student's native dialect or language
As part of the complete assessment, the SLP must perform this analysis to know how the sound errors compare across languages and which errors would be anticipated for an English learner.

Assessment Considerations for Students Suspected of having a Disability
Complete the Eligibility Guide/Team Summary in the section

☐ Use of an interpreter for bilingual students
☐ Extended case study
☐ Application of interpreter guidelines
☐ Alternative assessments/inventories
☐ Speech sampling in multiple settings/partners
☐ Application CLD criterion to standardized test selection/use

Comments: _____

PRE-REFERRAL INFORMATION: ACTION STEPS

Teams should complete many activities to determine whether the student appears to have an articulation disorder, rather than speech sound errors that would be expected given their native dialect or language. This will help the team to determine whether a complete assessment is warranted (if the student is suspected of having a disability).

Gather information

The first step in determining whether or not the student has a communication disorder or difference involves gathering information related to the current speech problems that are occurring and how they compare to the students native dialect or language. Gathering information from teachers, bilingual staff and parents about the student's patterns of articulation in both languages, how the student's speech compares to multi-lingual siblings and peers will be helpful. The SLP looks for speech patterns that are not representative of the speaker's native language/dialectal patterns.

Teacher Interview

Complete a teacher interview to learn about the student's speech proficiency across languages, participation in the classroom and curricular tasks and the impact of his or her speech problems in the classroom. The teacher input form in the articulation section can be used.

Bilingual Staff Interview

Complete an interview with the bilingual staff to learn about the student's speech proficiency across languages, cultural background, and other relevant information, such as sound production in the native language. There is a form that may be used for this purpose on page A-5.

Parent Interview

Complete a parental interview with the help of an interpreter to learn about the student's speech proficiency across languages. There is a form that may be used for this purpose on page A-6.

Student Observation

Listen to the student and note the presence of sound errors described by the team. Compare these errors to what is expected in the student's native dialect or language. Compare speech differences to dialectal charts and determine if the same errors are seen in the native language and in English. In addition, the SLP should determine if the errors of the acquired language are typical phonemes in the native language.

CULTURALLY AND LINGUISTICALLY DIVERSE
Bilingual Staff Questionnaire - Articulation

Student's Name:_____ Birth date/Age: _____/__Date:_____
Staff Member's Name and Title:_____
Dialect variation_____Primary language spoken in home? _____

Is it difficult to understand this student in his/her primary language?
__Never __Sometimes __Always
Is this student hard to understand when speaking his/her primary language?
_____ all of the time _____ in context _____ out of context
_____ most of the time _____ in context _____ out of context
_____ some of the time _____ in context _____ out of context
When speaking in his/her primary language does this student appear to: (Check all that apply.)
_____ Delete sounds when speaking _____ Change sounds when speaking
_____ Distort sounds when speaking
_____ Other inappropriate use (explain)_____
Is this student aware of his/her speech difficulty? _____ Yes _____No

Does this student appear to be frustrated by his/her speech difficulty?
__Never __Sometimes __Always
Does this student seem to avoid speaking in his/her primary language?
__Never __Sometimes __Always
Does this student seem to avoid speaking in English?
__Never __Sometimes __Always
Have this student's parents expressed concerns regarding his/her articulation skills?
____ Yes ____No
How do his/her articulation difficulties impact his/her reading, writing, or other academic skills?
_____
How do his/her articulation difficulties impact him/her socially and/or vocationally?
_____
Does the student demonstrate language competencies in their native language?
_____ Yes _____No Describe: _____
Does the student demonstrate narrative language competencies comparative of their peers?
_____ Yes _____No Describe: _____
What support services do you provide for the student? _____
_____
What strategies have you found to be useful for developing academic successful for this student?
_____
Can the child pronounce words, so that his or her speech is understood in their primary language? _____ Yes _____No describe: _____

Does the child initiate verbal interactions with peers_____ Yes _____No
Describe: _____
Does the child initiate or organize play activities with peers? _____ Yes _____No
Describe: _____

CULTURALLY AND LINGUISTICALLY DIVERSE
Parent Interview

Student's Name: _____ Date: _____

Parents' Names: _____ Birth date/Age: _____/____

Person Interviewing: _____ Interpreter: _____

1. At what age did the child begin speaking? _____

2. What was the child's first language? If not English, when did the child begin speaking English?_____

3. What language is used most often by your child at home? _____

4. What language is used most often by the child's brothers, sisters, and friends? _____

5. What language do you use most often when you talk to your child? _____

6. What language do you use most often when you talk to your spouse? _____

	First Language	English
7. How often does your child speak each language at home?	Frequently Sometimes Not at all	Frequently Sometimes Not at all
8. How often does your child hear others use each language at home?	Frequently Sometimes Not at all	Frequently Sometimes Not at all
9. How often does your child talk with people who speak each language outside of the home?	Frequently Sometimes Not at all	Frequently Sometimes Not at all
10. How often do you have difficulty understanding what your child is saying because of poor pronunciation?	Frequently Sometimes Not at all	Frequently Sometimes Not at all

11. Do other children make fun of the child's speech? Yes/No _____ Yes /No _____

12. Do other adults understand what the child says? Yes /No _____ Yes /No _____

	First Language	English
13. Does your child have problems understanding remembering new words?	Yes/No _____	Yes/No_____
14. Does your child pause, repeat words or parts of words?	Yes/No _____	Yes/No_____
15. Does your child follow directions?	Yes/No _____	Yes/No_____
16. Does your child use complete sentences?	Yes/No _____	Yes/No_____
17. Does your child use gestures to communicate?	Yes/No _____	Yes/No_____
18. Can your child pronounce so that most of his speech is understood?	Yes/No _____	Yes/No_____

19. How does your child relate with children who speak the native language? _____

_____

20. How does the parent feel about the child's speaking ability? _____

_____

21. How does the child's speaking ability compare to younger siblings? _____

_____

22. How does the child's speaking ability compare to other children of the same age? _____

_____

23. Has your child's voice ever sounded strained, hoarse, raspy, or nasal voice quality? _____

If yes, When and for how long?_____

Please describe _____

_____ _____

Parent Signature Date

Phonological Features Across Languages

African American English Phonology

Phonological Features Often Observed in African American English (Roseberry-McKibbins, 1995; Stockman, 2006, 2007)	
Features	**Examples**
/l/ phoneme omitted or lessened	Too/tool
/r/ phoneme omitted	Doah/door
f/th (voiceless) sound substitution at the beginning or middle of words	Baf/bath
d/th (voiced) sound substitutions at beginning, middle of words	Dis/this
v/voiced "th" substitution at the end of words	Smoov/smooth
Consonant final cluster reductions	Des/desk
Consonant initial cluster reductions	Throw/tho
Consonant cluster substitution	Street/skreet
Differing syllable stress patterns	Po lice/police
Methathesis	Aks/ask
Deletion of final consonants	Ba/bad
Devoicing of final voiced consonants	Bed/bet
Short vowel i/e substitution	Pin/pen
B/v substitution	Vest/bes
Diphthong reduction	Oil/ol
n/ng substitution	Walking/walkin'
Unstressed syllable deletion in multisyllabic words	Away/way
Lax vowel contrast loss before nasals	Sin/sen

Spanish Phonology

Phonological Features Often Observed in Spanish Speakers (Goldstein, 2001; Roseberry-McKibbins, 1995)	
Features	**Examples**
T,d,n may be dentalized	
Devoicing of final consonants	dose/doze
b/v sound substitutions	berry/very
Despirated stops	
ch/sh sound substitutions	Chirley/Shirley
d/th voiced	dis/this
No voiceless th phoneme	tink/think
Schwa sound added before the initial consonant cluster	eskate/skate
Omission of the /h/ phoneme	it/hit
Trilled r	Comparable to the r sound in butter
Words ending can have multiple sounds: a,e,I,o,u, l,r,n,s,d	English words may have drop sound endings
y/j Sound substitution	yoke/joke
Frontal /s/ -Spanish sound is produced more frontally than in English	
n sounds like y	bano/bahnyo
Spanish has 5 vowels	
ee/I	peeg/pig
e/long vowel a	pet/pat

Additional information about Spanish phonology can be found on the internet. Websites are not listed here since they change too frequently (they became outdated and no longer worked with the exact URL simply during the drafts of this document.

Asian Phonology

Phonological Features Often Observed in Asian speakers (Roseberry-McKibbins, 1995)	
Features	Examples
Many words have vowel endings. Few words end in consonants	do/dog
Some languages are monosyllabic; speakers may truncate polysyllabic words or emphasize the wrong syllable	efunt/elephant DIversity/diversity
May devoice voiced cognates	beece/bees
r/l substitutions	clown/crown
Shorten vowel length in words	Words sound choppy
No voiceless th	Tin/
Addition of "uh" sound in blends, and in the end of words	wooduh/wood buhlacl

Arabic Phonology

Phonological Features Often Observed in Arabic speakers (Roseberry-McKibbins, 1995)	
Features	**Examples**
n/ng sound substitution	nothin'/nothing
sh/ch sound substitution	shoe/chew
w/v sound substitution or f/v substitution	west/vest fife/five
t/voiceless "th" substitution or s/voiceless "th" substitution	bat/bath sing/thing
z/voiced "th" substitution	brozer/brother, zhoke/joke
retroflex /r/ doesn't exist;	speakers of Arabic will use a tap or trilled /r/
Triple consonant clusters are not present in Arabic	May have insertions of "uh" kinduhly/kindly, harduhly/hardly
o/a vowel substitutions	hole/hall
o/oi vowel substitutions	bowl/boil
a/uh vowel substitutions	snuck/snack, ruck/rach
ee/I vowel substitutions	cheep/chip, sheep/ship

Referral Decision
Decide whether or not to refer a student for assessment, using the data gathered in the pre-referral process, if the student's sound errors appear related to learning the new speech sounds in the Standard English dialect of the English language then the SLP should not refer for a speech and language assessment. However, the SLP could offer other services such as consulting with the teacher and other staff about teaching strategies that help the student improve sound production in English.

INDEPTH Analysis of speech sound errors and phonological processes as related to student's native dialect or language
As part of the complete assessment, the SLP must perform this analysis to know how the sound errors compare across languages and which errors would be anticipated for an English language learner.

REFERENCES

American Speech and Language Association (2001). *Guide to speech language pathology assessment tools for multicultural and bilingual populations*. Rockville, MD

American Speech and Language Association. (2003). IDEA and your caseload: A template for eligibility and dismissal criteria for students age 3-21. Rockville, MD.

American Speech and Language Association (2005). Cultural Competence. ASHA. *Supplement 25.* Rockville, MD.

Fradd, S.H., McGee, L., & Wilen, D.K. (1994). *Instructional assessment: An integrative approach to evaluating students*. Reading, MA: Addison-Wesley.

Goldstein, B. A. (2000). *Resource Guide on Cultural and Linguistic Diversity*. San Diego, CA: Singular Publishing Group.

Goldstein, B. A. (2001). Assessing phonological skills in Hispanic/Latino children. *Seminars in Speech and Language*, 22 (1), p. 39-49

Individuals with Disabilities Education Improvement Act of 2004 (IDEA), 20 U.S.C. § 1400 *et seq*. (2004).

Kayser, H. (1995). Cultural/linguistic variation in the United States and its implications for assessment and intervention in speech. *Language, Speech, Hearing Services in the Schools*, 27, p. 385-387.

Mattes, L.J., & Omark, D.R. (1984). *Speech and language assessment for the bilingual handicapped* (2nd edition). Oceanside, CA: Academic Communication Associates.

Roseberry-McKibbins, C. (1995). *Multicultural students with special language needs*. Oceanside, CA: Academic Communication Associates, p 117.

Smit, A. (2004). *Articulation and Phonology: Resource Guide for School-age Children and Adults*. Clifton Park, NY: Thomson Delmar Learning .

Stockman, I. (Print date: March 2007) *African American English in the international guide to speech acquisition*. Clifton Park, NY: Thompson Delmar Learning.

Stockman, I (2006). A minimal competency core of consonant sounds for young African American children. *Journal of Clinical Linguistic and Phonetics*, 20 (10), 1-28

Stockman, I. (2006) Alveolar bias in the final consonant deletion patterns of African American *Language, Speech, and Hearing Services in Schools, 37* (2) 85-9

Taylor, O., Payne, K. & Anderson, N., in Owen, R.E. (2001). *Language development: An Introduction* (5th edition). Needham Heights, MA: Allyn & Bacon.

FLUENCY

DEFINITION

Students are found eligible as fluency impaired under Special Education Rule:

Rule 340.1710 of the Michigan Special Education code provides the following definition of an fluency impairment as of May 20, 2005:

Rule 10.

(1) A "speech and language impairment" means a communication disorder that adversely affects educational performance, such as a language impairment, articulation impairment, **fluency impairment**, or voice impairment.

(2) A communication disorder shall be determined through the manifestation of 1 or more of the following speech and language impairments that adversely affects educational performance:

(a) A language impairment which interferes with the student's ability to understand and use language effectively and which includes 1 or more of the following:

(i.) Phonology.
(ii.) Morphology.
(iii.) Syntax.
(iv.) Semantics.
(v.) Pragmatics.

(b) Articulation impairment, including omissions, substitutions, or distortions of sound, persisting beyond the age at which maturation alone might be expected to correct the deviation.

(c) Fluency impairment, including an abnormal rate of speaking, speech interruptions, and repetition of sounds, words, phrases, or sentences, that interferes with effective communication.

(d) Voice impairment, including inappropriate pitch, loudness, or voice quality.

(3) Any impairment under subrule (2) (a) of this rule shall be evidenced by both of the following:

(a) A spontaneous language sample demonstrating inadequate language functioning.

(b) Test results on not less than 2 standardized assessment instruments or 2 subtests designed to determine language functioning which indicate inappropriate language functioning for the student's age.

(4) A student who has a communication disorder, but whose primary disability is other than speech and language may be eligible for speech and language services under R 340.1745 (a).

(5) A determination of impairment shall be based upon a comprehensive evaluation by a multidisciplinary evaluation team, which shall include a teacher of students with speech and language impairment under R 340.1796 or a speech and language pathologist qualified under R 340.1792.

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, 1993).

Fluency terminology variations may include:

- Disfluency (stuttering) is an abnormally high frequency or duration of stoppages in the forward flow of speech that occur in the form of repetitions of sounds or syllables, prolongations of sounds, blocks of airflow or voicing. Often accompanied by awareness, embarrassment, signs of physical tension, or increased rate of speech (adapted from Guitar, 1998).

- "Cluttering is a disorder of speech and language processing resulting in rapid, dysrhythmic, sporadic, unorganized, and frequently unintelligible speech. Accelerated speech is not always present, but an impairment in formulating language almost always is" (Daly, 1996).

Theoretical Perspectives
There are many different theories about the development of fluent speech. Assessment and intervention practices described in these guidelines will address a combination of affective, cognitive, and behavioral components. ASHA (2002) delineates these components as shown in Table 1.

Table 1

Affective	Behavioral	Cognitive
Feelings 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 fluent control	Rate of speaking	Attitudes regarding fluency
	Concomitant factors	

(ASHA, 2002)

PREVENTION
SLPs have a role in educating parents and school personnel about fluency, stuttering, and general strategies for fluency enhancement. Inservices, brochures, and videos may be used to provide general information to teachers and parents. Teachers may find that implementation of general suggestions obtained from these resources may increase fluency rates in some children who may have a predisposition toward stuttering.

Deciding If Early Intervening is Appropriate
When a teacher or parent has a concern about a student's use of fluent speech, they consult with the SLP to know whether a concern warrants further evaluation. For example, when a student presents with excessive repetitions or stopping behaviors, a discussion of appropriate fluency skills pursuant to that child's age may alleviate concern. In order to determine the best course of action, the SLP along with the team (teacher, and others if applicable) collect information through observation and parent and teacher input.

Determining Presence of Risk Factors

Several risk factors are reported to increase the likelihood that a student will continue to stutter. These are outlined in Table F-1 for the SLP to record their presence. The SLP should consider these risk factors when determining whether to intervene informally or to expedite the formal assessment and treatment process as the more risk factors evident, the higher probability that the student will continue to struggle with fluency.

Parent Input: The SLP collects information from the parent. This may be done using the Parent Input form on page F-#.

SLP Observation: The SLP listens to the student's speech, especially noting the ease of disfluencies and listening for blocks (Phonatory arrest).

Table F-1 Fluency Risk Factors (Ainsworth & Fraser, 2006; Yairi & Ambrose, 2005)

Risk Factors	Where Obtained	Present or Absent
Male (stuttering affects males 3 - 4 times more than females. Females likely to recover without intervention.		
Age of Onset Students who begin stuttering prior to the age of 3 ½ years are more likely to outgrow stuttering. Students who begin stuttering after age 3 ½ years may continue to demonstrate stuttering behaviors.	Parent Input	
Time Since Onset If a student has been stuttering longer than 6 months, they may be less likely to outgrow the behavior on their own. The likelihood to a student who has stuttered longer than 12 months increases even more.	Parent Input	
Family History Approximately 60% of people who stutter have a family member who stuttered.	Parent Input	
Presence other Speech/Language Impairment Students with other speech/language disorders are at higher risk for stuttering (SFA, 2006).	Parent Input	
Pattern of Stuttering If the student is relatively unaware of their disfluencies, the risk for a fluency disorder is reduced compared to a student who is aware of their stuttering. Whole word repetition at the beginning of an utterance is more typical in development than blocks. (when phonation is interrupted)	SLP Observation or Parent/Teacher report	
Sensitivity of Child Students who are emotionally more sensitive may respond to stressful situations with stuttering behaviors.	Parent Input	
Environment Family reaction, fast-paced family schedule, family dynamics such as high expectations, communication style of parents and/or teachers, significant life event (death, divorce, etc)	Parent Input	

Based on the observation and teacher and parent input, the team determines whether:

No referral or further action needed
It is clear that there is not a fluency disorder that is adversely affecting educational performance. No further actions are warranted.

Early Intervening is Appropriate (Response to Intervention)
There appears to be fluency difficulties. The team feels that with some consultation from the SLP, the problems may be resolved. The SLP suggests strategies for the student, teacher, and parent to use and follows up periodically. An example of this could include the situation where a young student is exhibiting whole word repetitions at the beginning of utterances and is told to "slow down when speaking" by the parents and teacher who are stressed by the child's disfluency. The SLP may make suggestions related to how the teacher and family respond to the child's disfluency. After a period of time the response to this intervention is documented. The team may use the Early Intervening form on the following page to document this process of providing suggestions. This would enable the SLP to have a record of the early intervening for district planning or for documentation should the student later receive a formal assessment. See the following pages for further description.

Immediate Formal Assessment is Appropriate
In some case the team may determine that there appears to be a fluency disorder that is adversely affecting educational performance and direct intervention from the SLP is needed as opposed to consultation. In this case, rather than providing early intervening, the SLP obtains parental consent for evaluation. An example of when to immediately use the formal assessment process might include a case where there is a family history of stuttering behavior, and the student shows multiple secondary characteristics and disfluencies, along with self awareness of the dysfluent behavior, despite the teacher and parent providing a nurturing communicative environment. For further guidelines related to formal assessment, turn to page F-9.

GENERAL EDUCATION ASSISTANCE PLAN FOR EARLY INTERVENING SERVICES

Name: _____ DOB: _____Grade:_____
Meeting date: _____ Follow-up date: _____
Persons Attending the Meeting
Name:_____ Name:_____
Name:_____ Name:_____
Name:_____ Name:_____
Person(s) who referred:_____
Specific Concerns:_____
_____
Review of Pertinent Information
_____
_____

Current Accommodations and Modifications	Progress and Results	Time Frame

Hypothesis of Problem:
_____
_____
_____

New Early Intervening Plan	Who is Responsible	Time Frame	Response to Intervention

Parent Notification and/or Signature:_____Date:_____
Recommendations:_____
_____
_____
_____
_____

GUIDELINES RELATED TO EARLY INTERVENING FOR FLUENCY

Specific Concerns
The SLP and the teacher document the specific concerns related to fluency.

Review of Pertinent Information
The SLP/teacher team documents information about the student including: relevant developmental or medical history, family history, the student's native culture and its views on fluency, educational records, previous educational supports or placements and attendance.

Documentation of Current Accommodations and Modifications
The SLP/teacher team documents current accommodations and modifications being used with the child related to fluency. The student's responses to these attempts are examined as well as the length of time that these strategies have been implemented to determine the direction for further intervention.

Hypothesis of Problem
Based on an analysis of the student's background information and response to classroom accommodations and/or modifications, the SLP may have a hypothesis about how disfluencies affect the student in the classroom and what might help the student.

Design of New Early Intervening Plan, Parent Notification and/or Signature, Implementation
The SLP/teacher team then designs an early intervening plan. For example, the SLP may provide some suggestions to the teacher and parent on how to foster a more fluent environment.

The SLP/team reviews with the parent the specific area(s) of difficulty the student is having, what has been attempted and aspects of the new early intervening plan. Policies and procedures related to how the parents are notified for early intervening vary across districts, SLPs should follow their district procedures.

Response to Intervention and Recommendations
If the student begins to progress adequately then the SLP begins to transfer the responsibility for strategy implementation to the teacher. The SLP may consult as the treatment period is ended to promote continued progress. In this example no referral is necessary.

If the team determines that the student is not making adequate progress based on data collected, then the plan is redesigned and another period of intervention is attempted. Throughout the trial intervention attempts, the SLP/teacher team reconvenes as needed and monitors progress using data to evaluate the student's response to intervention and the effectiveness of the strategies being used. The team may decide to alter the strategies and continue early intervening. The SLP/teacher team may find that the student is not making adequate progress and the team, the team may initiate an Evaluation Review, if appropriate, that may lead to a formal evaluation for speech and language services.

Evaluation Review/Consent
The team reviews all of the pertinent data collected to this point, including results of the pre-referral interventions. The team decides what additional information is needed in order to determine the presence of a disability and adverse educational effect. A plan is made and agreed upon. Parental consent is gained for the plan (Evaluation Review, if appropriate) and the proposed evaluation (initial consent).

INITIAL ELIGIBILITY ASSESSMENT

A worksheet on the following page, the Fluency Eligibility Guide/Team Summary outlines the procedures in a formal assessment. The assessment section of this document is organized by this table, as each row in the Summary Guide is a heading in the text. This is followed by an explanation of suggested assessment activities and the sequence in which they may be carried out. The primary goal of the *initial assessment* is to both determine eligibility and to identify an appropriate treatment plan. This means that the SLP and team must determine:

- Whether a fluency impairment exists,
- Whether the fluency impairment adversely affects educational performance (academic, nonacademic, or extracurricular), and
- How intervention should be designed and implemented in order to help the student to progress in the general curriculum.

These activities are described in the sequence provided by the Fluency Eligibility Guide Summary on the next page.

Response to Intervention
If Early Intervening was implemented, that process showed the need for the formal assessment. The student's response documented on the Early Intervening Form may be transferred to the diagnostic report.

Teacher, Parent, and Student Input:
The SLP and team determine whether additional information is needed to complete the formal evaluation and plan intervention. If the input forms (pages F9, F-10, and F-11) for teachers, parents, and students have not been used the team may decide to use these forms or other checklists at this point.

FLUENCY ELIGIBILITY GUIDE/TEAM SUMMARY

Student _____ Birthdate_____ Date_____
Speech-Language Pathologist _____ Team Members_____
Medical History Input - Attach report regarding medical issues that may be relevant (if applicable)
Hearing Screen Pass_____ Fail_____
History of chronic otitis media Yes _____ No _____

		Does **not** support eligibility	Supports Eligibility
Response to Intervention If Early Intervening was implemented, that process showed the need for the formal assessment. The student's response documented on the Early Intervening Form may be transferred to the diagnostic report.			
Gather Input	**Teacher Input** Collect teacher input.		
	Parent Input Collect Parent input including family history.		
	Student Input Collect the student's input including student's self-esteem, motivation/attitude, and self-assessment of communication as it relates to their fluency.		
Review of Pertinent Information			
Risk Factors Family history**,** Gender, Student's response to dyfluency			
Consideration of cultural / linguistic differences Complete the process in the Culturally and Linguistically Diverse section if indicated			
Test Administration or Analysis of Frequency and Duration of a Connected Speech Sample Administer a formal test of complete frequency and duration analysis			
Classroom Observation of Adverse Effect Observe the student during a time of day when the teacher indicated that the student's disfluencies interfere with participation. Collect more information regarding whether the student's fluency is adequate for successful participation in that curricular task or whether the student lacks the fluency skills and strategies needed.			
Cluttering Analyze disfluencies for differential diagnosis of stuttering vs. cluttering. Please refer to the Cluttering checklist on pages F- ## and F-##.			
Other Assessment Information Complete a broad based screening of language, articulation, oral-motor, and voice to explore the possibility of additional impairments.			
Summary of Disability Comments about the presence or absence of disability.	**Summary of Adverse Educational Effect** Comments about the presence or absence of adverse effects on social, vocational, or academic performance based upon **all** of the above assessment components.		
Summary of Eligibility in Fluency Comments and decision regarding the student's eligibility.			

Comments_____
_____
_____

FLUENCY
Teacher Input

Name _____ Date _____
Birth date _____ Grade/Program _____ Teacher _____

The child above has been referred for or is receiving services regarding fluency skills. Please help me gain a better overall view of this student's speech skills by completing the following information:

1. This student:
   _____ seldom volunteers to participate in class. _____ seems to avoid speaking in class.
   _____ is difficult to understand in class. _____ demonstrates frustration when speaking
   If so, how? _____

2. This student is dysfluent or stutters when he/she:
   _____ speaks to the class.
   _____ gets upset.
   _____ shares ideas or tells a story.
   _____ answers questions.
   _____ talks with peers.
   _____ carries on a conversation.
   _____ reads aloud.
   _____ talks to adults.
   _____ other _____

3. Check any of the following behaviors you have noticed in this child's speech:
   _____ revisions (starting and stopping and starting over again)
   _____ frequent interjections (um, like, you know)
   _____ word repetitions (we-we-we-)
   _____ phrase repetitions (and then, and then)
   _____ part-word repetitions (ta-ta-take)
   _____ sound repetitions (t-t-t take)
   _____ prolongations (n----------obody)
   _____ block (noticeable tension/no speech comes out)
   _____ unusual face or body movements (visible tension, head nods, eye movements)
   _____ abnormal breathing patterns
   _____ other _____

4. When this child has difficulty speaking he/she reacts by: _____

5. When this child has difficulty speaking, I respond by: _____

6. To your knowledge, has this student been teased or mimicked because of his/her speech?_____

   If so, please explain: _____

7. How does the student's stuttering affect classroom participation or educational performance?
   _____

   _____

8. Some questions I have about stuttering or about helping this child be successful in the classroom would be: _____

_____ _____
Teacher's Signature Date

(Adapted from Nina Reardon, 1999.)

FLUENCY
Parent Input

Name _____ Date _____
Birth date _____ Input provided by _____
Language spoken in the home _____, _____
(primary language)

1. Tell me about your child's speech problem. _____
2. At what age did you first notice your child's stuttering? _____
3. How many years (months) has your child been stuttering? _____
4. Please describe the stuttering behavior: _____
5. Does your child repeat? Does he/she seem to hold his/her breath or get "stuck" getting the words out? _____
6. Have you ever seen him/her make a face, blink, or move his/her body trying to get the words out? _____
7. Tell me about times when your child speaks normally: _____
8. Describe your child's daily activities: _____
9. How does your child speak with other people? _____
10. What do teachers report? _____
11. What do you do when your child stutters? _____
12. How do you help your child to speak differently or better? _____
13. Has anything changed during the last 6 months or have there been any significant life events (e.g., death, divorce)? _____
14. Tell me about previous therapy experiences: _____
15. Does anyone in your family stutter? _____
16. Does your child have other speech and language impairments? _____
17. Summarize your child's medical history: _____
18. What do you think might have caused your child's stuttering? _____
19. Is your child sensitive to stressful situations? Does he/she stutter more? _____

References: (Guitar, 1998; Conture, 2001; Culatta and Goldberg, 1995)
(Johnson, 2002)

FLUENCY
Student Input

Name _____ Date _____
Birth date _____ Grade/Program _____ Teacher _____

Discuss the following questions with the student. You can take notes on the comments lines between questions.

1. Why are you here today? _____
_____

2. Tell me about your speech _____
_____

3. Tell me what you do when your speech is bumpy _____
_____

4. Tell me what you think about when your speech is bumpy. _____
_____

5. Is your speech sometimes smooth? _____
_____

6. Why do you think your speech is bumpy? _____
_____

7. Can you make your speech smooth or bumpy? _____
_____

8. Has anyone helped you before to speak smoothly? _____
_____

9. Tell me what they did to help you: _____
_____

10. Have other kids ever teased you or said things you didn't like about your speech? _____
_____

11. Do you like to talk in class? _____
_____

12. Do you ever do things to get out of talking in class? _____
_____

13. Are you ever embarrassed by your speech in school? _____
_____

Adapted from Guitar, Conture, and Culatta and Goldberg, 1995 by Johnson, 2003)

FLUENCY
Student Input (Adolescents)

Name _____ Date _____
Birth date _____ Grade/Program _____ Teacher _____

Discuss the following questions with the student. You can take notes on the comments lines between questions.

1. Why are you here today? _____
2. Tell me about your speech _____
3. Who referred you? _____
4. With regard to your stuttering: How often? How long? What does it feel like? How does it change?

   _____
5. Tell me about the good speaking times. _____
6. Why do you think you stutter? _____
7. Has anything changed recently? _____
8. Tell me how you spend a typical day:

   _____
9. When is your speech better or worse? _____
10. Are there some things you do to make your speech more fluent (smooth)?

    _____
11. Have you been in speech therapy before? If so, where?

    _____
12. Tell me about your therapy: _____
13. Have other kids ever teased you or said things you didn't like about your speech?

    _____
14. Do you like to talk in class? _____
15. Do you ever do things to get out of talking in class? _____
16. Are you ever embarrassed by your speech in school?

    _____

(Adapted from Guitar, Conture, and Culatta and Goldberg, 1995 by Johnson, 2003)

Risk Factors
The team should have completed Table F-1 on page F-3. These results should be documented in the diagnostic report.

Consideration of Cultural/Linguistic Differences
When a student's native language is other than English, the SLP should investigate the child's native culture relative to the cultural understanding, beliefs, and reactions to stuttering behavior. Sensitivity to these issues will be crucial throughout the assessment and intervention process.

Test Administration or Analysis of Frequency and Duration of a Connected Speech Sample
Formal fluency assessments may be used or an analysis of frequency and duration may be used (the following section). Use of standardized tests should only be one source of data when determining eligibility.

Frequency and Duration Descriptive Assessment - *Riley Assessment Instrument*
On Following Page.

STUTTERING SEVERITY INSTRUMENT

Glyndon D. Riley

Frequency (Use A or B, not both)

A. For reader, use 1 and 2. B. For nonreaders

1. Job Task		2. Reading Task		Picture Task		
Percentage	Task Score	Percentage	Task Score	Percentage	Task Score	
1	2	1	2	1	4	
2-3	3	2-3	2	2-3	6	
4	4	4-5	5	4	8	
5-6	5	6-9	6	5-6	10	
7-9	6	10-16	7	7-9	12	Total
10-14	7	17-26	8	10-14	14	Frequency
15-28	8	27 & up	9	15-28	16	Score A 1 & 2
29 & up	9			29 & up	18	Or B _____

Duration

Estimated Length of Three Longest Blocks	Task Score	
Fleeting	1	
One half second	2	
One full second	3	
2 to 9 seconds	4	
10 to 30 seconds (by second hand)	5	Total
30 to 60 seconds	6	Duration
More than 60 seconds	7	Score _____

Physical Concomitants

Evaluating Scale: 0 = none; 1 -= not noticeable unless looking for it; 2 = barely noticeable to casual observer; 3 = distracting; 4 = very distracting; 5 = severe and painful looking.

1. Distracting Sounds. Noise breathing, whistling, Sniffing, blowing, clicking sounds ……	0 1 2 3 4 5	Total
2. Facial grimaces, jaw jerking, tongue protruding, lip pressing, jaw muscles tense ……	0 1 2 3 4 5	Physical Concomitant
3. Head movement. Back, forward, turning away, poor eye contact, constant looking around ……..	0 1 2 3 4 5	Score _____
4. Extremities movement. Arm and hand movement, hands about face, torso movement, leg movements, foot tapping or swinging …….	0 1 2 3 4 5	Total Overall Score _____

CHILDREN'S CONVERSION TABLE (USE TO AGE 18)

TOTAL OVERALL SCORE	PERCENTILE	COMPARISON TO OTHER CHILDREN
0-5	0-4	WITHIN NORMAL RANGE
6-15	5-40	MILDLY DYSFLUENT
16-23	41-77	MODERATELY DYSFLUENT
24-45	78-100	SEVERELY DYSFLUENT

Frequency and Duration Descriptive Assessment*: Frequency, Type of Disfluencies and Presence of Secondary Characteristics in a Connected Speech Sample*

1. Collect a spontaneous speech sample (such as description, monologue or dialogue) and a reading sample (often one-minute samples are adequate). If the samples are not sufficient evidence of the student's disfluencies, the SLP may increase the communication stress factors by changing the speaking situation such as making a telephone call or speaking to a peer.

2. Analyze the sample to identify fluency behaviors such as:
   - Pauses or hesitations both between words and within words
   - Repetition of single phonemes, words, and/or phrases
   - Revisions of linguistic phrase
   - Fragmented phrases
   - Prolongation of phonemes in words
   - Insertions of fillers (uh, um, er, etc.)
   - Altered phonation/prosody within words or phrases
   - Observation of tension and/or secondary behaviors (i.e. eye blinks, shoulders hunched, head nods, facial grimaces, etc.)

3. Determine the frequency of stuttering by counting the number of words or syllables with identified disfluencies and the number of words or syllables spoken per minute. Frequency of stuttering calculation is: (Culatta & Goldberg, 1995)

$$\text{Percentage of stuttered words} = \frac{\text{(words stuttered)}}{\text{(total words)}} \times 100$$

$$\text{Percentage syllables stuttered} = \frac{\text{(syllables stuttered)}}{\text{(syllables spoken)}} \times 100$$

4. Analyze sample for the average duration of prolongations.
   - Average duration calculation
     -Take 3 longest occurrences of prolongations and average the times

5. Document any physical characteristics observed such as facial grimaces, limb or head movement, eye blinking, and distracting sounds. Note whether these are barely noticeable, distracting or severe/painful looking. Note whether the student appears aware of these physical characteristics.

Frequency and Duration Descriptive Assessment: Differentiating Stuttering from Normal Disfluency

Consider the following information when determining if the disfluencies represent stuttering behaviors:

- The number of total disfluencies is greater than 10% of the words produced.
- Sixty-six percent to 81% of total disfluencies are stutter-like disfluencies.
- Sound prolongation exceed 1 second in duration.
- Thirty percent or more stuttering events consist of sound prolongations.
- There are irregular phonatory characteristics (vocal tension, vocal fry, voice stoppage, abnormal inflections).
- There is an observable (seen or heard) struggle in greater than 3% of utterances.

Susca, (2002).

Classroom Observation for Adverse Educational Effect

Academic, social, behavioral and emotional success Observe the student during a time of day when the teacher indicated that the student's disfluencies interfere with participation. Note the number and type of disfluencies and evidence of secondary symptoms. Is the student's fluency adequate for successful participation within the classroom, or does the disfluency impede participation? Does the student avoid speaking situations? Is there a reaction by the student or others to the disfluencies?

Cluttering

Cluttering is a communication disorder that can affect the four major areas of communication: articulation, language, voice, and fluency. It is presented for several reasons:

- Cluttering affects fluency
- Stuttering and cluttering are sometimes confused, particularly on initial observation
- Cluttering and stuttering can occur in the same student
- Cluttering is usually considered in conjunction with fluency.

Differential diagnosis of stuttering vs. cluttering can be difficult. The following characteristics are essential in diagnosing cluttering: excessive number of whole-word or phrase repetitions, poorly organized thinking, short attention span and poor concentration, and lack of complete awareness of the problem (Daly, 1996). Since thought organization is one the most apparent symptoms displayed by the student, a thorough language evaluation, including written expression, is necessary if cluttering is suspected. Please refer to the assessment portion of the Language section within this document for further details about language assessment. See the following for a checklist of stuttering characteristics and a chart which assists the SLP in the differential diagnosis of stuttering vs. cluttering.

CHECKLIST OF CLUTTERING CHARACTERISTICS

Name _____ Age _____ Date_____
Examiner _____

Instructions: Check each characteristic student exhibits. Include additional comments on the right-hand side of each column.

__ Indistinct speech_____	__ More errors on longer units _____
__ Minimal pitch variation _____	__ Rapid rate _____
__ Minimal stress variation _____	__ Sound distortions _____
__ Monotone voice _____	__Spoonerisms_____
__ Within words _____	__ Within phrases/sentences _____
__ Telescoping _____	__ Sounds _____
__ Speech improves when concentrating on fluency _____	__ Words _____
	__ Parts of phrases _____
__ Speech improves when rate is reduced _____	__ Structured retrials improve fluency _____ _____
__ Speech improves during shorter interval _____	__ Presence of language problems_____ _____
__ Relatively few sound or syllable repetitions_____	__ Improved speech does not tend to generalize _____
__ Improved speech is somewhat difficult to stimulate _____	__ Student not concerned about speech problem _____
__ Student now very aware of speech Problem_____	_____

DIFFERENTIAL DIAGNOSIS OF STUTTERING AND CLUTTERING

Stuttering	Cluttering
Student is aware of disfluencies.	Student is unaware of disfluencies.
Student becomes less fluent when the student concentrates on being fluent.	Speech becomes more fluent when student concentrates on being fluent.
Spontaneous speech may be more fluent than oral reading or directed speech.	Spontaneous speech may be less fluent than oral reading or directed speech.
Speech is usually less fluent with strangers.	Speech is usually more fluent with strangers.
Structured retrials may not result in increased fluency.	Structured retrials may improve fluency.
More sound and syllable repetitions are present.	Fewer sound and syllable repetitions are present.
Fewer language problems (e.g., incomplete phrases, reduced linguistic complexity, etc.) are present.	More language problems are present.
Speech rate may be normal when disfluencies are omitted from speech rate calculations.	Speech rate may be produced at a very rapid, "machine gun" rate.
Fewer articulation errors are present.	Multiple articulation errors may be present.

Summary of Disability
When all the relevant information has been gathered and reviewed the team considers whether the assessment documentation supports the identification of a fluency disability. The SLP describes this disability in the assessment documentation/report.

Summary of Adverse Educational Effects
Based on the information gathered, the team decides whether the student is experiencing an adverse educational effect as a result of a fluency disability. Educational success involves academic, social, behavioral and emotional success. Thus, if the child is limiting class participation, has reduced interaction with others, speaking or situational fears, or expresses concern about stuttering, assessment and intervention are indicated. Additionally, SLPs are reminded that stuttering behaviors vary significantly across communication situations and stuttering may not be directly observable in classroom situations. If the team feels that there is evidence of adverse effects, special education certification should be considered. If there is not an adverse educational effect, the student is not eligible for special education services even if the child demonstrates a fluency disability.

Summary of Eligibility in Fluency
When it has been determined that a disability is present which adversely effects educational performance, eligibility for speech and language services should be considered by the IEP team.

INTERVENTION
Intervention for fluency is based on an individual student's needs and must be related to a student's academic, social, or vocational requirements. There are many treatment approaches and no single approach guarantees a cure, but that most individuals (especially young children) can have significant improvements with treatment to improve participation in the student's educational setting. To this end, intervention for students who stutter may not be consistent throughout the student's educational career. Students with a fluency impairment may need to be serviced in a flexible manner such as altering service delivery models throughout intervention. There may be times when the student is not amenable to stuttering therapy and taken off the SLPs caseload for the time being. Such students can be added back to the caseload at a later date when students are ready for intervention. The SLP should consult their school district's administrator for paperwork requirements pursuant to these types of cases. It may be suggested that the SLP leave the student on their caseload as consultative only or formally dismiss and re-evaluate later if future services are needed.

Goal Selection
Intervention for fluency disorders in students is most effective when approached as a collaborative effort involving the SLP, teachers, other support staff, and parents. In addition, the IEP process dictates that the creation of goals be a collaborative endeavor which allows all members of the team to take ownership for the achievement of those goals. Goals are derived from the comprehensive evaluation conducted by the SLP, which should include a variety of sources. The general education teacher becomes an important aspect of this process. The general education teacher not only assists in identifying the aspects of the curriculum which adversely affects classroom communicative performance, they also aid the SLP in determining student goals relevant to the curriculum.

Treatment Approaches

There are a multitude of treatment approaches commercially available or documented in research articles for fluency impairments. This document will not attempt to discuss or endorse any specific treatment approach. The SLP should utilize a treatment approach which is research-based and provides data demonstrating its effectiveness. The treatment should focus on those areas of difficulty the student demonstrated during the assessment phase.

Self-Esteem/Bullying/Teasing/Counseling issues

An overwhelming number of students who stutter experience teasing and bullying, yet this topic is sometimes not addressed in therapy. It is important that SLPs take an active role in informing parents and teachers and helping students to deal with these issues and get more help when needed. The following pages include more information about this topic and some strategies for SLP.

TEASING AND BULLYING OF CHILDREN WHO STUTTER

(The following is an excerpt from Roth & Beal, 1999)

Multiple studies have shown that an overwhelming majority, approximately 80 percent, of children who stutter report having been bullied at some period in their school lives, with 11 to 13 year olds being targeted more than any other age group (Langevin, 1998; Mooney & Smith, 1995). Among the children who reported that they had been bullied because of their stuttering, the most frequent type of bullying was imitation (Langevin et al., 1998) and name-calling (Mooney & Smith, 1995).

Speech-language pathologists have a responsibility to educate school staff about this issue and providing strategies to the students to minimize bullying situations and to deal with bullies.

Strategies for the Child Who Stutters

The speech-language pathologist can work with children to brainstorm ways that they can confidently and effectively react to the teasing (Starkweather & Givens-Ackerman, 1997). Strategies may be generally grouped into five classifications:

Avoid -- the child learns to alter his own behavior in order to avoid the teaser at all costs. Although a child may prefer this option at first, its perceived effectiveness rapidly declines as the child realizes the sacrifices he must make to employ this strategy. For example, Rosemond (1994) tells of a child who took a different route home from school each day and remained close to his teachers when in the schoolyard. Unfortunately, the teaser did not lose interest in the child and eventually his parents decided it would be best to transfer the child to a new school.

Ignore -- the child learns to ignore the bully when teasing occurs. It is believed that if the child does not react, the bully will lose interest and discontinue the teasing (Langevin, 1998). This strategy is faulted by the fact that the child is passive and has no recourse throughout the teasing. S/he may also have to endure an increased amount and severity of teasing before it stops.

Inform -- the child learns to inform an adult whenever teasing takes place (Starkweather & Givens-Ackerman, 1997). This is effective for children who have teachers and parents who manage teasing well. Unfortunately, teachers and parents often are not aware of the extent to which teasing occurs, or of the consequences. Thus, teasing is often not dealt with effectively. It is worth note, however, that Mooney and Smith (1995) found that parents are quite willing to address the issue of their children's teasing when they are informed about it. Teachers were found to be less likely to deal with teasing even when informed.

Confront -- the child learns to confront and inform the teaser. A typical reaction that utilizes this strategy is "Yes, I stutter. It is a problem that is not my fault. Would you like to learn more about why I stutter or what you can do to help me?" This strategy, if employed in a confident manner, can empower children who stutter and allow them to diffuse the teaser and demystify the subject of stuttering (Lew, 1998). This may be a difficult strategy for children to master, as it requires them to be secure and confident – skills that children who stutter and are teased do not have in excess.

Witticism -- the child learns to make light of his own stuttering problem in front of the bully. A reaction to a bully's imitating a stutter might be "Oh, do you stutter, too?" or "You don't stutter the same way I do. Try it like this." This strategy is also a difficult one for children to employ

because only select people possess such quick thinking skills, not to mention confidence (Langevin, 1998; Lew, 1998; Starkweather & Givens-Ackerman, 1997; Manning, 1996).

Children may have difficulty employing these strategies and will require time and support from their clinicians, teachers, parents, and peers to do so.

Service Delivery Models

Flexibility in the service delivery for students with fluency impairments is essential for providing comprehensive intervention. This flexibility is necessary as stuttering severity may change throughout a student's lifetime. For example, students with fluency impairments may require intensive one-on-one therapy to address primary and secondary stuttering characteristics observed during the assessment phase. However, during a maintenance or generalization phase of treatment, a push-in model or consultation model may be more appropriate in order to address their needs.

Tracking and Reporting Progress

The SLP should follow a "best practice method" of intervention to assess its effectiveness in increasing the student's fluency performance within the school environment. After a predetermined interval of time (i.e., card markings) progress should be evaluated for evidence of improvement. If progress is evident with a particular intervention, the team may decide to proceed with few adjustments. If no progress is noted, the method of intervention should change for the next time interval. This process of adjusting intervention strategies when no improvement is seen should continue for several time periods. If after several adjustments in evidence-based practice intervention methods the student continues to make no progress, a re-evaluation of service may be warranted to determine if the student may benefit from a change in support services.

DISMISSAL

Please refer to the introduction to this section, SLI as a Primary Disability, for guidelines related to dismissal, pages SLI-7, SLI-8. In addition to the guidelines on those pages, the following relates to fluency, in particular.

Students who are dismissed from fluency therapy, may be referred again at a later date. This could related to the presence of a disability or adverse educational effect.

Presence of a disability

People who stutter will experience stuttering relapses throughout their life. Dependent upon the age of the student, this relapse may be handled through the early intervention process or formal speech therapy. The SLP will need to determine the level of service required to address the specific student's needs.

Adverse educational effect

Although stuttering may present as a lifelong disability, the adverse affect of the disability may vary at different times in the student's education. This may result in times when the student may not need (or be eligible) for services. At a later date, eligibility and services could be re-examined.

The following rubric may be useful as a discussion guide for the team:

A Rubric for Dismissal from Therapy for Stuttering

Behavior	Examples
Does the student demonstrate the knowledge and skills to maintain a feeling of control over stuttering?	➢ Student can use appropriate vocabulary to describe the stuttering episode ➢ Student can use appropriate vocabulary to describe fluency shaping or stuttering modification techniques ➢ Student can use appropriate skills to change stuttering behavior
Does the student demonstrate an ability to advocate for his/her own needs?	➢ Student can describe his stuttering and his abilities to others ➢ Student uses effective interpersonal skills to handle discrimination, teasing, bullying
Does the student demonstrate an ability to monitor his/her own speech, use self-reflection, and respond appropriately to communication breakdowns?	➢ Can the student demonstrate an array of skills to handle commonly encountered speaking situations ➢ Can the student maintain a sense of humor about his/her challenges
Does the student desire dismissal and express a degree of satisfaction with his/her current success in therapy?	➢ Student can relate speech goals in the context of other career and personal goals and desires

	➢ Student understands how to get additional professional assistance, if needed

Developed by Tom Ehren, 2001. School Board of Broward County, Florida.

Information for Parents of Dysfluent Children/Adolescents
Stuttering Center of Western Pennsylvania
Co-Directors: J. Scott Yaruss, Ph.D., CCC-SLP, and David W. Hammer, M.A., CCC-SLP

What is stuttering? Stuttering is a speech/language impairment characterized by disruptions in the forward flow of speech (or "speech disfluencies"), such as repetitions of whole words or parts of words, prolongations of sounds, or complete blockages of sound. Speech disfluencies may be accompanied by physical tension or struggle, though many young children do not exhibit such tension in the early stages of the disorder.

Stuttering is highly variable – sometimes a child will stutter a lot and sometimes the child will be very fluent. Factors influencing the likelihood that stuttering will occur differ from one child to the next, but might include:

Who the child is talking to
What the child is talking about
Where the child is when talking
What time of day or year the child is talking
The child's emotional or physical state (e.g., excitement, fatigue, illness) while talking
The length and complexity of the message the child wishes to convey
Other factors that are more difficult to identify

Many times, children experience fear or embarrassment because of their stuttering. As a result, they may learn to hide their stuttering so it does not show. They can do this by avoiding speaking in certain situations or to certain people. They might also avoid saying words they think they might stutter on or refrain from talking altogether. If a child begins to avoid speaking in order to avoid stuttering, the disorder can have a marked impact on his or her social, emotional, and educational development.

Sometimes, older children and adolescents become so adept at hiding their stuttering that other people may not even know that they stutter. Although this might sound like a good goal, it typically is not. Hiding stuttering takes a lot of emotional and cognitive effort and results in significant shame for the person who stutters. This, in turn, often limits the child's ability to participate in life activities at school or in social settings. The best way to deal with stuttering is not to try to hide it, or to hide from it, but rather to face it directly.

What causes stuttering?
There is no one cause of stuttering. Current research indicates that many different factors, including genetic inheritance, the child's language skills, the child's ability to move his or her mouth when speaking, the child's temperament, and the reactions of those in the child's environment play a role in the development of stuttering.

How do we treat stuttering?
For very young children (age 2 ½ to 5 or 6), the primary goal of treatment is to help the child learn to speak fluently. We do this by teaching the child to change the timing and the tension of speech production through modeling and play-based activities, both in the therapy room and at

home. Treatment of children in this age range can be highly effective, with many children exhibiting complete recovery by approximately age 6.

For older children and adolescents, it is more difficult to eliminate stuttering, and the child is more likely to begin experiencing the shame and embarrassment that characterizes advanced stuttering in adults. Improving fluency is still a major focus of treatment; however, a necessary additional goal involves helping children to develop healthy, positive attitudes toward themselves and toward their speech, even if they are still stuttering. Parents play a very central role in this process by conveying acceptance of their child's speaking abilities and by providing a supportive environment where the child can both stutter and learn to speak more fluently.

How can parents help?

It is important to remember that parents do not cause stuttering. Still, there are several things you can do to help your child learn to speak more fluently. Parents of young children can help by: (i) providing a model of an easier, more fluent way of speaking, (ii) reducing demands on the child to speak, particularly demands to speak fluently, and (iii) minimizing the time pressure a child may feel when speaking.

Modeling. Children tend to be more dysfluent when they or the people around them talk more quickly. This is due partly to the increased time pressures children may feel and also the children's own attempts to speak more quickly in order to keep up. Family members (particularly parents and primary caregivers) should be aware of their speaking rate and make a conscious effort to speak more slowly.

Beyond reducing your own speaking rate, you can model for your child an easier, more relaxed way of speaking. One way to do this is by reflecting the child's sentences back to him or her, using a slower speaking rate, then expanding on the child's utterance when responding to the child's question. For example, if your child says "I want to play outside now," you can respond using a slower speaking rate, saying "You want to play outside now? (pause) Okay, that would be fine." This gives the child an immediate example of how to speak more easily and more fluently using a slower speaking rate.

Reducing demands. Often, people in the child's environment feel uncomfortable when a child stutters. There is sometimes an irresistible urge to try to help children by telling them to "speak more slowly" or to "stop, take a deep breath, and think about what they want to say." Although this might sound like good advice, it does not help, and only serves to make the child more self-conscious about his speech. The same is true about finishing a child's words or making seemingly supportive comments about his or her fluency (e.g., "you said that so fluently"). Although such statements seem positive, children interpret them as corrections since they typically don't know what they did differently to make their speech fluent. In general, it is best to avoid any such corrections or demands on the child to speak fluently. In treatment, children will be taught how to make these changes in their speech, and you will learn ways to respond to their children's fluent and dysfluent speech in a supportive manner.

Parents are naturally proud of their children's ability to memorize stories and rhymes, and often ask children to give performances for friends or family. Although it is very important for you to demonstrate pride in your child's accomplishments, particularly those related to speaking, it is probably more helpful to find other ways for your child to demonstrate his or her skills that will be less demanding on fluency (e.g., speaking together in a group or singing).

Still another form of demand involves the use of complicated language. Children are more dysfluent when they use longer or more complex sentences. When a child is dysfluent, therefore, it is helpful to limit your use of open-ended questions requiring long or complex answers (e.g., "what did you do at school today?"). Instead, try using closed-ended questions requiring shorter, simpler answers (e.g., "did you have fun as school today?" or "did you go outside during recess?"). You can also try to encourage your child to talk without asking any questions at all. Try simply commenting on your child's activities (e.g., "I wonder if it's going to rain while you're at school today") and giving him an opportunity to respond. The key is to manage the child's speaking situations carefully – at times when he is speaking more fluently, you can feel comfortable stimulating his language development by using more open-ended questions.

Minimizing time pressure. One of the most helpful ways you can reduce the conversational time pressure your children may feel is to model and use a slower speaking rate as described above. Another useful technique is pausing, one to two seconds, before answering your child's questions. This gives your child the time he or she needs to ask and answer questions, and it helps teach him not to rush into responding during his own speaking turns. Finally, this technique shows children how to take enough time before speaking to formulate their answers more fully.

Another important benefit of using pauses is that it helps children learn to take turns when speaking. The normal flow of conversation involves turn-taking – only one person speaks at a time. If two or more people are competing for talking time or if one person interrupts another, however, there is a tendency for the rate of speech to increase and for the speakers to feel pressure to get their message out quickly. This is particularly difficult for children who stutter, so it is best to take turns when talking – each person gets an opportunity to speak without fear of being interrupted and without the need to hurry. You can demonstrate this in your own speech by not interrupting your child (a part of pausing between speaker turns) and by managing the talking turns of other children so each child gets their turn to talk.

Finally, you can reduce overall time pressures by reviewing your daily routines to make sure your child's schedule is not so busy that it does not leave time to talk about his or her experiences in a slow and unhurried manner. It is certainly good for children to have full and active lives; however, some children may benefit more from participating in fewer activities that are enjoyed at a slower pace.

For older children or for children who have exhibited concern about their speech, [parents can supplement these strategies with other techniques to help children develop healthy, positive attitudes about their speaking abilities.

> Listen to content rather than manner. Stuttering draws attention to itself, so it is not surprising that parents and others in the child's environment might be more likely to hear the child's stuttering, rather than the message the child is trying to convey. Children quickly become aware of this, and this can increase their sense of shame or embarrassment about their speech even further. To reduce these negative feelings, parents should be sure to focus on and respond to their child's message and to "talk about what the child talks about." You can help yourself focus on your child's content by developing a "talking log," in which you keep track of the topics your child raises in conversation during the day.
>
> Respond to stuttering in an accepting manner. No parent would want their child to have a stuttering problem; however, it is important for you to convey complete acceptance of our child, including acceptance of his or her stuttering. Children's self-esteem and self-acceptance are highly dependent upon the acceptance of others, particularly their parents. If you convey the message that stuttering is bad, or something to be ashamed of, then it is more likely that your child will believe that he is bad. As a result, his shame will increase. Importantly, it is the child's negative reactions to stuttering that determines whether he will be handicapped by his speech, not the number of disfluencies he produces. In treatment, children will learn to be more fluent; however, they will not be successful if they have already developed negative attitudes about themselves and their speech.

Some Helpful Tips

Speaking More Slowly. Learning to speak slowly can be quite challenging, both for children and for their parents. Many parents are accustomed to a fast rate of speech, and they initially feel that slower speech feels unnatural. The best way to practice slower speech is to begin just 5 minutes per day, during a simple structured activity such as reading a child's book (Dr. Seuss books are great for this). The key to talking slowly is to use pauses, between words and between phrases. For example (the dots indicate pauses approximately 1 second long):

> "One fish . . . . . .two fish . . . . . red fish. . . . . blue fish."
> "This is a story. . . . . about a little girl. . . . . named Goldilocks."

After practicing a slower rate and pausing when reading, you can begin to use this strategy in conversational speech. The best example of how to do this is Fred Rogers of Mr. Rogers' Neighborhood. Watching Mr. Rogers on television can also help you become more comfortable with a slower speaking rate.

Managing Turn Taking. Another challenging strategy is learning to use structured turn-taking. This is especially helpful for parents who have more than one child. You help all of your children learn to take turns when talking by playing simple and familiar games such as "Go Fish" or "Hi-ho Cherry-O". All of these games are based on turn-taking – to play the game, each child

takes a turn, and the game cannot proceed until every child takes their turn. By highlighting the way that players are taking turns, you can gently direct your children's attention to turn-taking rules that will facilitate their fluency in conversational speech.

Treat stuttering like any other behavior. Parents are often confused about what to say when their children stutter, particularly following a tense or long disfluency. Many parents have been told not to draw attention to their children's stuttering for fear that this will make the stuttering worse. We feel that a better approach is to treat stuttering just like any other difficulty your child may experience when learning a difficult task (e.g., learning to skip or ride a bicycle). If a child falls while learning to ride a bicycle, you probably do not refrain from commenting for fear that he will become self-conscious about his bicycle-riding skills. Instead, you might rush to him, pi9ck him up and give him a hug, encourage him to try it again, and praise him for his courage in learning a new skill. The exact same approach should be taken with stuttering – use their own style to encourage your children and to build confidence about speaking. This also helps bring stuttering in to the open so children will feel more comfortable talking about it and expressing their own feelings of fear and frustration.

Remember – These strategies take time to learn.
Do not feel discouraged if you find them difficult at first.

You will receive specific training
about how to make these changes during treatment.

Some Things to Watch For

Normal disfluencies can be hard to distinguish from stuttering. Also, the severity of stuttering can fluctuate over time, even if the child is in therapy. Some signs that might indicate that stuttering is getting worse include:

Increased iterations during repetitions (e.g., 5 iterations of "I" in "I-I-I-I-I want that")
Increased proportion of prolongations, rather than repetitions (e.g., "IIIIIIII want that.")
Complete blockages of speech (e.g., child opens mouth to speak but no sound comes out)
Noticeable physical tension or struggle during disfluencies
Changes in pitch during prolongations or irregular rhythm during repetitions
Apparent signs of fear or frustration immediately proper to or following disfluencies
Indications that the child is substituting words to avoid stuttering
Indications that the child is avoiding talking in certain situations or to certain people

If you notice any of these behaviors, you should discuss them with a licensed and certified speech-language pathologist who is also a specialist in the diagnosis and treatment of childhood stuttering.

RESOURCES

Stuttering Foundation of America
The Stuttering Foundation provides free online resources such as video streams for children and parents, services and support to those who stutter and their families, as well as support for research into the causes of stuttering. They also offer extensive educational programs, DVDs, articles, manuals, brochures and other resources related to stuttering for professionals.
3100 Walnut Grove Road, Suite 603
P.O. Box 11749
Memphis, TN 38111-0749
(800)992-9392
http://www.stutteringhelp.org

ASHA Special Interest Division 4, Fluency and Fluency Disorders
ASHA members and students may want to consider joining the related Special Interest Division and receive newsletter with articles on this topic, members-only e-mail listservs, and Web forums. This Special Interest Division focuses on the study of characteristics and processes related to normal fluency of speech; prevention, assessment, and treatment of fluency disorders, including neurophysiologic, cognitive, psychological, social, and cultural factors.

REFERENCES

Ainsworth, S. & Fraser, J. (2006). *If Your Child Stutters: A Guide for Parents (7th ed.).* Memphis, TN: Stuttering Foundation of America.

American Speech-Language-Hearing Association Ad Hoc Committee on Service Delivery in the Schools. (1993). Definitions of Communication disorders and variations. *ASHA, 35* (Suppl. 10). 40-41.

Culatta, R. & Goldberg, S.A. (1995). *Stuttering Therapy: An Integrated Approach to Theory and Practice.* Boston, MA: Allyn and Bacon.

Daly, D. (1996). *The Source for Stuttering and Cluttering*. East Moline, IL: LinguiSystems, Inc.

Johnson, A. (2003) *Effective Fluency Therapy*. A Presentation to the Macomb/St.Clair Speech-Language-Hearing Association, Clinton Township, MI, March 7, 2003.

Langevin, M. (1998). "Teasing & Bullying: Unacceptable Behavior. Helping Children Handle Teasing and Bullying" (ISTAR research monograph). Edmonton, Alberta: Institute for Stuttering Treatment & Research (ISTAR) and Communication Improvement Program.

Langevin, M., Bortnick, K., Hammer, T., & Wiebe, E. (1998). "Teasing/bullying experienced by children who stutter: Toward development of a questionnaire. *Contemporary Issues in Communication Science and Disorders*, 25, 12-24.

Lew, G.W. (1998) "Stuttering and teasing" [on-line article].
Available: http://www.parentpals.com/5.0newsletter/5.5speechnews/5.5.1stuttease.html.

Mooney, S. & Smith, P.K. (1995). "Bullying and the child who stammers". **British Journal of Special Education**, 22, 24-27. A British study that looked into the prevalence and types of bullying experienced by schoolchildren who stutter.

Rosemond, J. (1994). "Beating the Bully". Better Homes and Gardens. [On-line magazine article].
Available: http://bhglive.teamnet.net/features/parentguide/rose93-96/rosm94-09b.html

Roth, I. & Beal, D. (1999) *Teasing and Bullying of Children Who Stutter*, University of Toronto, May 28, 1999. Accessed at http://www.mnsu.edu/comdis/kuster/journal/roth.html on November 15, 2006.

Starkweather, C.W. & Givens-Ackerman, J. (1997). **Stuttering: Studies in Communicative Disorders**. Pro-Ed: Austin, Texas: Pro-Ed. An extremely thorough guide to stuttering co-authored by one of the field's leading experts.

Yairi, E. & Ambrose, N. (2005). *Early Childhood Stuttering: For Clinicians by Clinicians*, Austin, TX: ProEd

VOICE

DEFINITION

Students are found eligible as Voice Impaired under Special Education Rule 340.1710.

Rule 340.1710 of the Michigan Special Education code provides the following definition of a voice impairment as of May 20, 2005:
Rule 10.

(1) A "speech and language impairment" means a communication disorder that adversely affects educational performance, such as a language impairment, articulation impairment, fluency impairment, or **voice impairment**.

(2) A communication disorder shall be determined through the manifestation of 1 or more of the following speech and language impairments that adversely affects educational performance:

(a) A language impairment which interferes with the student's ability to understand and use language effectively and which includes 1 or more of the following:
Phonology, Morphology, Syntax, Semantics, Pragmatics.

(b) Articulation impairment, including omissions, substitutions, or distortions of sound, persisting beyond the age at which maturation alone might be expected to correct the deviation.

(c) Fluency impairment, including an abnormal rate of speaking, speech interruptions, and repetition of sounds, words, phrases, or sentences, that interferes with effective communication.

(d) Voice impairment, including inappropriate pitch, loudness, or voice quality.

(3) Any impairment under sub rule (2) (a) of this rule shall be evidenced by both of the following: (a) A spontaneous language sample demonstrating inadequate language functioning, (b) Test results on not less than 2 standardized assessment instruments or 2 subtests designed to determine language functioning which indicate inappropriate language functioning for the student's age.

(4) A student who has a communication disorder, but whose primary disability is other than speech and language may be eligible for speech and language services under R 340.1745 (a).

(5)A determination of impairment shall be based upon a comprehensive evaluation by a multidisciplinary evaluation team, which shall include a teacher of students with speech and language impairment under R 340.1796 or a speech and language pathologist qualified under R 340.1792.

A voice impairment is defined as "the abnormal production and/or absence of vocal quality, pitch, loudness, resonance, and/or duration which is appropriate for an individual's age and/or sex." (ASHA, 1993, p. 40) When this disorder adversely affects educational performance, then a voice impairment *may* be present as described in the Michigan rule.

PREVENTION

SLPs have a role in educating school personnel about appropriate uses of the voice, vocal hygiene, and voice impairments. Teachers may be interested in promoting appropriate vocal use

in their classrooms. Other school personnel, such as cheer leading or other sport coaches, may need information about ways to help students to prevent damage to the vocal mechanism.

EARLY INTERVENING

When a teacher or parent has a concern about a student's vocal quality, they consult the SLP. School personnel often need this consultation to know whether a concern warrants further evaluation. For example, when students present with laryngitis or hyponasality, a brief conversation about the duration, symptoms, and the possible presence of a cold or allergies can alleviate concern. The SLP listens to the student's voice, interviews the parents, and together with the classroom teacher determines how the student's voice is affecting educational performance. They decide whether

- It is clear that there is not a voice disorder that is adversely affecting educational performance. No further actions are warranted.
- There appears to be difficulties. The team feels that with some consultation from the SLP, the problems may be resolved. The SLP suggests strategies for the student, teacher, and parent to use and follows up periodically. The team may use the Early Intervening form on the following page to document this process of providing suggestions. This would enable the SLP to have a record of the early intervening for district planning or for documentation should the student later receive a formal assessment. See the following information for further description. At some point the team may feel that there is no longer difficulty, or that the student needs a complete speech and language assessment. In this case the SLP obtains parental consent for evaluation.
- There appears to be a voice disorder that is adversely affecting educational performance and needs direct intervention from the SLP as opposed to consultation. The SLP then begins an Evaluation Review process that may lead to parental consent for evaluation.

Note: A request for a medical evaluation, such as a visit to an ENT, may occur during the early intervening process.

General Education Assistance Plan for Early Intervening Services

Name: _____ DOB: _____Grade:_____
Meeting date: _____ Follow-up date: _____
Persons Attending the Meeting
Name:_____ Name:_____
Name:_____ Name:_____
Name:_____ Name:_____
Person(s) who referred: _____
Specific Concerns:_____
_____
Review of Pertinent Information
_____
_____

Current Accommodations and Modifications	Progress and Results	Time Frame

Hypothesis of Problem:
_____
_____
_____

New Early Intervening Plan	Who is Responsible	Time Frame	Response to Intervention

Parent Notification and/or Signature:_____Date:_____
Recommendations: _____
_____
_____
_____
_____

Guidelines Related to Early Intervening for Voice

Specific Concerns
The SLP and the teacher document the specific concerns related to voice.

Review of Pertinent Information
The SLP/teacher team documents information about the student including: relevant developmental or medical history, family history, the student's native culture and its views on voice, educational records, previous educational supports or placements and attendance.

Documentation of Current Accommodations and Modifications
The SLP/teacher team documents current accommodations and modifications being used with the child related to voice. The student's responses to these attempts are examined as well as the length of time that these strategies have been implemented to determine the direction for further intervention.

Hypothesis of Problem
Based on an analysis of the student's background information and response to classroom accommodations and/or modifications, the SLP may have a hypothesis about how the voice problem affects the student in the classroom and what might help the student.

Design of New Early Intervening Plan, Parent Notification and/or Signature, Implementation
The SLP/teacher team then designs an early intervening plan. For example, the SLP may provide some suggestions to the teacher and parent on how to encourage use of more appropriate vocal hygiene within the student's environment.

The SLP/team reviews with the parent the specific area(s) of difficulty the student is having, what has been attempted and aspects of the new early intervening plan. Policies and procedures related to how the parents are notified for early intervening vary across districts, SLPs should follow their district procedures.

Response to Intervention and Recommendations

If the student's voice quality improves, the SLP may gradually provide less consultation as the treatment period ends. In this example no referral is necessary.

If the team determines that the student is not making adequate progress based on data collected, then the plan is redesigned and another period of intervention is attempted. Throughout the trial intervention attempts, the SLP/teacher team reconvenes as needed and monitors progress using data to evaluate the student's response to intervention and the effectiveness of the strategies being used. The team may decide to alter the strategies and continue early intervening. The SLP/teacher team may find that the student is not making adequate progress and the team, the team may initiate an Evaluation Review, if appropriate, that may lead to a formal evaluation for speech and language services.

Evaluation Review/Consent
The team reviews all of the pertinent data collected to this point, including results of the pre-referral interventions. The team decides what additional information is needed in order to determine the presence of a disability and adverse educational effect. A plan is made and agreed upon. Parental consent is gained for the plan (Evaluation Review, if appropriate) and the proposed evaluation (initial consent).

INITIAL ELIGIBILITY ASSESSMENT
A worksheet on the following page, the Voice Eligibility Guide Summary outlines the procedures in a formal assessment. The assessment section of this document is organized by this table, as each row in the Summary Guide is a heading in the text. This is followed by an explanation of suggested assessment activities and the sequence in which they may be carried out. The primary goal of the *initial assessment* is to both determine eligibility and to identify an appropriate treatment plan. This means that the SLP and team must determine:

- Whether a voice impairment exists,
- Whether the voice impairment adversely affects educational performance (academic, nonacademic, or extracurricular), and
- How intervention should be designed and implemented in order to help the student to progress in the general curriculum.

These activities are described in the sequence provided by the Voice Eligibility Guide Summary on the next page.

VOICE ELIGIBILITY GUIDE/TEAM SUMMARY

Student _____ Birthdate_____
Speech-Language Pathologist _____ Date_____

Medical Evaluation Input
Report or interview with student's otolaryngologist, audiologist, allergist, or other appropriate medical professionals
Medical evaluation has been completed and results made available ____Yes ____No
School SLP attended Medical evaluation ____Yes ____No

Comments:

Attach documentation as applicable. *Collected in part during pre-referral phase	Does not Support Eligibility*	Supports Eligibility**
Response to Intervention * If Early Intervening was implemented, then document the student's response in the diagnostic report.		
Teacher Input * Interview, checklist, or comments		
Parent Input * Interview, checklist, or comments		
Student Input * Interview, checklist, or comments		
Consideration of cultural/linguistic differences * Complete the process in the Culturally and Linguistically Diverse section if indicated		
Consideration of environmental or economic differences *		
Consideration of Temporary Physical Factors * Are vocal characteristics due to temporary physical factors such as allergies, colds or short term vocal abuse		
Vocal Quality Use observations, checklists, or interviews to assess the student's vocal characteristics looking for difficulties such as breathiness, stridency, or hoarseness.		
Pitch Use observations, checklists, or interviews to assess the student's Use of pitch looking for difficulties such as extraordinarily high or low pitch, pitch breaks, or monotone.		
Loudness Use observations, checklists, or interviews to assess the student's use of loudness, looking for difficulties such as excessive loudness, or softness.		
Resonance Use observations, checklists, or interviews to assess the student's resonance, looking for difficulties such as hyponasal, hypernasal, nasal emissions, assimilation nasality on vowels.		
Additional Areas of Assessment That Will Assist in Planning Intervention Use observations, checklists, or interviews to assess these areas. Circle those that apply: Breath Rate Phonatory Efficiancy Muscle Tension Intelligibility Speech Avoidance		
Summary of Disability	**Summary of Adverse Educational Effect**	
Summary of Eligibility in Voice Team comments and decision regarding the student's eligibility.		

Comments:

ASSESSMENT CONSIDERATIONS

Following parental consent, an assessment is conducted to determine the presence of a voice disorder and its nature. The evaluation also determines whether the voice disorder has an adverse effect on the student's educational performance. Both a voice disorder and adverse educational effect must be present for the student to be found eligible as speech and language impaired under rule 340.1710 (2)(d). A voice evaluation should include observations of the student's voice in a variety of communicative situations including connected speech as well as during specific voice tasks. Consideration must be given to age, sex and cultural differences of the student. "The evaluation should consider environmental and health factors which may contribute to the voice problem by the SLP" (ASHA, 1997). Prior to assessment, the SLP should familiarize themselves with voice related health problems of the student's ethnicity.

Gathering Input

This information should be documented in the MET report.

Medical Evaluation Input

"All students with voice disorders must be examined by a physician, preferably in a discipline appropriate to the presenting complaint" (ASHA, 1997). The SLP refers the student for a laryngeal examination to gather more information about voice structure and function. Intermediate or local school districts may wish to develop lists of otolaryngologists who provide services in the community. The SLP then distributes this list to families when making a referral. It is preferred practice for the SLP to accompany the family to the medical appointment so the SLP and physician can discuss and coordinate the treatment plan. Evaluative information should be documented in the Speech and Language MET report. The SLP should also coordinate services with intervention that may be initiated through a medical facility. The SLP may also wish to utilize the information resources of SLPs who work within the office of an ENT, who treats patients with voice disorders frequently.

Teacher Input

Collect information about the student's use of voice in the classroom setting. The SLP may want to interview other teacher(s), including the physical education teacher and lunch aides regarding vocal abuse/misuse and voice quality in a variety of settings. There are a variety of checklists available for this use. One such checklist is included on page V-9.

Parent Input

Collect information from the parent regarding past or current vocal behavior. Look for behaviors considered vocal abuse, information about the environment, such as second-hand smoke, food allergies, and medical conditions, such as sinusitis, enlarged adenoid/tonsils, bulimia. There are a variety of checklists available for this use in the literature. A sample Parent Voice Input Form is included on pages V-10.

VOICE
Teacher Input

Name_____ Date _____
Birthdate_____Grade/Program _____Teacher_____

The child above has been referred for or is receiving services regarding voice skills. Please help me gain a better overall view of this student's voice skills by completing the following information:

	Yes	No
1. Is this student able to speak loudly enough to be adequately heard in your classroom?	___	___
2. Does this student appear to avoid talking or reading aloud in your classroom?	___	___
3. Is there a decrease in the student's vocal quality (sounding hoarse, raspy, etc.)	___	___
If so, describe _____ _____		
4. Does this student use an unusually loud voice or shout a great deal in your classroom?	___	___
5. Does this student engage in an excessive amount of throat clearing or coughing?	___	___
6. Does it appear to disturb the other student's concentration or listening?	___	___
7. Does this student's voice quality (hoarseness, raspiness) in itself distract you from what he/she is saying?	___	___
8. Has this student ever mentioned to you that he/she thinks he/she has a voice problem or shown embarrassment?	___	___
9. Have the parents of this student ever talked to you about this student's voice?	___	___
10. Do other students comment about this student's voice?	___	___

_____ _____
Date Classroom Teacher's Signature

VOICE
Parent Input

Name _____ Date _____
Birth date_____ Input provided by _____
Language spoken in the home_____,_____
(primary language)

	Yes	No
1. Does your child speak loud enough to be heard?	___	___
Comment:_____		
2. Does your child lose his/her voice often?	___	___
If so, please describe:_____		
3. Is there a decrease in your child's vocal quality (becomes hoarse, nasal, raspy, or "loses his/her voice") during the day?	___	___
If so, describe: _____		
4. Does your child use an unusually loud voice or shout a great deal?	___	___
Comment:_____		
5. Does your child have a vocal quality that distracts you from what he/she is saying (such as being hoarse, harsh, or too nasal)?	____	____
Comment:_____		
6. Is your child embarrassed by his/her voice?	___	___
Comment:_____		
7. Do other people comment about your child's voice?	___	___
Please Describe:_____		

8. Please check all that apply to your child's general physical development and health:

Chronic allergies (including food)	____	Earaches	____
Chronic colds/upper respiratory	____	Asthma	____
Excessive coughing	____	Swallowing problems	____
Excessive throat clearing	____	Craniofacial disorders/cleft palate	____
Chronic sinus condition	____	Injury to nose, neck or throat area	____
Frequent sore throat	____	History of bulimia	____
Enlarged adenoids/tonsils	____		

9. Please check all that apply to your child's general behavior and/or the environment:

Participates in sports that include shouting	____	Exposure to allergens, e.g. dust, pollen, fumes, etc.	____
Participates in cheerleading	____	Cigarette smoking	____
Excessive yelling/screaming	____	Drug use	____
Talking loudly	____	Alcohol use	____
Excessive talking or arguing	____	Participates in choir or singing	____

_____ _____
Date Parent's Signature

VOICE
Student Input

Name _____ Date _____
Birth date _____Grade/Program _____Teacher_____

Discuss the following questions with the student:

	Yes	No
1. Are you concerned about your voice (as being hoarse, raspy or nasal)?	___	___
If so, please describe:_____		
2. Do you lose your voice often?	___	___
If so, please describe: _____		
3. Do you participate in activities that require you to use a loud voice such as cheerleading or sports?	____	____
4. Are you ever embarrassed by your voice?	___	___
If so, please describe: _____		
5. Do other people comment your voice?	___	___
If so, please describe _____		

6. Rate your voice in the following situations:

	Better	Worse
Morning	_____	_____
Afternoon	_____	_____
Evening	_____	_____
Weekend	_____	_____
Spring	_____	_____
Summer	_____	_____
Winter	_____	_____
Fall	_____	_____
Home	_____	_____
School	_____	_____

7. Do you participate in the following activities or behaviors?

Sports that include shouting	____	Choir or singing	____
Cheerleading	____	Exposure to allergens,	
Excessive yelling/screaming	____	e.g. dust, pollen, fumes, etc.	____
Talking loudly	____	Cigarette smoking	____
Excessive talking or arguing	____	Drug use	____
Clearing your throat or Coughing a lot	____	Alcohol use	____

_____ _____
Date Student's Signature

Student Input
Collect information from the student (or parent if a preschooler) regarding the presence of ongoing vocal abuse in a variety of settings including home, a quiet classroom, noisy classroom, playground, sports and recreation activities, and singing activities. Vocal abuse such as coughing, throat clearing, significant neck or jaw tension, etc. should be addressed. There are a variety of checklists available for use in the literature. A sample student voice input form is included on page V- 10, as well as another tool: Voice Conservation Index for Children, pages V-26 & V-27. This information should be documented in the speech and language MET report.

Considerations of Cultural/Linguistic Differences (CLD)
It is important to investigate cultural and linguistic variables that may effect voice production. Cultural variations can influence variations in volume, pitch, and quality.

CLD Considerations for Volume
When assessing a student's volume, the SLP should take into account how the student's culture perceives and uses volume when communicating in various environments. Students may speak more softly or more loudly than the American culture would expect given their cultural background. Misjudging loudness perceptions from one culture may be perceived as a disorder in another culture. CLD Children may be perceived as talking too loudly during a classroom interchange because the voice volume is outside the boundaries of the norms established for the American school environment. Some children are thought to have difficulties with excessive loudness when they actually do not know when to adjust their volume levels. For example, the student may not know that they are expected to lower their voice in the library, or lower their voice if someone backs away from them or whispers to them in an effort to signal them to speak more softly. Some CLD students need to learn to focus on and interpret the feedback they get from listeners to adjust their volume accordingly (Andrews & Summers, 2002).

CLD Considerations for Pitch
Pitch may vary for students who are culturally and linguistically diverse. Pitch variations for students who speak with an African American dialect may include register shifts for emphasis, or differences in how pitch is used to mark yes/no questions, commands, or conditionality (Holland & DeJarnette, 2002). Pitch variations in students who speak other languages, such as Asian Hmong and Vietnamese, may result in differences in how sentences and questions of all types are marked (Cheng, 2002).

CLD Considerations for Quality
Assessment and intervention for issues related to vocal quality should follow the procedures described later in this document. Holland and DeJarnette (2002) summarize the incidence of voice-related pathologies in minority groups across this country. They discuss the risk factors as including access to health care, exposure to toxins, and possible predispositions. They also describe some specific variations in quality for African American dialectal speakers including increased vocal fry and breathiness.

Considerations of Temporary Physical Factors
Voice difficulties as a result of temporary physical factors should not be considered as a voice impairment/disability. These might include factors such as allergies, sinusitis, gastroesophageal reflux, colds, abnormal tonsils or adenoids.

Vocal Quality
The voice should be evaluated for breathiness, stridency, harshness or other characteristics using observations, checklists and teacher and parent input. The Vocal Characteristics checklist on page V-16 and the Buffalo III Voice Profile on page V-17 are tools designed to record these observations. The SLP will want to evaluate the student's breath supply to support an audible and consistent level of speech and the student's phonatory efficiency to coordinate speech with breath support for smooth and intelligible speech.

Breath Supply
Breath supply should be evaluated for the amount and efficiency of air to sustain speech. Breath supply may be recorded as part of the Buffalo III profile on page V-17. In order to assess efficiency of breath support, the type of breathing should be assessed. Types of breathing include clavicular, diaphragmatic, and thoracic, with diaphragmatic considered the most efficient method of breathing.

In order to assess breath support, the SLP may use the following tasks:
- Observations of the student's breathing and movements of the chest and abdominal cavity.
- Have the student produce a variety of speech tasks of increasing length, e.g. reciting the alphabet, counting to 100, imitating or repeating sentences of increasing length, reading a paragraph, etc. The SLP would record the average number of syllables and the amount of breaths the student produces during a running speech task.
- Listen for appropriate use of breath support and phrasing to sustain speech. Record instances of inadequate breath or loss of voice.
- Record instances of speaking on inhalation versus exhalation.

Phonatory Efficiency
Phonatory efficiency should be evaluated to assess the student's ability to sustain quality phonation. In order to assess phonatory efficiency, the SLP may use the following tasks:
- Observations of the student having difficulty maintaining speech or its quality, e.g. harshness, hoarseness, breathiness, tremor, glottal fry, and periods of weakness or loss of voice.
- Assessment of the student's ability to sustain the /a/ sound for at least 14 seconds.
- Observations of the student producing a smooth versus hard attack when producing words and sentences beginning with vowel sounds.
- Determination of S/Z ratio. The SLP will time the student's ability to sustain the /s/ sound for as long as possible, on two occasions. The SLP then times the student's ability to sustain the /z/ sound for as long as possible, on two occasions. Divide the longest measurement of /s/ by the longest measurement of /z/. If the ratio is greater than 1.25 than there is reason for concern. This may indicate a vocal fold pathology affecting phonation.

Muscle Tension
Overall muscle tension during speech production should be evaluated. The Buffalo III Profile on page V-17 may be used to record these observations. The SLP should look for signs of hypertension, hypotension, and anxiety when speaking. Tension sites may include the lips, face, mandible, neck, chest, and abdominal areas.

Pitch
Pitch should be evaluated regarding whether it is too high, too low, monotone, or contains too many variations using checklists such as the Buffalo III Voice Profile on page V-17 or the Vocal Characteristics Checklist V-16. The SLP should also listen for pitch breaks, glottal squeakiness, periods of diplophonia or an audible use of two different pitches at the same time, as well as use of disordered intonation patterns as a result of pitch difficulties.

Loudness
Loudness should be evaluated as being either too loud or too soft using observations, checklists and teacher and parent input. The Vocal Characteristics checklist on page V-16 and the Buffalo III Voice Profile on page V-17 tools may be used to record these observations. The SLP may evaluate whether or not the student can imitate, control and sustain both soft and loud voice levels, as well as an appropriate loudness level when reading a passage.

Resonance
Resonance disorders are usually the result of a variety of structural abnormalities such as cleft palate and velopharyngeal insufficiency (hypernasality) or nasal polyps and enlarged adenoids (hyponasality). Resonance should be evaluated for the components of hypernasality, hyponasality, assimilative nasality, mixed nasality, and cul de sac resonance. Hypernasality is perceived as too much resonance in the nasal cavity during the production of non-nasal sounds, which include all, sounds other than the consonants “m, n, ng.” Hyponasality is perceived as too little resonance in the nasal cavity during the production of “m, n, and ng” and will also affect perception of nasality in vowel production. Hyponasality may sound similar to the speech of someone experiencing a head cold. Assimilative nasality is hypernasality of vowel sounds that are adjacent to one of the nasal consonants, such as too much nasality occurring during production of the vowel sound “e” in the word “pen.” Mixed nasality occurs when both hypernasality and hyponasality are present in the student’s speech. Cul de sac resonance occurs when the tongue is positioned too far back in the oral cavity and interferes with production of resonance through the velopharyngeal area creating too much resonance in the pharyngeal area. The student’s speech may sound muffled or like that of a speaker who is deaf. The SLP should also listen for instances of nasal emission, such as a snorting sound, occurring speech production.

When assessing for resonance, the SLP should use observations, parent, and teacher input, and assessments with words and sentences containing pressure consonant sounds. Comments may be recorded on the Vocal Characteristics Checklist V-16 or the Buffalo III Voice Profile V-17.

Hypernasality - Pressure Consonant Production
There are 16 pressure consonants that use a greater amount of intra-oral air pressure than other consonant sounds. Having the student produce words containing these sounds may readily reveal nasal emissions or hypernasality.

The following pressure consonants may be put into words and alliterative phrases to challenge the students velopharyngeal functioning (such as Peter picked a peck of pickles.)

/p/	/g/	/f/	/z/	/ch/
/b/	/t/	/v/	/sh/	/th/
/k/	/d/	/s/	/zh/	/O/

The SLP would determine if nasal emission occurs on these non-nasal sounds.

Other Tools
Another sample evaluation tool would be the IOWA Pressure Articulation Test included on page V-18. The SLP may also have the student read a paragraph (such as the Zoo passage) in which nasal consonants have been deleted. If nasality is detected, using any of these measurements, a hypernasal resonance disorder may exist. When assessing for hyponasality, the SLP may ask the student to read a word list containing nasal consonant sounds. Hyponasal resonance would exist if the following sound substitutions are perceived: b/m, d/n, and g/ng. Products to further assess for resonance disorders, such as the nasometer or various software programs, are commercially available through speech/language publishers/venders.

Additional Areas of Assessment That Will Assist in Planning Intervention:
Include any relevant information below in the MET.

Speech Avoidance
The amount and degree that the student may avoid speaking situations should be evaluated using any of a variety of resources, including the teacher, parent, and student input forms and the Buffalo III profile on page V-17.

Speech Intelligibility
Speech intelligibility should be evaluated in connected speech and may be rated using the Buffalo III Voice Profile on page V-17.

Summary of Disability
Include a statement in the box labeled Summary of Disability on the Voice Eligibility Guide Summary that supports or does not support the existence of a voice disorder. This should be a culminating statement of the information gathered including the characteristics of quality, pitch, loudness, and resonance of the student's voice.

Adverse Educational Effect
Write a statement in the box labeled Summary of Adverse Educational Effect regarding whether the voice concerns have adverse effect on the student's educational performance. It should provide a summary of documentation related to how the voice disorder may impact the student's social, vocational, or academic performance.

Summary of Eligibility
If there is evidence of a voice disorder and an adverse impact on educational performance, in the absence of cultural/linguistic or environment/economic differences, then the student should be considered eligible as speech and language impaired in the area of voice.

INTERVENTION
Invention goals are selected based on the assessment. Goals should reference changes that should occur in the student's school environment, as well as improving the student's voice in the areas of vocal quality, pitch, loudness and resonance. The majority of voice impairments in school age children are related to vocal quality, usually as a result of vocal nodules. The voice parameters of pitch and loudness may be addressed through vocal quality programs. Treatment related to pitch disorders may include determining the student's optimal pitch and providing feedback methods for the student to obtain that particular pitch level. Treatment for voice intensity (loudness) would also include providing the student with feedback measures to maintain an optimal loudness level. The primary treatment for resonance disorders focuses on correcting the structural abnormality, e.g. surgery to repair a cleft palate or velopharyngeal insufficiency. The SLP should remain in contact with the physician and family during this process. Treatment may also include feedback and facilitation of recognizing the contrast between oral versus nasal resonance.

Intervention of Vocal Quality Difficulties
The following tools are included in pages V-19 to V-25 to facilitate intervention of vocal quality:
-Therapy Program for Improved Vocal Use
-Voice Reduction Agreement
-Vocal Hygiene Recommendations
-Easy Talking and Voice Rules (for student)
-Voice Conservation Index for Children

Evaluating Progress and Adjusting Approach
Intervention for a pre-determined interval of time to assess the effectiveness in improving the student's voice is recommended. This time interval is determined on an individual basis. Progress should be evaluated for evidence of improvement. If no progress is noted, the intervention should be modified for the next time interval. This process of adjusting intervention strategies when no improvement is seen should continue for a period of time. If progress is evident with a particular intervention, the team may decide to proceed with few adjustments. If after several adjustments in intervention methods, the student continues to make no progress, a re-evaluation of service may be warranted.

It is important to help the family to follow-through on doctor's recommendation for re-evaluation. Once again, it is preferred practice for SLPs to attend this doctor visit for coordination of treatment.

Scheduling of Services/Service Delivery Models
Initial phases of voice intervention are often within the privacy of pull-out therapy. However, as therapy progresses, classroom based services can be helpful for the student to carryover learned skills.

DISMISSAL CRITERIA

Please refer to the introduction to this section, SLI as a Primary Disability, for guidelines related to dismissal, pages SLI-7, SLI-8.

VOCAL CHARACTERISTICS CHECKLIST

Name _____ Age ____ Examiner _____ Date _____

Instructions: Rate each characteristic. Use the comments column on the right-hand side to add additional information.

1=never 2=infrequently 3=severe

Pitch Notes	Loudness Notes
__ too high _____ __ too low _____ __ monotone _____ __ limited variation _____ __ excessive variation_____ __ pitch breaks_____ __ diplophonia_____ __ disordered intonation/patterns _____	__ too loud __ too soft __ limited variation __ excessive variation __ mon loudness
Resonance	Phonatory-Based Quality
__ hypernasal _____ __ nasal emission_____ __ assimilation nasality _____ __ hyponasal_____ __ mixed _____ __ transitions between orality and nasality_____ __ mouth opening_____ __ tongue movement_____ __ lip movement_____	__ breathy __ strident __ harsh __ hoarse __ quivering __ tremor in voice __ weak voice __ loss of voice __ glottal fry __ hard glottal attacks __ reverse phonation
Other	Rate
__ breathing through mouth_____ __ inadequate breath support_____ __ throat clearing_____ __ disordered stress patterns_____	__ too rapid __ too slow

BUFFALO III VOICE PROFILE
VOICE PROBLEMS OF CHILDREN

Name _____ Birth Date _____ Age _____ Sex _____
Rater _____ Date _____ Time of Day _____ Place _____
Collect a speech sample and rate the following aspects of the student's voice.

	SEVERITY RATING				
	Normal	Mild	Moderate	Severe	Very Severe
LARYNGEAL TONE	1	2	3	4	5
Breathy					
Harsh					
Hoarse					
PITCH	1	2	3	4	5
Too High					
Too Low					
LOUDNESS	1	2	3	4	5
Too Loud					
Too Soft					
NASAL RESONANCE	1	2	3	4	5
Hypernasal					
Hyponasal					
ORAL RESONANCE	1	2	3	4	5
Throatiness					
BREATH SUPPLY	1	2	3	4	5
Amount					
MUSCLES	1	2	3	4	5
Hypertense					
Hypotense					
VOICE ABUSE	1	2	3	4	5
Amount and degree					
RATE	1	2	3	4	5
Too Fast					
Too slow					
SPEECH ANXIETY	1	2	3	4	5
Amount and degree					
SPEECH INTELLIGIBILITY	1	2	3	4	5
	100%	75%	50%	25%	0%
OVERALL VOICE RATING	1	2	3	4	5

COMMENTS:
Adequate Aspects Aspects for Improvement

_____

_____

Wilson, D.K. (1987). *Voice problems in children*, 3rd edition. Baltimore, MD: Williams & Wilkins.

IOWA PRESSURE ARTICULATION TEST

Iowa Pressure Articulation Test measures sounds and words in order of decreasing discrimination levels. This test should be used with cleft palate children to assess levels of intra-oral pressure related to velopharyngeal function. These sounds are listed in order from those needing the most intra-oral pressure to level 8, needing the least intra-oral pressure. This will aide in choosing target sounds for remediation goals.

Discrimination Level	Sounds	Words
1	/s-, sk-/	sun, skates
2	/-k-, sm-, -sm, sn-, str-/	pocket, smoke, possum, snowman, string
3	sh-, -z-, -k, st-/	shoe, scissors, cracker, stairs
4	/-s-, -sh-, kr-/	dresses, dishes, crayons
5	/-g-, -s, sp-, tr-, gr-, -g, -k, -pt, kl-, gl-, -mps/	wagon, mouse, spoon, tree, tiger, fork, stopped, clown, glasses, stamps, grass,
6	/k-, g-, -g, sh-, j-, -sh, bl-, -ks/	cat, girl, dog, fish, jump, washer, blocks, socks
7	/-k, br-, dr-, tw-/	truck, bread, drum, twins
8	/t-, f-, -f, -p, pl-, -lf/	two, telephone, knife, paper, planting, wolf

Key: Level 1 = most discriminating, Level 8 = least discriminating. Sounds are shown according to position in word, e.g. initial /s-/, medial /-s-/, and final /-s/.

*Discrimination levels from Morris, H.L., Spriestersbach, D.C., and Darley, F.L. "An Articulation Test, for Assessing Competency of Velopharyngeal Closure," J.S.H.R., 4, 1961, pp. 48-55.

Words from Templin, M.C. and Darley, F.L. "The Templin-Darley Tests of Articulation - A Manual and Discussion of Articulation Testing," Ed. 2, Iowa City: Bureau of Educational Research and Service University of Iowa, 1969.
(D. Kenneth Wilson, Ph.D., State University of New York, Buffalo, New York, U.S.A.)
Source: Wilson, D.K. (1987). Voice problems in children (3rd ed.). Baltimore, MD: Williams & Wilkins.

THERAPY PROGRAM FOR IMPROVED VOCAL USE

Questions and Answers

What are vocal nodules? Vocal nodules are added layers of tissue on the vibrating edge of the vocal folds that vary in size from pinpoint to the size of a peppercorn. They develop as the body attempts to protect itself against abuse and overuse of the voice. They usually are on both vocal folds, and located a third of the way down from the front of the vocal folds.

How do they develop? Nodules develop when a person (a) continuously uses a loud voice (whether speaking or singing), and (b) abuses the voice through shouting, yelling, etc.

What is the primary cause? Nodules develop when a "vocal attack" or repeated hard initiation of voice with a greater than normal loudness occurs. This development can be enhanced by medical problems (e.g., laryngitis, edema (swelling), sinus, etc.).

What are the symptoms? The major symptoms include having to work harder than normal to produce voice (tension), and reduced closure of the vocal folds (possible breathiness) due to the presence of the nodules. In addition, the person may have pitch breaks or uncertainty of pitch (as during singing), a reduction in the upper part of the pitch range, as well as instances where the pitch level is perceived as lower than usual.

What is treated with direct therapy? The symptom worked on through direct treatment is the loud abrupt vocal attack. No direct work is done on reducing breathiness or changing pitch level of the voice. In addition to changing the way voicing is initiated (attack), there must be some reduction in the overall amount of talking or using voice.

How long will it take? With good cooperation, an audible change in voice should be heard within 4-6 weeks. By 6 months, there should be an absence or significant reduction in the size of the nodule, as determined by medical examination.

How will I know my voice is improving? In order, the changes in voice are as follows: (a) reduction in pitch breaks and breaks in voicing, (b) awareness of less tension in making voice, and (c) an awareness of less breathiness in the voice.

ORGANIZATION OF THERAPY PROGRAMS

1. There is need to make sure that any current or potential medical problems that may be affecting the larynx, are ruled out or being treated.
2. There is a period of partial voice rest for approximately 4-6 weeks. There are three parts to this program, which need to be done by the student and reported to the SLP.
   (a) Instances where the voice is used in an abusive way should be reduced. Identify your "peak" voice usage time, and attempt to reduce instances of yelling, etc., by at least 50%.
   (b) Watch very carefully for an excessive amount of coughing and throat clearing. The student should not "perform" in the sense of using funny voices.
   (c) Find ways of significantly reducing (notice this is not a prescription for total voice rest), the overall amount of use of voice in daily activities. The student should work this out with the SLP.

Burk & Brenner. *Reducing Vocal Abuse. Language, Speech and Hearing Services in Schools*, pp. 173-178. July 1991

VOICE REDUCTION AGREEMENT

I. Introductory Statement

The outcome of voice therapy is in your hands. The best vocal techniques are fruitless unless they are used with fully rested and functioning vocal folds. This can only be achieved through a reduction of vocal use and absence of vocal abuse.

II. Overall Goal of Therapy

You will reduce use and abuse through a short-term intensive vocal reduction agreement.

A. Informed of peak vocal abuse situations
   1. Acknowledged
   2. Reduced
B. Informed of vocal use time
   1. Acknowledged
   2. Reduced
C. Instructed in vocal behavior modification
   1. Vocal intensity decreases
   2. Appropriate word initiation/breathy approach as opposed to harsh vocal attack
   3. Appropriate use of available air supply . . . not forcing words at the end of a breath

III. Objectives

A. Not to talk for PLANNED periods of time during daily activities
   1. This does not include sleeping, showering, studying, etc.
   2. If need arises for communication during these times, use of a breathy voice is required.
B. Reduce situations where there is difficulty in not talking.
   1. Lunch time with friends . . . listen more than talk or sit with more people so less talking is expected.
   2. In general, the time spent with friends needs to be monitored closely and changed if it is a problem situation.
C. To keep a voice tape denoting success in reduction of abuse and use of voice.
   1. This is a daily log and should include the date and time of the recording.
   2. The selected reading should be completed every morning and evening. After the evening recording a specific description on vocal use/abuse of that day should be included. This tape should be brought to each therapy session.

IV. Specific Guidelines

A. From wake-up time to the time of the first class at school, NO vocal use is allowed. This will be explained to family members so that they can be supportive of your efforts.
B. NO speaking unless the other person is within touching distance. No shouting from room to room.
C. DO NOT carry on conversations:
   1. Across a crowd, stage, large room, etc.

2. In the presence of high noise levels:
   a. TV set
   b. Stereo/radio/orchestra/band
   c. Car
   d. Other people
   e. Appliances (e.g., mixer, sweeper, blender)

D. Telephone conversations should be limited to one two-minute call per day. An egg timer is an excellent way to monitor and limit this period.
E. There may be NO uses of funny voices, yelling, shouting, sound effects, reading aloud, singing or other abusive activities.
F. While in the cafeteria, talking is permitted only when it is necessary.
G. NO auditions for any vocal part until voice therapy is completed.
H. Monitor vocal abuses with a counter at three specified times during the day:
   1. In the hall between classes
   2. In the car
   3. At mealtime

   These should be recorded on a chart daily. Any comments should be written beside the tally.
I. ABSOLUTELY NO yelling at siblings.
J. After-school activities must be monitored and discussed at each therapy session. If excessive vocal use is apparent, more specific guidelines may be formed.
K. If at any time a sore throat, allergies or other throat ailment occurs, all talking is prohibited.

V. Time Line

To be implemented beginning (date) and continuing for 4 weeks, depending on progress and follow-through of guidelines. If there are no apparent vocal use changes through the time line, it will be discussed at the end of the 4-week period.

I, _____, have read the above agreement and understand the necessity of the guidelines and the probable outcomes. I wish to comply with these guidelines and continue to work on the reduction of vocal use/abuse.

_____
(DATE)

Burk & Brenner. *Reducing Vocal Abuse. Language, Speech and Hearing Services in Schools*, pp. 173-178. July 1991

VOCAL HYGIENE RECOMMENDATIONS

No shouting.

Avoid smoky environments.

Use modified singing and vocal play.

Sleep with warm steam vaporizer nearby.

Sip warm water or juice throughout the day. (Warm, with steam)

Suck on a lozenge. (Glycerin – avoid Menthol, Eucalyptus)

Allow for quiet times throughout the day. (No talking! No whispering!)

Minimize coughing and throat clearing. (Swallow & clear with air)

Don't speak over noise.

Voice rest after singing or prolonged vocalization. (Playing, crying, etc.)

Cover nose and mouth with scarf in cold weather.

Use easy phonatory initiation; soft, breathy voice.

Use a daily behavior chart to reduce abusive vocal behaviors.

Use a system of reinforcement to encourage desired behaviors.

Share information with others involved in your care. (School personnel, etc.)

Author Unknown

EASY TALKING AND VOICE RULES

Name: _____ Date: _____

1. Slow down.

2. Talk with your lips and say every sound.

3. Start words in a gentle, easy way.

4. Flow your words together, smooth, not choppy.

5. Do not yell or talk loud.

6. Do not clear your throat or talk a lot.

7. Do not sing or try to imitate voices from TV or movies.

Author Unknown

VOICE CONSERVATION INDEX FOR CHILDREN*

NAME: _____ AGE: _____ SEX: _____ RACE: _____

Please circle the best answer.

When I get a cold, my voice gets hoarse.
All the time Most of the time Half of the time Once in a while Never

After cheering at a ball game, I get hoarse.
All the time Most of the time Half of the time Once in a while Never

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 of the time Once in a while Never

When I'm in a noisy situation, I speak very loudly.
All the time Most of the time Half of the time Once in a while Never

At home or at school, I spend a lot of time talking every day.
All the time Most of the time Half of the time Once in a while Never

Outside, I like to talk to people who are far away from me.
All the time Most of the time Half of the time Once in a while Never

When I play outside with my friends, I yell a lot.
All the time Most of the time Half of the time Once in a while Never

I lose my voice when I don't have a cold.
All the time Most of the time Half of the time Once in a while Never

People tell me I talk too loudly.
All the time Most of the time Half of the time Once in a while Never

People tell me I never stop talking.
All the time Most of the time Half of the time Once in a while Never

I like to talk.
All the time Most of the time Half of the time Once in a while Never

I talk on the phone.
All the time Most of the time Half of the time Once in a while Never

At home, I talk to people who are in another room.
All the time Most of the time Half of the time Once in a while Never

I like to make car or other noises when I play.
All the time Most of the time Half of the time Once in a while Never

I like to sing.
All the time Most of the time Half of the time Once in a while Never

People don't listen to me unless I talk loudly.
All the time Most of the time Half of the time Once in a while Never

Saniga, R.D. & Carlin, M.F. (1993). Vocal Abuse Behaviors in Young Children. *Language, Speech, and Hearing Services in Schools, 24*(2).

RESOURCES

ASHA Special Interest Division 3, Voice and Voice Disorders

ASHA member and students may want to consider joining the related Special Interest Division and receive newsletter with articles on this topic, members-only e-mail listservs, and Web forums. This Special Interest Division offers an opportunity for ASHA members to pursue a common interest related to voice production and voice disorders through continuing education, networking, demonstrations and study sessions. The potential of the Division is limited only by the imagination of those who join.

REFERENCES

American Speech-Language-Hearing Association Ad Hoc Committee on Service Delivery in the Schools. (1993). Definitions of Communication disorders and variations. *ASHA, 35* (Suppl.10), p. 40-41.

American Speech-Language-Hearing Association (1997). *Preferred practice patterns for the profession of speech-language pathology*. Rockville, MD: Author.

Andrews, M. L. (1986). *Voice Therapy for Children*. Longman Inc., White Plains, N.Y.

Andrews, M. L. & Summers, A. C. (2002). *Voice Treatment for Children and Adolescents.* San Diego, CA: Singular Publishing.

Boone, D. R. & McFarlane, S. C. (1994). *The Voice and Voice Therapy* 5th Edition. Prentice Hall, Englewood Cliffs, New Jersey.

Burk & Brenner. *Reducing Vocal Abuse. Language, Speech and Hearing Services in Schools*, pp. 173-178. July 1991

Cheng, L. L. (2002) Asian and Pacific American Cultures. In D.E. Battle (Ed.) *Communication Disorders in Multicultural Populations* 3rd ed. Boston: Butterworth-Heinemann, p. 71-112.

Cotton, Raymond & Casper, Janina K, (1996). *Understanding voice problems: A physiological perspective for diagnosis and treatment*, 2nd Edition. Williams & Wilkins Publishing, Baltimore.

Holland, R. W. & DeJarnette, G. D. (2002) Voice and voice disorders. In D.E. Battle (Ed.) *Communication Disorders in Multicultural Populations* 3rd ed. Boston: Butterworth-Heinemann, p. 299-335.

Saniga, R.D. & Carlin, M.F. (1993). Vocal Abuse Behaviors in Young Children. *Language, Speech, and Hearing Services in Schools, 24*(2).

Wilson, D.K. (1987). *Voice problems in children*, 3rd edition. Baltimore, MD: Williams & Wilkins.

SPEECH AND LANGUAGE AS A RELATED SERVICE
[Speech-Language Services for Students with Other Primary Disabilities]

Many students who have disabilities also experience speech and language disorders. In fact, language disorders are intrinsic to disorders such as cognitive impairments and autism spectrum disorders. Under the Michigan Special Education Code (2005) of the Michigan Department of Education, children who have a primary disability other than speech and language impairment may be eligible for services if they have communication impairment and need additional services to benefit from special education. Eligibility in such instances is based upon the student's needs, which are determined by the IEP team. The team in making its determination reviews information provided by the speech-language pathologist in an assessment report. This is the consistent with recommendations in earlier versions of this document.

Michigan Special Education Code references related service in R340.1710 Speech and language impairment Defined; determination.

(4) Students who have a communication disorder, but whose primary disability is other than speech and language may be eligible for services under R. 340.1745 (a).

Michigan Special Education Code defines speech and language as a related service in R340.1745 Services for students with speech and language impairment.

(a) The speech and language services provided by an authorized provider of speech and language services shall be based on the needs of a student with a disability as determined by an individualized education program team after reviewing a diagnostic report provided by an authorized provider of speech and language services.

Related services are defined in IDEA as well

IDEA (34CFR§ 300.24)

(a) General. As used in this part, **the term related services means** transportation and **such developmental, corrective, and other supportive services as are required to assist a child with a [FR Page 12424] disability to benefit from special education, and includes speech-language pathology** and audiology services, psychological services, physical and occupational therapy, recreation, including therapeutic recreation, early identification and assessment of disabilities in children, counseling services, including rehabilitation counseling, orientation and mobility services, and medical services for diagnostic or evaluation purposes. The term also includes school health services, social work services in schools, and parent counseling and training.

IDEA (34CFR§ 300.24) Continues

(14) Speech-language pathology services includes--

(i) Identification of children with speech or language impairments;
(ii) Diagnosis and appraisal of specific speech or language impairments;
(iii) Referral for medical or other professional attention necessary for the habilitation of speech or language impairments;
(iv) Provision of speech and language services for the habilitation or prevention of communicative impairments; and
(v) Counseling and guidance of parents, children, and teachers regarding speech and language impairments.

Fluid Service Delivery

When students experience other primary disabilities that include communication impairment, they will need considerations for those communication needs throughout their education. However, many students with other disabilities receive special service and may also have adapted or modified curricula. The need for speech and language intervention will increase and decrease as the student experiences different stages of development or has different education team members. It is important that students who need the support of a speech-language pathologist receive that support. Similarly, if a student does not currently need the service but may in the future, The team may removed the service at an IEP, and it can be reconsidered at the point in time when it is needed. Even when it is anticipated that the student may need services again, services may be discontinued, as it is not necessary to continue services 'just in case' there is a need at another time.

DOCUMENTATION

Diagnostic Reports

This rule (340.1745) does not specify what needs to be included in the diagnostic report. Furthermore, the rule does not require standardized testing of students whose primary disabilities are other than speech and language to determine eligibility. Because they have another disability that qualifies them to receive special education services, they are already eligible for speech and language services as a related service if it is shown that the service is needed. The basis for determining the provision of related services is the responsibility of the team, including an SLP, by assessing the student's need for speech and language service in addition to other special services. Of course, if standardized tests are needed by the SLP to determine communicative impairment and needs, then this does not preclude their use. The information collected by the SLP and other team members should continue to include multiple forms of assessment. The diagnostic report should lay the foundation for intervention by describing how the SLP's service will assist the student to progress in the curriculum.

MET Requirements

There is no MET required to add speech and language services to the educational program of a student with a MET eligibility in another area. The SLP writes a diagnostic report that explains the need for services. The diagnostic report should contain the results of multiple forms of

assessment data gathered by the team to determine this need. After a period of intervention, the team may determine that the student no longer needs speech and language services. They document this in another report explaining why services are no longer recommended. This may mean that the short-term outcomes were met and the student is now progressing with the other special education supports received. In other cases, it may mean that the student did not respond to intervention at this point in time or there were some other mitigating factors that inhibited progress, and the team is recommending discontinuation of speech and language services. Certainly this same student may have speech and language services added to his/her program at another time.

A caveat to this guideline relates to districts that choose to use dual certification. It should be noted that if the SLP and team elect to use MET paperwork and make a secondary eligibility as speech and language impaired, then the MET paperwork may also be needed to discontinue services.

IEP Requirements

Some districts document speech and language services added for a student with a different disability as a related service in the "related service section" and some school districts document these related services under speech-language services on the IEP form. When there is question as to how an IEP is written, it is recommended that the SLP confer with his/her district administrator.

DISMISSAL CRITERIA

ASHA (2003) makes the following recommendations for dismissal criteria in the schools. These suggestions are different from the recommendations in the last version of the MSHA document and in the 1999 guidelines document from ASHA, in order to meet the requirements of IDEA regulations 1997 and 2004. It is suggested that these considerations be made and discussed further by local districts.

> The decision-making process for dismissing a child from speech-language services is different for children receiving special education services than it is in the clinical setting. In a clinical setting, dismissal criteria can include issues regarding motivation, attendance, or lack of progress. In special education, however, dismissal decisions must comply with IDEA.
>
> All children who are found in need of related services in order to benefit from special education services must receive services. A child may be dismissed from receiving services only when he/she no longer needs the related services to benefit from special education. If the child continues to meet those criteria, the child must continue to be served.
>
> So, how is a child to be dismissed? Children who have a speech-language impairment that is secondary to another disability must need related services (services to benefit from special education) to receive speech-language services. The converse would be true for a

child to be dismissed from services – the child with "speech-language as a related service" would no longer need speech-language services to benefit from special education services.

Dismissal from services may occur if:

- the child no longer has a speech-language impairment; OR
- although the child has a speech-language impairment, it no longer affects his/her educational performance; OR
- although the child who has received speech-language services as related service still has a speech-language impairment that affects his/her educational performance, the eligibility team determines that he/she does not need related services to benefit from special education.

The question remains as to what options speech-language pathologists have when children are failing to make progress, for any of a variety of reasons. IDEA includes requirements regarding lack of progress. The IEP team is to "review the child's IEP to determine whether the annual goals for the child are being achieved and revise the IEP as appropriate to address any lack of expected progress toward the annual goals" (34 CFR § 300.343 (c)). The speech-language pathologist should seek the assistance of the IEP team whenever a child fails to make progress. A number of options could be considered as follows:

- The child has plateaued in his/her progress. The speech-language pathologist may serve as a consultant to others (the special education teacher, paraprofessional, regular education teacher) who can provide communication facilitation. The child may be dismissed from speech-language services due to lack of educational benefit but remain in special education.

- The child is not motivated to continued working on a communication impairment. The IEP team may determine that the child is having motivational problems in other special education and regular education classes. A joint effort would then be pursued to address motivation. If the IEP team identifies that motivation is a problem only in speech-language services, the SLP may consider a change in intervention focus or service delivery, or discuss other support options with the IEP team.

- There are extenuating medical circumstances. If the medical circumstance is temporary (i.e., the child is receiving a particular treatment that requires absence from school), the IEP team should reconvene and revise the IEP to reflect the services the child should receive during the medical situation. Documentation should be in place to explain why any service is temporarily discontinued. Upon the child's recovery and return to school, the IEP should be again revised and services initiated as appropriate. Such a child would not be dismissed from services temporarily.

- The child is not making progress. If the lack of progress is not related to reaching a plateau that could be anticipated based on the child's disability, the IEP team should consider the reasons for the lack of progress. In some cases, the cause may be the

complexity of the speech-language impairment and the need for the student to receive more specialized speech-language services.

When making decisions regarding removal of related service or addressing a student's lack of progress toward meeting annual goals, SLPs should be sure to follow procedures put forth by their school district and to discuss these situations with administrators.

(ASHA, 1993, p. 30-32, reprinted with permission)

AUTISTIC SPECTRUM DISORDERS (ASD)

DEFINITION
Students are found eligible having Autism Spectrum Disorder under Special Education Rule 340.1715

R 340.1715 Autism spectrum disorder defined; determination.
Rule 15.
(1) Autism spectrum disorder is considered a lifelong developmental disability that adversely affects a student's educational performance, in one of more of the following performance areas:
(a) Academic.
(b) Behavioral.
(c) Social.
Autism spectrum disorder is typically manifested before 36 months of age; a child who first manifests the characteristics after age 3 may also meet criteria. Autism spectrum disorder is characterized by qualitative impairments in reciprocal social interactions, qualitative impairments in communication, and restricted range of interests/repetitive behavior.

(2) Determination for eligibility shall include: (a), (b), (c), and may include (d):
(a) Qualitative impairments in reciprocal social interactions include at least two of the following areas:
(i) Marked impairment in the use of multiple nonverbal behaviors such as eye-to-eye gaze, facial expression, body postures, and gestures to regulate social interaction.(ii) Failure to develop peer relationships appropriate to developmental level.
(iii) Limitations in spontaneous seeking to share enjoyment, interests, or achievements with other people (e.g., by a lack of showing, bringing, or pointing out objects of interest).
(iv) Limitations in the areas of social or emotional reciprocity.
(b) Qualitative impairments in communication include at least 1 of the following:
(i) Delay in, or total lack of, the development of spoken language not accompanied by an attempt to compensate through alternative modes of communication such as gesture or mime.
(ii) Marked impairment in pragmatics or in the ability to initiate, sustain, or engage in reciprocal conversation with others.
(iii) Stereotyped and repetitive use of language or idiosyncratic language.
(iv) Lack of varied, spontaneous make-believe play or social imitative play appropriate to developmental level.
(c) Restricted, repetitive, and stereotyped behaviors include at least 1 of the following:
(i) Encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus.

(ii) Apparently inflexible adherence to specific, nonfunctional routines or rituals.
(iii) Stereotyped and repetitive motor mannerisms (e.g., hand or finger flapping or twisting, or complex whole-body movements).
(iv) Persistent preoccupation with parts of objects.

(3) Determination may include unusual or inconsistent response to sensory stimuli, in combination with subdivisions (a), (b), and (c) of subrule 2 of this rule.

(4) While autism spectrum disorder may exist concurrently with other diagnoses or areas of disability, to be eligible under this rule, there shall not be a primary diagnosis of schizophrenia or emotional impairment.

(5) A determination of impairment shall be based upon a comprehensive evaluation by a multidisciplinary evaluation team including, at a minimum, a psychologist or psychiatrist, an authorized provider of speech and language under R340.1745(d), and a school social worker.

Language disorders are a defining characteristic of Autism Spectrum Disorders (ASD). Students who experience ASD have communication impairments and require services of the speech-language pathologist at varying degrees of intensity throughout their education. Once a student has been identified as eligible under Autism Spectrum Disorders, speech and language services can be added or removed as a related service.

This definition highlights the core features of ASD such as impairments in social reciprocity, verbal and nonverbal communication, and restricted range of interest. Students vary significantly in other areas such as cognitive, motor, and adaptive abilities. Further description and definitions related to ASD are available through the American Speech-Language Hearing Association (ASHA) (ASHA, 2006b). Speech-language pathologists (SLPs) "play a critical role in the screening, diagnosing, and enhancing the social communication development and quality of life of children, adolescents, and adults with ASD" (ASHA, 2006a, p. 1).

Autistic Spectrum Disorders (ASD) appears in the Diagnostic and Statistical Manual (DSM-4) under Pervasive Developmental Disorder (PDD). PDD is the overall term in this medical classification system that encompasses autism, high-functioning autism, and asperger's syndrome. When the diagnosis of Autistic Disorder is not met because of late onset, atypical symptomology, and or threshold symptomology, then Pervasive Developmental Disorder, Not Otherwise Specified (PDDNOS) is considered. PDDNOS is a separate diagnostic label under the Pervasive Developmental Disorders. Many professionals consider PDD, PDD-NOS, and Asperger's Syndrome to fall on the autism spectrum and may decide to provide service under the ASD educational label (ASHA, 2006b).

Asperger's syndrome and high functioning autism are not synonymous labels, although both would qualify as autism spectrum disorders. Asperger Syndrome is recognized as a separate entity from autism, but is a pervasive developmental disorder. Some characteristics of Asperger's include:

- Development of speech-language skills relatively on time
- Normal to above normal IQ

- Significant pragmatic deficits
- Language scores are most often within normal limits, unless assessed on a specific pragmatics test
- Extreme interest and routines
- Poor nonverbal communication
- Motor, learning and emotional problems
- Egocentricity and poor social skills (Richard & Hoge, 1999)

One resource for information about Asperger's syndrome is *Asperger's Syndrome: A Guide for Parents and Professionals* (Atwood, 1998).

ASSESSMENT CONSIDERATIONS

SLPs are a ***required*** member of the evaluation team and play a central role in the evaluation process since communication is a central part of the ASD certification. SLPs evaluate pre-linguistic, linguistic, and pragmatic development as well as language related cognitive, affective, and social-emotional development. The rule for Autistic Spectrum Disorder has specific criteria that the MET team must include in the assessment. The criterion from the rule has been placed in a checklist format to use in gathering information, called the "Autistic Spectrum Disorders Checklist" (p. ASD-10).

Communication evaluations are a central component of students with Autistic Spectrum Disorders for initial eligibility and re-evaluation of ASD. The language assessment and intervention procedures outlined in the language section of this document should be followed. However, there are some considerations specific to this population. For students already found eligible for special education under the rule for ASD, SLPs should keep in mind that the requirements for adding a related service are different than for initial eligibility as SLI primary. A diagnostic report is needed, but there is *not* a requirement of standardized testing for the addition of speech and language services as a related service. More information about the specific state requirements to add speech and language as a related service are included in the introduction to this section, Introduction to Speech and Language as a Related Service (pages SLRS-1-2). However, in the event that the team feels formal testing would provide helpful information, it can certainly be included. Generally, gathering a profile of the student's strengths and challenges in language as they participate educationally will allow the team to determine how the addition of speech and language services is needed to help the student to progress and to design the most appropriate treatment plan. The following are some of the considerations for appropriate assessments for this population; additional guidelines are available through the ASHA (ASHA, 2006c):

Assessment Should Include Communication as it Relates to Multiple Domains

A complete language assessment as described in the language section is needed. For this population it is also important to asses other domains that impact communication such as cognitive, sensory, affective, and social-emotional development. Some authors have written about developmental approaches that include domains which impact communication. (Prizant & Wetherby. 1990; Prizant and Meyer; 1993) A multi-system developmental approach, or the SCERTS, Social Communication, Emotional Regulation, Transactional Supports Model is suggested as a framework for the communication assessment. The basis for this model looks at capacities for communication and social-emotional development and how these domains are interrupted from developing normally.

Assessment is an Ongoing Process Across Contexts (school, home, and community)
It is important to gather information about communication abilities and performance over multiple days and across contexts. This may be true for all children but is particularly important with this population. Gerber & Prizant (2000) write about the importance of this type of assessment versus a 'one-shot' assessment, saying, "it is well documented that a child's communicative abilities vary greatly as a function of many factors including, but not limited to the environment or setting which a child is observed, the persons interacting with the child, and the familiarity of the situation" (pg. 95). When findings in communication across many settings and over time are in agreement, the results of the assessment become valid**.**

Assessment Should Consist of Information from Persons Within the Context of the Student's Environment
The guidelines for language assessment earlier in this document outline the importance of using interviews to obtain input from families and teachers as well as techniques to gather curriculum-based language performance in addition to any tasks introduced by the SLPs to assess communication. For students experiencing autism spectrum disorders, it is vital that assessment includes reports from significant persons in the student's home and community environments (such as parents, siblings, day care providers) (Gerber & Prizant, 2000). It is important that extra steps be taken to gather information from persons across environments. With this population, developmental and medical history will be particularly helpful to the educational team.

A worksheet entitled, "Communication Across Environments" is provided on the following page as a guide for collecting evidence to support a valid assessment. Interview information is recorded along with ongoing observations related to language, cognitive, and social-affective domains across contexts, over time. These contexts include all school settings such as general education classes, special education classes, and other school activities; home; and community.

Communication Across Environments
Communication evaluations for students suspected of exhibiting the characteristics of ASD should include observations across many settings. This will validate a communication impairment and lead to appropriate goal setting. Use the following table to guide your data collection in each of the areas one needs to consider across all contexts for the student. Check off each consideration under each context as you gather information.

Student_____ Examiner_____ Date_____

COMMUNICATION ACROSS ENVIRONMENTS						
Areas of Consideration	**Contexts**					
	School			Home	Community	Examples (Use back if needed)
	Gen. Ed	Spec Ed	Other			
LANGUAGE	**+ = Present**			**- = Absent**		
Communicative Means						
▪ Gesture means (giving, showing, pushing away, reaching)						
▪ Vocal means (speech and non-speech sounds)						
▪ Coordination of gestural and vocal acts						
▪ Echolalia: immediate, delayed						
▪ Expressive Language and Communication						
▪ Verbal (single and multi-word messages)						
▪ Perseverative utterances						
Communication Functions for regulating behavior, interacting socially, or sharing joint attention						
▪ Requesting objects						
▪ Requesting actions						
▪ Protesting						
▪ Requesting social routines						
▪ Requesting comfort						
▪ Requesting permission						
▪ Showing off						
▪ Showing joint attention						
▪ Commenting						
▪ Requesting and providing information						
▪ Speech Production						
▪ Inventory of consonants and vowels						
▪ Inventory of syllable use (Mono-vs.-multisyllabic wds)						
Receptive Language						
▪ Language Comprehension						
▪ Nonlinguistic Comprehension (Comprehension of non-verbal cues, situational cues, paralinguistic cues)						
LANGUAGE RELATED TO COGNITION						
▪ Imitation						
▪ Symbolic Play						
▪ Combination/constructional play						
▪ Attentional Skills						
SOCIAL-AFFECTIVE BEHAVIOR						
▪ Use of gaze/gaze shifts for social reinforcing to regulate interaction						
▪ Display of positive affect						
▪ Display of negative affect						
▪ Emotional regulatory strategies						
▪ Level of comfort, emotional reaction -observation/caregivers' report						

Comments:

(Source: Wetherby & Prizant, 1993)

INTERVENTION CONSIDERATIONS

The intervention guidelines in the language section of this document apply to this population with the following additional considerations:

Working with Partners

As part of language therapy, it is important to work with the student's communication partners as well as the student. An interactive approach that includes partners helps facilitate and target reciprocal communication. Modeling helps the partner learn to attend, wait, initiate, cue and facilitate social communication. Peers can also be partners, supporting the social and communicative success of students. Resources for working with partners

- *More Than Words Program: Helping Parents Promote Communication and Social Skills in Children with Autism Spectrum Disorder,* (Sussman, 2000). is written for parents but is also helpful with all partners and therapists. This book offers strategies for working with partners as well as many of the other intervention considerations below.
- *Communicating Partners: 30 Years of Building Responsive Relationships with Late-Talking Children including Asperger's Syndrome, and Typical Development (*Jessica Kingsley Publishers (April 2004)
- *Communication Partner website for families www.jamesmacdonald.org*

Kline (2005) from Yale suggests that the goal to help the family achieve 25 hours a week of meaningful engagement "reciprocity" across environments with multiple communication partners. This is not done by a therapist but incorporated into daily routines of life.

Current Developmental Levels and Individual Learning Styles

Treatment approaches should consider the current developmental level and learning style of the student. A student may be actively engaged in the nonverbal language opportunities afforded by the environment. Non-verbal communication skills are critical to the development of social communication and often interfere with communication competencies and the complexities of higher level communicative interactions. Social communication skills are often inflexible and rote without the development of affect. One should also consider the idiosyncratic nature of communication as well as echolalia and perseverative speech patterns in planning therapy.

Intentional Communication

It is important to teach intentional communication. Preintentional, prelinguistic intentional, and emerging symbolic communication precedes learning vocabulary and multi-word combinations. Intervention approaches should address emerging communication weaknesses and strengths.

Functional Communication

Students with Autistic Spectrum Disorders need to learn a variety of functional means, not simply a set of verbal behaviors. For example, treatment might emphasize making choices to indicate needs and wants using either verbal or nonverbal means throughout the day and then facilitate generalization across environments / in a variety of settings.

Natural Context

Considering the natural context is important for all students; however, it is particularly critical for students experiencing ASD (ASHA 2006c). Every effort should be made to help the student

to acquire skills in a natural context. This can be accomplished by having the entire educational team be the responsible for communication training. The team should consider how the communication goals can be achieved in the student's natural settings throughout the day by practicing with their communicative partners.

Visual Supports
Students with Autistic Spectrum Disorders benefit from the use of visual supports.

- Use the pictures often and with meaning. Use pictures (real photographs-paired with symbols such as those made with Boardmaker) for all activities and transitions.
- Always pair words with pictures used.
- Encourage parents to take pictures of daily routines. These pictures can be used at home on a schedule board. This facilitates continuity of programming between home schools.
- Encourage parents to take pictures of places they visit. These pictures can be placed in a small photo album, which will be used by the family to alert the children as to where they are going and what is expected of them, hopefully easing transitions. This also helps to build receptive language skills.

Mark Transitions
Mark beginning and ends of activities
Use pictures and music/song routine to mark the beginning and ending or activities. Build this into routines.

Involve All Team Members in the Role of Communicative Partners is Vital to Achieving Goals
Indirect service models can create support for students in their environment as described above. Consultation to team members should be considered as an appropriate service to a student with Autistic Spectrum Disorders.

Intervention for Learners with Emergent Language
This may include infant and preschoolers as well as older students who are just developing language.

- Help the families to achieve a significant amount of interaction time throughout their day by teaching them strategies.

- Interaction, reciprocity, and receptive language are excellent foci of therapy
  Goals to increase reciprocity for a young child might include having the child engage in multiple activities, taking as many turns as possible, aiming for 3-5 back and forth turns per activity.

- Emphasize engagement rather than eye contact.

- When comforting a small child, it is suggested that the SLP/teacher get close to the child's level on the floor and offer a hug/reassurance and gently turn their child around so they can "play". It is often helpful to recommend this strategy to parents whose first inclination is to pick up their children up when they are upset.

- When parents are part of a classroom session, it is suggested that the parents enter the room and sit down on the floor, or in a chair. This lets the child know, visually, that they are not planning on leaving.

- Parents are asked not to pick up or to carry their child, especially through transitions such as entering the room. The rationale behind this suggestion is that the child is learning about his body, his body in space, where he is going**,** what is expected, and what is available to him as options in the world. A toddler and preschooler's world is on the floor*,* where he can run, explore, and investigate. Each time the child is picked up, he has to start over again when he is set back down. his typically causes a bit of anxiety. Keeping the child's feet on the floor helps the child be more organized, alert, aware, and ready to embrace the environment of play and interaction.

  Alternative strategies to picking up a small child include:
  - moving the child by the hips (rather than pulling by the arms)
  - walking toward the area where one wants the child to go
  - moving down to the child's level, offering a "big hug", and turning the child around
  - stating "it's time to play" (or whatever beginning cue you have previously used with the event about to take place)

- Teach families to use nondirective, balanced and matched communication (MacDonald, 2004. See Handout on page ASD 13.)

- Teach families to use specific action needed and use noun-verb combinations for directives to increase comprehension and build vocabulary. (Use "Feet go on floor" instead of Get down, Use Put toy on shelf instead of Clean up).

Respecting the Child's Personal Space/Tolerance for Interaction/Auditory and Sensory Challenges and Using Appropriate Comforting and Redirection Strategies

Children with Autism Spectrum Disorders often experience perceptual and sensory input in a manner that is different than students with other disabilities. There are a number of strategies to enhance tolerance for interaction, reciprocity and increase learning.

- *Honor* child's personal space
- Give periodic breaks in the action of reciprocity/reciprocal play
- Limit Sensory Input (touch, sound, visual) - 'touch less'
- Limit Pushing, Pulling, Dragging, Hand-over-hand cueing, commonly used with small children. Alert the child verbally (e.g. "I'm going to touch you"). Shape reaching/pushing/pulling *into* a gesture (I want/tap chest), or a point.
  Shape pulling a finger into hand holding to move from place to place.
- When a student is reticent such as walking the parameter of the room,
  Gradually decreasing the space of the room can be helpful (use table, cube chairs, etc.) then enticing the child into play partner's personal space.
- Due to sensory needs, some SLPs arrange for occupational therapy to occur just preceding speech-language intervention so that the student has received assistance with sensory integration issues, feeding issues, and sensory diet prior to beginning.

- Use enticing/interesting choices.
- Use the word "Stop" vs. "No" paired with a visual
- Follow, don't lead, Imitate the child (movements, sounds, actions)*
- Talk less
- Talk quieter.
- Wait*
- Look and listen more than talk.*

*This approach is outlined in the parent manual AS OWL: Observe, Wait, and Listen, *It Takes Two to Talk: A Parent's Guide To Helping Children Communicate* (Manolson, 1992.)

Augmentative/Alternative Communication
Augmentative*/Alternative* Communication is beneficial to support receptive, expressive, and pragmatic communication for students with ASD. Augmentative communication refers to the use of non-speech systems, such as picture communication symbols, communication boards, and voice output devices to supplement the child's vocalizations, verbalizations, or other communication means (gestures, facial expressions, sign language, etc). Non-speech systems as a communication model, along with encouraging the child to produce vocalizations and/or verbalizations, can be an interactive practice that encourages communication. Development of non-speech systems should be used with reciprocity. Research suggests that augmentative*/alternative* communication enhances the child's communication and supports the development of speech (Greenspan and Lewis, 2002).

Visual Communication Strategies/Supports
Hodgdon (1999, 1995) describes many advantages of using picture communications, symbols, communication boards and books, and other visual supports such as picture schedules to augment receptive language for students with autism spectrum disorders. Many students with ASD experience difficulty in understanding language and pragmatics. This may result in a student displaying inappropriate behavior and/or refusing to participate in activities. By using picture supports for language, a student's participation may increase, while inappropriate behaviors may decline.

Picture Exchange Communication System (PECS)
PECS was designed as a system for teaching children with ASD how to communicate expressively by using the exchange of objects, picture symbols or sentence strips. The authors emphasized the necessity of teaching students how to initiate communication. As professionals, we need to reduce our prompts as quickly as possible. And, we need to vary the people and location/environment acting at facilitators and communication partners (PECS, 1995).

Communication Boards/Books, Voice Output Communication Aids (VOCAs)
Communication boards, books, and VOCA's have been successfully used by many students with ASD. Often, verbalizations increase with the use of augmentative/alternative communication. Educational teams design functional activities to support and emphasize independent, functional, and spontaneous communication. Training everyone involved as a communication partner with the student is important for the successful use of AAC. Please refer to the information in the assistive technology section.

Social Stories and Comic Book Conversations

Social stories describe the expectations in a particular social event. They are typically written for a specific student for a specific situation to help the student understand and accept a routine or event. Gray (1994) designed a strategy for writing social stories that has been successful with a wide range of students with ASD. The guidelines include such suggestions as providing only one directive in the story, and making positive statements about the sequence of the event. Gray also designed comic book conversations as a way to interact with a student and discuss pragmatic skills, relationships, and feelings. The 'comic strips' are roughly sketched by the SLP and student as they discuss a topic, often supplemented by the use of colors coded to represent the feelings of the participants. For example, angry messages are red (Gray, 1994).

Student _____ **Examiner** _____ **Date**_____

Autism Spectrum Disorders Checklist
This checklist may be used to document typical and atypical communication and to help determine eligibility for rule 340.1715 (revised).

Key (+) Skill present (√) Emerging skill (-) Does not use skill (N/A) Not applicable

Marked impairment in the use of multiple non-verbal behaviors such as eye-to-eye gaze, facial expressions, body posture, and gestures to regulate social interaction.

_____Some non–verbal behaviors present as described above
_____Exhibits appropriate affect
- _____Shows interest in sights and sounds
- _____Able to calm down
- _____Engages in shared and joint attention with a partner
- _____Eye gaze for interactive purposes
- _____Gestures to support meaning, greetings, comfort, showing off, request permission

_____Two-way purposeful interactions with gestures convey the following:
- _____Engages in gesture, signaling to convey intentions
- _____Seeks out others
- _____Requests actions/objects
- _____Finding a needed object

_____Exhibits interactions to show someone what you want with a pattern of actions, rather than words

_____ **Peer relationships appropriate to developmental levels**

_____ **Spontaneous seeking to share enjoyment of interests or achievements with other people (e.g. by lack of showing, bringing, or pointing out objects of interests).**

_____ **Social and emotional reciprocity**

Check All that Apply:
- _____Uses appropriate social and emotional reciprocity in interactions and joint attention communicative functions.
- _____Initiates social greetings
- _____Pointing to objects
- _____Request social routines
- _____Shows objects
- _____Reciprocity in comments
- _____Request information
- _____Social responsiveness, avoidance, improved
- _____Provides information
- _____Comments on other people, environment
- _____Social engagement and responsiveness in familiar and predictable contexts.
- _____Engages in humor, appropriate to development

_____Other/ Comments: _____
_____
_____

Student_____ Examiner_____ Date_____

Autism Spectrum Disorders Checklist - *Continued*

Key (+) Skill present (√) Emerging skill (-) Does not use skill (N/A) Not applicable

Qualitative impairments in communication include at least 1 of the following:

1. Delay in or total lack of, the development of spoken language (not accompanied by an attempt to compensate through alternative modes of communication such as gestures or mine.

_____Uses vocalizations to express needs & wants _____Uses Gestures

2. **Marked impairment in pragmatics or the ability to initiate sustain or engage in reciprocity with others**.

_____Attention to speaker
_____Discourse skills in verbal children
_____Turn Taking Skills
_____Initiates greetings
_____Asks for clarification/help
_____Responds to greetings
_____Follows partner turn with appropriate utterance
_____Yields turn when appropriate
_____Allows partner to complete turn talking without interrupting
_____Can participate in discourse with relevant context, multiple turns
_____Managing Topics, initiating conversation, maintaining conversations, ending conversations, shifting to topics introduced by others.

3. Stereotyped and repetitive use of language or idiosyncratic language

Exhibits the following:

_____Perseverative Speech
_____Immediate Echolalia
_____Delayed Echolalia, delayed
_____Interactive
_____Non interactive
_____Conventional gestures

4. Lack of varied, spontaneous make–believe play or social imitative play appropriate to developmental level.

Exhibits the following:

_____Prefers to play alone
_____Constructive play
_____Imaginative Play
_____Flexible routines in play
_____Narrow interest in play
_____Easily takes instruction in play

5. Apparently inflexible adherence to specific nonfunctional routines or rituals.

_____Repetitious motor movements _____Perseverative speech
_____Repetitious movements with objects

Speech production patterns not related to engaging others in joint attention communicative acts.

_____Vocalization: wide range of vocal acts, determine which are directed to others and which are not utterances that serve to regulate ones own actions, produced with motor activity.

_____Rehearsal: utterances used as a processing aid, followed by an action; or utterances indicating noninteractive utterances. Utterances produced with no apparent intent, often in states of high arousal. Self regulating comprehension of utterance.

The team also assesses disabilities that may co-exist with ASD.

Cognitive impairments, hearing impairments, visual impairments, and sensory issues.

Eligibility is determined by Rule 340.1715

BALANCED, MATCHED, NONDIRECTIVE COMMUNICATION

How Adults Can Build Balanced Partnerships with Children

1. Occasionally, physically prompt child to show how to initiate or take a turn.
2. Wait expectantly for child to initiate contact.
3. Say or do one thing at the child's level; then wait.
4. Give the child the time needed to take a turn.
5. Give the child some control in the interaction.
6. Some of the time, keep the child for one more exchange.
7. Share the choice of activities and topics with the child.
8. Keep interactions going back and forth by responding in a meaningful way to the child's behaviors and communications.

Balance

Act and communicate as much as child does.

- Respond to child
- Initiate contacts
- Communicate for a response, then wait
- Sustain joint activities

How Adults Can Build Matched Partnerships with Children

1. Respond to movements with similar movements and occasionally add a sound.
2. Respond to sounds with similar sounds and occasionally a simple word like "Hi," or a meaningful sound like "Vrrroooom."
3. Respond to a word with one or two words as though translating the child's meanings into adult language and extending the child's ideas briefly.
4. Respond to words with short phrases.
5. Frequently act like the child in spontaneous contacts.
6. Show the child a next developmental step by adding a sound, word, or communication to the child's turn.

Match

Act and communicate in ways the child can do

- Match actions, sounds, words
- Show child how next to communicate
- Be child-like

How Adults Can Build Nondirective Relationships With Children

1. Limit Questions and commands to authentic ones.
2. Communicate by using comments, a powerful general strategy in motivating a child to communicate.
3. Wait and expect: Give children time and signals to interact.
4. Expect children to communicate with others, at least some of the time.
5. Match the children's language level and ideas.
6. Build a habit of keeping the children for more than one turn.
7. Allow children to communicate from their interests and experiences much of the time, but also expect the children to communicate about the adult's interests some of the time.

Nondirectiveness

Follow the child's lead and allow him/her to share in the direction of the interaction.

- Follow child's lead
- Comment more than using questions or commands
- Limit questions to authentic ones

How adults Can Become Emotionally Attached to Children

1. Balance turns with the child.
2. Match the child's interests and communications.
3. Respond sensitively to the child's emerging communications and behaviors that may become communications.
4. Be nondirective with the child; share the lead in play and in conversations, allowing communication from the child's agenda and interests.

Emotional Attachment

Become spontaneously rewarding by engaging the child more for the fun of it than to get something done.

- Actively enjoy the child
- Be animated.
- Show child-like play style.

MacDonald, J. (2004). *Communicating Partners: 30 Years of Building Responsive Relationships with Late-Talking Children including Asperger's Syndrome, and Typical Development.* London : Jessica Kingsley Publishers.

RESOURCES

Guidelines for SLPs related to Autism Spectrum Disorder ASHA (2006)
Available from http://www.asha.org.

Position Statement. Technical report and Knowledge and skills document for SLPs related to Autism Spectrum Disorder ASHA (2006)
Available from http://www.asha.org.

Infant and Early Childhood Mental Health, by Stanley I. Greenspan, M.D. and Serena Wieder, Ph.D., 2006. American Psychiatric Publishing, Inc. www.appi.org

Grandon, T. (1995). *Thinking in Pictures and Other Reports from my Life with Autism*. New York: Random House.

Greenspan, S. I. & Wieder, S. (2003). *Engaging Autism: The Floortime Approach to Helping Children Relate, Communicate and Think***,** Jackson, TN : Perseus Books. www.perseusbooksgroup.com.

Sonders, A.A. (2003). *Giggle Time: Establishing the Social Connection*. London : Jessica Kingsley Publishers

Weissman, J. (1988). *Games to Play with Babies*. Overland Park, KS: Gryphon House.

Websites

Communicating Partners Website http://www.jamesdmacdonald.org
Aimed at Helping Parents Help Children. Programs for Parents, Therapists & Educators
by Dr. James D. MacDonald
Includes information, articles and more for families

Hanen Centre
Specialize in family-focused early language intervention programs and learning resources for parents and professionals.
http://www.hanen.org/

REFERENCES

American Speech-Language-Hearing Association, (2006a). *Principles for speech-language pathologists in diagnosis, assessment, and treatment of autism spectrum disorders across the life span: Technical report*.

American Speech-Language-Hearing Association, (2006b). *Roles and responsibilities for speech-language pathologists in diagnosis, assessment, and treatment of autism spectrum disorders across the life span: Position statement*.

American Speech-Language-Hearing Association, (2006c). *Guidelines for speech-language pathologists in diagnosis, assessment, and treatment of autism spectrum disorders across the life span*.

American Speech-Language-Hearing Association, (2006c). *Knowledge and skills needed by speech-language pathologists in diagnosis, assessment, and treatment of autism spectrum disorders across the life span:*

Attwood, T. (1998). *Asperger Syndrome: A guide for parents and professional*. London: Jessica Kingsley.

Frost L. & Bondy A. (1994). *Picture Exchange System (PECS);* Newark, DE: Pyramid Educational Consultants.

Gray C. (1994). *Comic Strip Conversations.* Arlington TX: Future Horizons, Inc.

Gray C. (2000). *The New Social Story Book: Consultants to students with autism.* Jenison, MI; Arlington, TX: Future Horizons Inc.

Gerber, S. & Prizant, B. (2000). Speech, language, and communication assessment and intervention for children. *Interdisciplinary Council on Developmental and Learning Disorders Clinical Practice Guidelines*, p. 85-121. Bethesda, MD.

Greenspan, S. I. & Lewis, D. (2002). Affect-based language curriculum. *Interdisciplinary Council on Development and Learning Disorders.* Bethesda, MD.

Greenspan, S. I. & Wieder, S. (2003). *Engaging Autism: The Floortime Approach to Helping Children Relate, Communicate and Think***,** Jackson, TN : Perseus Books. www.perseusbooksgroup.com.

Infant and Early Childhood Mental Health, by Stanley I. Greenspan, M.D. and Serena Wieder, Ph.D., 2006. American Psychiatric Publishing, Inc. www.appi.org

Hodgdon, L. (1999). *Solving behavior problems in autism*. Troy, MI: Quirk Roberts Publishing.

Hodgdon, L. (1995). *Visual strategies for improving communication.* Troy, MI: Quirk Roberts Publishing.

Kline, A. (2005). Asperger's disorder and Autism: An update on understanding and interventions. A presentation through the New England Educational Institute, Detroit, MI

MacDonald, J. (2004). *Communicating Partners: 30 Years of Building Responsive Relationships with Late-Talking Children including Asperger's Syndrome, and Typical Development.* London : Jessica Kingsley Publishers.

Manolson, A. (1992). *It takes two to talk: A parent's guide to helping children communicate* (3rd edition). Toronto: Toronto Hanen Centre Publication

Prizant, B. & Wetherby, A. (1990). Toward an integrated view of early language and communication development and social-emotional development. *Topics in Language Disorders, 10*, p. 1-16.

Prizant B. M. and Meyer, E.C.(1993). Socio-emotional aspects of communication disorders in young children and their families. *American Journal of Speech-Language Pathology, 2*, p. 56-71.

Prizant, B. M. (2000). *Core foundations and capacities for communication and socioemotional development: Basis for SCRETS model*. Presentation at the Childhood Communication Seminars, Autistic Spectrum Disorders. Troy, MI.

Richard, G. & Hoge, D. (1999). *The source for syndromes.* East Moline, IL: Lingui Systems, Inc.

Sussman, F. (2000). *More than words program: Helping parents promote communication and social skills in children with autism spectrum disorder*. Toronto, ON: Hanen

Wetherby, A. & Prizant, B. (1993). *Communication and symbolic behavior scales* (*n*ormed edition). Chicago, IL: Applied Symbolic.

COGNITIVE IMPAIRMENTS (CI)

DEFINITION

Students are found eligible as Cognitively Impaired under Special Education Rule 340.1705.

R340.1705 Cognitive Impairment; determination.
Rule 5.
(1) Cognitive impairment shall be manifested during the developmental period and be determined through the demonstration of all of the following behavioral characteristics:

(a) Development at a rate at or below approximately 2 standard deviations below the mean as determined through intellectual assessment.
(b) Scores approximately within the lowest 6 percentiles on a standardized test in reading and arithmetic. This requirement will not apply if the student is not of an age, grade, or mental age appropriate for formal or standardized achievement test.
(c) Lack of development primarily in the cognitive domain.
(d) Impairment of adaptive behavior.
(e) Adversely affects a student's educational performance.

(2) A determination of impairment shall be based upon a comprehensive evaluation by a multidisciplinary evaluation team, which shall include a psychologist.

INTRODUCTION

Students experiencing cognitive impairments have associated language impairments and often experience articulation impairments. These students may experience fluency or voice problems as well. Speech and language services can be added as a related service for students who have been identified as having a cognitive impairment. The focus of assessment and intervention for students with cognitive impairments is on functional communication skills for life domains. For students who are included in general education classes but the anticipated life outcome is vocational rather than academic, language abilities of a functional nature are of primary concern.

All students with cognitive impairments have communication difficulties; however, many communication needs are met through the variety of special education supports provided such as a modified curriculum and specialized instruction. Students may need the additional assistance of speech and language intervention for specific education issues. This need and the student's response to intervention may change with the varying stages of development and the varying contexts, resulting in varying needs for speech-language support at different points in their education. Speech-language services may be added or removed, as the student's needs change. Early in the student's education, the team should help parents to understand that speech and language services may be needed more at times and other times may be indirect or removed.

DETERMINING WHEN TO ADD SPEECH-LANGUAGE SERVICES

It is recommended that a functional assessment be used to determine when to add speech and language services for a student with a cognitive impairment. Past practice guidelines offered the discrepancy model as an alternative to functional assessment to determine service eligibility; however, this is no longer considered an appropriate option. According to the National Joint Committee for the Communicative Needs of Persons with Severe Disabilities (2002) as well as

the guidelines from the American Speech-Language Hearing Association for School-Based SLPs (2002) services should be based on individual communication needs and not comparison to cognitive performance. A functional framework to determine the need for service should be utilized. Decisions regarding whether to add speech and language services need to be based on observation and assessment of communicative performance in context rather than solely on standardized results. Results need to be collected from various sources. Standardized testing may be used to glean information but not used as the sole, or primary means of decision-making for eligibility for speech and language services. Overall, the functional assessment will assist the team and SLP in determining when to add or to stop services and help to design appropriate intervention goals and strategies. Intervention outcomes may include increased access to learning, ability to direct self-care, and greater independence and participation across environments.

Current approaches to educational programming for persons having developmental disabilities emphasize the acquisition of functional skills that enable students 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, vocational, and adult living environments. Documenting the need for speech and language services involves assessing the student's current communication skills and determining whether those skills enable the student to participate maximally in his/her life experiences. If the assessment reveals a mismatch between the communication skills the student possesses and the skills he or she needs, and this mismatch is not being addressed by the student's current educational program, speech and language intervention is warranted**.**

A Functional Assessment

A functional assessment reflects realistic and achievable expectations of communicative performance for students with cognitive impairments within the environments and tasks they participate in. Expectations may range from full independence to basic participation when communicating in life domains. Services that are provided need to be in alignment with a standards-driven system, such as Addressing Unique Educational Needs of Students with Disabilities (AUEN). The assessment drives the intervention. Resources to assist SLPs with assessment and treatment planning include the ASHA documents for persons with mental retardation/developmental disabilities (ASHA, 2005) and the assessment tool *Achieving Communication Independence: A Comprehensive Guide to Assessment and Intervention (Gillette, 2003).*

To determine if speech-language support is needed as a related service, the CI Determination of Speech-Language Service Summary worksheet on the following page may assists the SLP/team in determining whether speech-language services are needed as a "Related Service" for students previously found special education eligible under cognitively impaired. Relevant information is gathered using the following areas as a guide. Each row on the worksheet is described in the pages following the worksheet.

CI Determination of Speech-Language Service Summary

Student _____ Birthdate_____ Date_____
Speech-Language Pathologist _____ Educational Setting_____
Extent of Services in General Education_____

			Does not support the need for speech-language as a related service Check	*Supports the need for speech-language as a related service Check*
This worksheet assists the SLP in determining whether speech-language services are needed as a "Related Service" for students previously found special education eligible under cognitively impaired.				
Gathering Input	**Teacher Input** Interview teacher or provide questionnaire specific to educational settings.	Special Ed. Provider		
		General Ed. Provider		
	Parent Input Interview parent regarding the student's needs & communication skills in all settings			
	Student Input Interview (comments and concerns)			
File Review	**Prior/Current SLP Intervention** Consider outcomes of previous speech-language services, placements.			
	Medical History Consider medical conditions effecting speech/language skills.			
	Educational Assessments Consider results of assessments			
Observation (CBLA) in the in the Classroom, Community, or Vocational setting Watch the student attempt a task. Observe the student's communication behavior relevant to the teacher's.				
Communication Samples/Tasks Level/form of communication. Engage the student in activities informal or standardized. Provide standardized assessment tools if applicable				
Dynamic Assessment Consider how well the student performs the same task with help				
Consideration of cultural / linguistic differences Complete the process in the Culturally and Linguistically Diverse section if indicated. Consider cultural and linguistic differences on parameters of communication.				
Consideration of environmental or economic differences Provide documentation from team reports, teacher, and parent interviews if needed. Consider impact of environment and economic differences on student's communication skills.				
Adverse Educational Effects Summary of Evidence related to adverse effects of communication impairment as indicated by any and all of the above forms. This includes adverse effect on social, vocational or academic achievement.				
Summary of Speech and Language Service Recommendations (Circle one)			**Service Not Recommended**	**Service Recommended**

Comments_____

Gathering Input

Teacher Input.

Obtain teacher input. This may be obtained through a variety of means including interviewing the teacher(s) and/or using a checklist with questions relevant to the speech/language skills needed for that particular setting. Consideration must be given to the educational setting, such as the classroom or a community based instruction site. If a student receives services in general education, those teachers must provide information as well. The speech/language pathologist as part of the MET will need to make a determination as to whether or not a mismatch exists between the communication skills required for the particular setting based on teacher input and the student's skills.

Parent Input

When making a decision regarding service eligibility, it is important to consider the perspective of the parent. In addition to both medical and educational history information, the parent is able is able to supply information regarding communicative expectations and abilities within the home setting. This may be obtained through a variety of means including interviewing the parent and/or using a written checklist. The SLP should obtain information regarding that student's ability to request their wants and needs, request directions, report personal and emergency information, comment on situations, and other skills across a variety of functional settings. This may include tasks, such as talking on the telephone, shopping at a store, or ordering food in a restaurant. The SLP can assist in determining if the student has adequate communication skills to participate in familiar environmental situations. The SLP should also consider the student's communication partners, and reasons for lack of adequate communication skills, such as dependency on others to communicate messages. Consideration should also be given as to whether parental expectations are realistic. If the factors considered above indicate a gap between the student's speech and language skills and the communication skills needed for a variety of functional tasks based on parental input, need for support is indicated and should be checked.

Student Input (if appropriate)

The student themselves may also provide information relevant to the decision making process. Information of this type may be gathered via interview and/or checklist format. Students may be able to describe particular circumstances when they themselves feel their communication skills are not adequate. Their input may also indicate whether or not therapy will be effective. Motivation and desire to improve speech and language skills must be considered when deciding service recommendations. Student input may be appropriate when the student is his/her own legal guardian and/or able to convey individual desires.

Cumulative File Review

Complete a file review. This may include a medical history (how medical condition affects speech/language profile) as well as standardized educational assessments and scores, teacher records and other pertinent information. The SLP should review previous MET testing and IEP goals and objectives for post-initial evaluations. If the student's records indicate progress on previous measures, the speech/language pathologist would indicate support for services. If the student has shown a lack of progress with goals and objectives during previous speech and

language intervention sessions, the speech/language pathologist may want to indicate a lack of support for services.

Observations Of Communication in Context (Functional Curriculum Based Language Assessment)

Observe the student's language and overall communicative performance. Students with cognitive impairments have educational programs designed with their cognitive disability taken into consideration. As part of the functional assessment, the SLP and team look at the communicative requirements in this specialized or modified curriculum. The team also takes into consideration the special education service providers communicative supports to the student and whether there are communicative needs that are not being met. In order to best make these judgments, the SLP may use the same guiding considerations used for students without cognitive impairments. Four basic questions are considered:

1. What language (communication) skills are needed for successful participation in this part of the curriculum?
2. What does the student usually do when attempting this task?
3. What language (communication) skills and strategies might the student acquire to become more successful?
4. How should the task be modified?

(Nelson, 1989; Nelson, 1998)

Through addressing these questions the team looks at realistic and achievable expectations of performance for students with cognitive impairments. Consider if the student's language skills are adequate for successful participation in the tasks in the environment. The SLP determines if the student has the needed skills and strategies to communicate effectively, controlling their environment. The SLP considers skills such as the student's ability to follow directions, initiate communication, make requests, and seek information. In many cases, the student is supported with special educators and a modified curriculum that enables the student to participate and communicate appropriately. Other times, the team identifies specific areas that the SLP may offer support that is unique from other team members.

Elicited Communication/Communication Samples

Collecting communication samples may help the SLP to understand the student's strengths and weakness. The speech/language pathologist may engage the student in activities or communicative situations that further explore their ability to communicate. For example the SLP may set up situations that are motivating for the student to make requests or to comment. The results of these tasks, sometimes referred to as communicative temptations – i.e., giving a student an unopened juice when they would clearly need help) and the resulting communication samples may help the SLP to gain a better idea of the students communication performance and the type of intervention they might design. In some situations, such as with a higher functioning student, the SLP may feel that it is appropriate to administer a standardized assessment, although these results would be interpreted in light of the rest of the functional assessment data.

Dynamic Assessment

Consider the situations or tasks that were communicatively challenging in the contexts observed above. Provide assistance or intervention to determine how the student's communication improves with this assistance. This might be provided in a single session, a few sessions, or over a period of time to determine the student's response to speech and language intervention. If the intervention is successful, services are supported. If the intervention or strategies tried, do not positively impact the student's communication skills, the need for service at this point in time may not be supported, or another approach may be tried before determination can be made. These interventions may be direct or indirect, through consultation with the student's team.

Consideration of Cultural/Linguistic Differences

Refer to the section regarding culturally and linguistically diverse if this is a considerations for your student. Speech and language support is not denied or provided to students based solely on cultural or linguistic differences. However, these influences should be considered when determining the need for service as well as level of service delivery. For example, a student with a cognitive impairment may have their wants and needs anticipated and met based on the values of their particular culture. The speech/language pathologist will need to consider if there is support for service based on consideration of cultural differences.

Consideration of Environmental and Economic Differences

Speech and language support is not denied to students due to economic or environmental reasons. However, these factors should be considered when determining the impact of speech/language intervention. The speech/language pathologist should be aware of family customs and habits if service is to be provided and integrated into the environment. For example, if a student does not regularly participate in a specific activity, communication interactions supporting this activity are not warranted. However, it is also noted that this is not a measure to deny service. Student success in his/her natural environment is the expected outcome. Documentation from team reports and from teacher and parent interview should be provided indicating support or no support for service intervention.

Adverse Educational Effects

Consider the impact the student's current communication skills have on their social, vocational, and academic achievement. If the documentation supports the student as an ineffective communicator within all current environments, service is supported due to adverse educational effects. If the student's communication skills do not have an adverse educational effect, no support for speech/language services is warranted. For example, limited exposure to communication building experiences is not sufficient to support services based on adverse educational effects.

Speech/Language Service Recommendations

Completion of the worksheet supplies information critical in making a determination of whether speech/language services are warranted as a related service. Once the information is organized and assimilated into report format, the speech/language pathologist, along with the rest of the IEP team should use judgment to determine the need for service. Speech/language pathologists strive to facilitate optimal communication performance in students so that they may participate to

the best of their ability in all life's domains. Relevant and effective services are provided to promote these skills (this can be assessed through progress monitoring.

INTERVENTION: PROVISION OF SERVICES

A variety of service delivery methods are typically needed to meet the needs of individual students. The student and their needs must drive intervention. Possible types of intervention range from direct services to offering classroom/staff support. Collaboration with the teacher and the parents are expected at all levels of service. A component of speech and language service is parental counseling and education. Additionally, parents can be provided with strategies that facilitate communication. Parents should be made aware levels of service may vary during the educational process, as students with cognitive impairments may need direct speech and language therapy at times, and at other times may progress well with the communication supports included in their educational program.

DECISIONS TO REMOVE SPEECH-LANGUAGE SERVICES

The need for speech and language support must be reviewed annually to determine continued need for services. When the functional or dynamic assessment reveals that the student is successful in their environment, level of speech support services may be changed or discontinued. The level of service may be adjusted to support current educational needs. For example, a student who is successful in current placement may not require speech and language to benefit from special education. Other factors may influence the level of services provided. These factors include, the student's communication skills have plateaued, lack of motivation, extenuating medical circumstances or lack of progress. It is expected various methods and strategies be employed and documented prior to service level reduction. Tracking the student's response to the intervention provided, followed by attempts to use different approaches to intervention should be considered when making decisions to remove services.

ISSUES COMMON TO THIS POPULATION

Transition

Under the individuals with disabilities education act of 1997 (I.D.E.A), transition services are described as a coordinated set of activities for a person with a disability that is based on an individuals needs, taking into account the student's preferences and interests. It is designed to support movement from school to post school activities including vocational training, employment (including supported employment) independent living and community participation. This may include instruction, community experiences, the development of employment and other post school objectives, and, when appropriate, daily living skills and functional vocational evaluation.

The SLP may be involved in the student's transition plan, which in Michigan begins at age 14. The main goal should be to provide the student with effective speech and language skills in preparation for post educational arrangements. As a part of the transition team, the SLP strives for integration of the student as fully as possible into major life roles. Individuals need opportunities to identify their personal desires and to make personal choices. If these opportunities are not made available, individuals may develop a learned dependence. The SLP may assist in student identified preferences as they relate to the attainment of their personal

desires (vocational, interpersonal, or recreational) and the communication skills necessary to achieve them.

Augmentative Communication
Students' with cognitive impairments may experience severe motor speech problems, nonverbal communication, or limited language, and may benefit from augmentative/alternative communication (AAC) support. The speech/language pathologist plays a major role in delivering and coordinating this service. The speech/language pathologist must look at the student's means of accessing a system, the functional vocabulary needed to express the student's wants and needs, arrangement of symbols to assist with communication and teaching the student basic language acquisition skills. AAC systems may range from simple communication boards with picture symbols or gestures to high-tech electronic devices with dynamic displays. The speech/language pathologist is involved in training the student and caregivers (staff, guardian, family) to use and program the AAC system to maximize the student's communicative effectiveness. The ultimate goal of AAC intervention is communication within the student's classroom, community, vocational and home environment.

Community Based Instruction (CBI)
A speech-language pathologists role in Community Based Instruction (CBI) is to assist the student and the staff with the communication skills needed to interact appropriately and functionally out in the community (e.g., ordering food, asking for directions, asking for assistance) The SLP may address these skills through role playing activities, communication symbols, or problem solving activities. The SLP may also accompany the students and staff in the community in order to encourage the use of their communication skills.

Vocational Instruction
The SLP may be involved in the student's vocational training in the classroom, on the job site, or in the community. Skills that prepare the student to successfully participate communicatively in their vocational training are stressed. Work on pragmatic skills such as requesting assistance, problem solving, conversational strategies and self-advocacy may also be appropriately addressed here. These services may be provided across a continuum including direct, consultative and/or as needed basis.

Intelligibility
Students who experience cognitive impairment may have a speech and language disorder due to reduced oral motor and speech intelligibility skills. The role of the speech/language pathologist is to assess the impact of the student's oral motor skills in relationship to feeding and speech intelligibility. Use of oral motor exercises may be implemented to increase oral function for feeding and motor speech depending on the student's cognitive skills and potential impact on the student's speech. Oral motor intervention is not warranted in instances when neurogenic symptomatology is present. An assessment of the student's speech intelligibility must consider the student's overall articulation and functional intelligibility in successful communication of their wants and needs. Additional information may be found in the articulation section of this document.

Behavior
Students with cognitive disabilities may experience difficulty acting appropriately in all situations or dealing with their feelings. A speech-language pathologist may need to help the student and the team with the communication skills needed to modify the behavior. This may involve developing social stories, generating a picture sequence or assisting the team in a Behavior Intervention Plan (BIP).

Daily Living/ Independence
The ultimate goal of speech-language pathologists is to help them become communicative competent and acquire language forms for communication and then encourage them to apply their knowledge in environmental contexts. Speech/language pathologists can help in developing active use of the important vocabulary of household, community, and school items and their functions or descriptions. With these, we can help students reach the goal of becoming more independent in integrated environment. Speech/language pathologists can be an essential tool in meeting the challenge of developing independence for students.

Considerations for Social/Pragmatic Skills
Students who present with a Cognitive Impairment may exhibit poor social skills and have fewer peer relationships. They may have difficulty using their language skills to share information, express feelings, direct behavior and negotiate misunderstandings. The speech-language pathologist must provide information to the instructional staff regarding the role of pragmatics when dealing with social and emotional factors. They must collaborate with staff and parents to determine communicative intent and facilitate socially appropriate behavior. The students need to be provided with opportunities to develop, refine and apply social skills through regular interactions with a wide range of persons in a wide range of contexts. Participation in such functional activities leads to social success and facilitate purposeful activity.

Center Based Programming/Self-Contained Classrooms
Students attending center-based programs or self-contained classrooms may or may not need speech and language as a related service. Often times it is the role of the speech pathologist to support classroom language programming. The therapist may provide service to the classroom staff in the form of suggestions and consultations to assure successful participation in their language driven activities. The optimal goal is to assist students in becoming effective communicators within all environments. To the best of their ability, the student should be able to get their point across and respond to the messages of others. Various modes of communication may be employed. Intervention may be integrated into the home, community, vocational and employment contexts.

REFERENCES AND RESOURCES

American Speech-Language Hearing Association (2002). G*uidelines for school-based speech-language pathologists*.

American Speech-Language Hearing Association (2005). Roles for Speech-Language Pathologists in the Identification, Diagnosis, and Treatment of Individuals with

Cognitive-Communication Disorders: Position Statement. ASHA Supplement 25, available at www.asha.org.

American Speech-Language Hearing Association (2005). Roles and Responsibilities of Speech-Language Pathologists Serving Persons with Mental Retardation/Developmental Disabilities. Available at www.asha.org/members/deskreference.

American Speech-Language Hearing Association (2005). Principles for Speech-Language Pathologists Serving Persons with Mental Retardation/Developmental Disabilities. Available at www.asha.org/members/deskreference.

Frey, W., Burke, D., Jakworth, P., Lynch, L., & Sumpter, M.L. (1996). Addressing unique educational needs of individuals with disabilities: Educational performance expectations for achieving supported independence in major life roles: AUEN 3.0. Lansing, MI: Disability Research Systems, Inc.

Gillette, Y. (2003). *Achieving Communication Independence: A Comprehensive Guide to Assessment and Intervention*. EuClaire, WI: Thinking Publications.

National Joint Committee for the Communicative Needs of Persons with Severe Disabilities (2002).

EARLY CHILDHOOD DEVELOPMENTAL DELAYS (ECDD)

DEFINITION

Students are found eligible as early childhood developmentally delayed under Special Education Rule 340.1711:

Rule 340.1711 Early childhood developmental delay defined; determination.
Rule 11.
(1) "Early childhood developmental delay" means a child through 7 years of age whose primary delay cannot be differentiated through the existing criteria within R 340.1705 (Cognitive impairment) to R340.1710 or R 340.1713 (Specific learning disability) **to** R 340.1716 (Traumatic brain injury) and who manifests a delay in 1 or more areas of development equal to or greater than ½ of the expected development. This definition does not preclude identification of a child through existing criteria within R 340.1705 (Cognitive impairment) **to** R340.1710 (Speech and language impairment) or R 340.1713 (Specific learning disability) **to** R 340.1716 (Traumatic brain injury).
(2) A determination of early childhood developmental delay shall be based upon a comprehensive evaluation by a multidisciplinary evaluation team.

Please note: In the above Rule 11, section one, references are made regarding rules R340.1705 **to** R340.1716. These rules specifically include:

R340.1705- Cognitive Impairment (CI)
R340.1706- Emotional Impairment (EI)
R340.1707- Hearing Impairment (HI)
R430.1708- Visual Impairment (VI)
R340.1709- Physical Impairment (PI)
R340.1709a- Other Health Impairment (OHI)
R340.1710- Speech and Language Impairment (SLI)
R340.1713- Specific Learning Disability (LD)
R340.1714- Severe Multiple Impairment (SXI)
R340.1715- Autism (AUT)
R340.1716- Traumatic Brain Injury (TBI)

INTRODUCTION

Students experiencing multiple developmental delays may be eligible for special education services as Early Childhood Developmental Delay (ECDD). These students may experience delays in more than one of the following developmental areas: cognitive, physical, communication, behavioral, or medical/health. Once a student has been identified as eligible under Early Childhood Developmental Delay (ECDD), speech and language services can be added as a related service.

SLPs Role in Assessment and Determination of Primary Eligibility as ECDD

Children who are less than eight years of age and exhibit more than one developmental delay are best certified as ECDD. This certification allows the multidisciplinary team to evaluate the whole child over a period of time. As intervention is provided, by multiple team members, the child's developmental profile becomes more clearly defined and the primary impairment becomes more apparent. The SLPs role in assessment is consistent with the assessment consideration of the preschool child. Therefore, SLPs using this section may also refer to the Language Services for Preschool Children.

Multidisciplinary Team Members/Roles (Roles May vary within Districts)

Speech-Language Pathologist- Provide assessment, intervention and consultation to team members and families. The SLP may also be key in preparing special education paperwork prior to the initial Individualized Education Plan meeting.

Psychologist- Assist in coordination of evaluations when applicable, assess, and consult with team members and families.

Social Worker- Obtain social history, observe, and provide intervention with the child, and consult with team members and families.

Teacher- Provide assessment and instruction in the areas of language and literacy. The teacher would also schedule and complete the paperwork for annual IEP's.

Intervention Considerations for ECDD Students

Once it has been determined that speech and language interventions are needed to meet the child's communication/education needs, services can be provided in a variety of ways. Service delivery models may include direct services on an individual, small group, or classroom basis. Consultation services may also be utilized with the classroom teacher or parents.

Service Delivery

Students are found eligible as ECDD under Special Education Rule 340.1711. Most students with early childhood developmental delays have communication difficulties; however, many communication needs are met through a variety of special education supports. These supports may include services within the ECDD classroom and/or pull-out services. Because the foundation of the ECDD classroom is literacy and language-based, the language needs of the ECDD children are addressed by the classroom teacher. The SLP should consult with the ECDD teacher in regards to language-based curriculum needs. These consultations may include information regarding augmentative and alternative communication, pre-literacy, language acquisition and disorders, articulation impairments, and information regarding specific syndrome disorders. The SLP should provide direct service for articulation/phonological delays.

Special Considerations and Programming

When working with ECDD students, the ECDD team may also have to consult with ancillary staff members such as occupational and physical therapists, autism consultants, and hearing impaired consultants. The team also has to consider the educational needs of transitioning students. As the ECDD child's family and special education team anticipates kindergarten

placement, the developmental profile of the child should become more clearly defined. During the second semester of the ECDD year the special education team should begin a comprehensive evaluation of each child. These assessments should include cognitive and academic achievement, speech and language, social emotional, and any other support service evaluations. It is also important during the second semester to suggest a regular education preschool opportunity. The team can be creative in determining what this programming may look like. For example, the ECDD child may participate in ECDD program two days a week and the regular education preschool three days a week or vice versa. During the regular education placement, it is important for the classroom teachers to maintain contact regarding the child's performance. It may also be helpful for an ECDD team member, typically the school psychologist or social worker, to observe the child in the regular education preschool. Once the evaluations and observations are complete, the ECDD team should then determine if the child should remain eligible for special education services as ECDD or if a more appropriate certification should be used. The SLP may also wish to use the School-Aged Language Eligibility Summary to assist in the transition of ECDD children to other educational placements.

LANGUAGE
Parent Input Form

To be completed by the child's parent or recorded by the SLP during a parent interview.

Child's Name: _____ Birthdate:_____
Home Telephone: _____ Cell Phone: _____
Address: _____
Home School: _____Teacher's Name_____ Date:_____

Name of Parents: _____
Father's Occupation: _____ Mother's Occupation: _____
Siblings (Names and Ages): _____

Child's Physician's Name: _____ Telephone:_____
Referred By: _____

Birth History
Please describe the Mother's health during pregnancy: _____
_____
List any medications taken by the child's mother during the pregnancy: _____
_____
Length of pregnancy: _____ Duration of labor: _____ Type of birth: _____
Age of mother at birth: _____ Age of father at birth: _____
List any unusual circumstances about the birth: _____
_____
Has the child had any illnesses (please indicate severity, age, and side-effects)? _____
_____

Developmental History
Please indicate the approximate age at which your child began to do the following:

	Age in Months		Age in Months
Rolled over		Feed self	
Sat unsupported		Dressed self	
Crawled		Became toilet trained	
Stood next to things		Spoke single words	
Walked		Spoke phrases	

Was your child a quiet baby or did your child babble and coo? _____
Did your child experience any feeding problems? _____
_____

Does your child have any difficulty walking, running, throwing, etc.? _____

Has your child's hearing been evaluated? If so, when, where, by whom, and what were the outcomes

Has your child's vision been evaluated? If so, when, where, by whom, and what were the outcomes:

Statement of Speech and Language Difficulty

Child's primary language: _____ Language spoken in the home: _____

Describe in your own words what problem your child is having with speech, language, and/or hearing:

When did your child's speech and language skills first become an area of concern?

Have any of your child's relatives had speech and language difficulties? If so, who and what type of difficulty did they have? _____

How does your child typically communicate (e.g., gestures, single words, screaming, phrases, sentences)?

Does your child have difficulty with the following?
Please answer by circling: N (Never), S (Sometimes) , F (Frequently), A (Always)

Listening

Understanding and following 1-2 step directions?	N S F A	_____
Understanding age-level vocabulary (e.g. nouns and verbs)?	N S F A	_____
Responding appropriately to WH questions (e.g., who, what)	N S F A	_____
Responding appropriately to yes/no questions?	N S F A	_____
Responding appropriately to choice questions?	N S F A	_____
Responding to questions within expected time period?	N S F A	_____
Difficulty attending to what is said?	N S F A	_____
Ignoring distractions?	N S F A	_____

Understanding basic concepts (e.g., on, off, before, after)? N S F A _____
Listening to a complete storybook? N S F A _____
Understanding new/novel ideas? N S F A _____

Speaking
Using age-appropriate sentences (e.g. 3-5 words per sentence)? N S F A _____
_____
Using age-appropriate grammar skills (e.g. pronouns, articles)? N S F A _____
_____
Asking questions? N S F A _____
Expressing daily needs (e.g., verbally or nonverbally)? N S F A _____
Using a variety of vocabulary words (e.g. 50-100 words)? N S F A _____
Expressing likes and dislikes? N S F A _____
Retelling Stories? N S F A _____
Sharing Ideas? N S F A _____
Adding information? N S F A _____
Sequencing Stories? N S F A _____
Asking for help when needed? N S F A _____

Socializing
Looking at people when talking or listening? N S F A _____
Providing nonverbal feedback (e.g., head nods, gestures) N S F A _____
Maintaining conversation? N S F A _____
Understanding facial expressions, gestures, or body language? N S F A _____
Greeting people? N S F A _____
Using his/her own words or does he/she repeat what others say? N S F A _____
Playing with other children? N S F A _____
Initiating Conversation? N S F A _____
Interacting with others? N S F A _____
Following routines? N S F A _____
Coping with changes in routine? N S F A _____
Transitioning between activities? N S F A _____

Behavior
Is your child easily frustrated because of lack of communication skills? N S F A
Is your child having behavior difficulties in structured situations? N S F A
Is your child having behavior difficulties in unstructured situations? N S F A
Is your child aggressive with your or the children in the classroom? N S F A

Does your child try to make himself/herself understood? _____ Yes _____ No
If yes, please describe._____

Medical and Therapeutic History
Has your child ever been diagnosed by a physician, neurologist, or psychologist as having any type of neurological impairment or syndrome? _____ If yes, please explain: _____

_____

_____

Please list any evaluations or therapies that your child has had and their outcomes (i.e., speech, occupational, or physical therapy, neurological examination, MRI, etc.):

Evaluation or Therapy	Date Started	Date Ended	Outcome

Does your child take any medications at home or during the school day?

Medication	Amount Prescribed/How Often (e.g. 15mg/2x day)	Taken at Home/School	For What Condition (e.g. ADD, Seizures)

Does your child have any known allergies? If so, please explain: _____

_____

Additional Comments:

_____

_____

_____

_____

_____ _____

Parent Signature Date

LANGUAGE - PRESCHOOL
Teacher Input Form

Child's Name: _____ Birthdate: _____ Date: _____
Teacher: _____ Speech-Language Pathologist: _____

Please describe the child's strengths: _____

_____

Please describe the child's main difficulties: _____

_____

Hearing screened: _____ Date Passed _____ Date Failed
Vision screened: _____ Date Passed _____ Date Failed

Does your student have difficulty with the following?
Please answer by circling: N (Never), S (Sometimes) , F (Frequently), A (Always)

Listening		
Understanding and following 1-2 step directions?	N S F A	_____
Understanding age-level vocabulary (e.g. nouns and verbs)?	N S F A	_____
Responding appropriately to WH questions (e.g., who, what)	N S F A	_____
Responding appropriately to yes/no questions?	N S F A	_____
Responding appropriately to choice questions?	N S F A	_____
Responding to questions within expected time period?	N S F A	_____
Difficulty attending to what is said?	N S F A	_____
Ignoring distractions?	N S F A	_____
Understanding basic concepts (e.g., on, off, before, after)?	N S F A	_____
Listening to a complete storybook?	N S F A	_____
Understanding new/novel ideas?	N S F A	_____
Speaking		
Using age-appropriate sentences (e.g. 3-5 words per sentence)?	N S F A	_____
Using age-appropriate grammar skills (e.g. pronouns, articles)?	N S F A	_____
Asking questions?	N S F A	_____
Expressing daily needs (e.g., verbally or nonverbally)?	N S F A	_____
Using a variety of vocabulary words (e.g. 50-100 words)?	N S F A	_____
Expressing likes and dislikes?	N S F A	_____
Retelling Stories?	N S F A	_____
Sharing Ideas?	N S F A	_____
Adding information?	N S F A	_____
Sequencing Stories?	N S F A	_____
Asking for help when needed?	N S F A	_____
Socializing		
Looking at people when talking or listening?	N S F A	_____
Providing nonverbal feedback (e.g., head nods, gestures)	N S F A	_____
Maintaining conversation?	N S F A	_____
Understanding facial expressions, gestures, or body language?	N S F A	_____
Greeting people?	N S F A	_____
Using his/her own words or does he/she repeat what others say?	N S F A	_____
Playing with other children?	N S F A	_____
Initiating Conversation?	N S F A	_____
Interacting with others?	N S F A	_____
Following routines?	N S F A	_____

Coping with changes in routine? N S F A _____
Transitioning between activities? N S F A _____

Behavior

Is your student easily frustrated because of lack of communication skills? N S F A _____
Is your student having behavior difficulties in structured situations? N S F A _____
Is your student having behavior difficulties in unstructured situations? N S F A _____
Is your student aggressive with your or the children in the classroom? N S F A _____

Does the child try to make himself/herself understood? _____ Yes _____ No
If yes, please describe._____

Please list any accommodation that your have tried in your classroom and their outcomes (i.e., increased wait time, visual strategies, behavior plans, etc.):

Interventions	Date Started	Date Ended	Outcome

Does your student take any medications at home or during the school day?

Medication	Amount Prescribed/How Often (e.g. 15mg/2x day)	Taken at Home/School	For What Condition (e.g. ADD, Seizures)

Does your student have any known allergies? If so, please explain: _____

Has your student had any private therapy that you know of (e.g., speech, occupation, or physical therapy)?___
_____

Additional Comments:

_____
_____
_____

EMOTIONAL IMPAIRMENTS (EI)

DEFINITION

Students are found eligible as Emotionally Impaired under Special Education Rule R340.1706

R340.1706 of the Michigan Special Education code provides the following definition of an emotional impairment as of May 20, 2005:

(1) Emotional impairment shall be determined through manifestation of behavioral problems primarily in the affective domain, over an extended period of time, which adversely affect the student's education to the extent that the student cannot profit from learning experiences without special education support. The problems result in behaviors manifested by 1 or more of the following characteristics:.
   (a) Inability to build or maintain satisfactory interpersonal relationships within the school environment.
   (b) Inappropriate types of behavior or feelings under normal circumstances.
   (c) General pervasive mood of unhappiness or depression.
   (d) Tendency to develop physical symptoms or fears associated with personal or school problems.

(2) Emotional impairment also includes students who, in addition to the characteristics specified in subrule (1) of this rule, exhibit maladaptive behaviors related to schizophrenia or similar disorders. The term "emotional impairment" does not include personals who are socially maladjusted, unless it is determined that the persons have an emotional impairment.

(3) Emotional impairment does not include students whose behaviors are primarily the result of intellectual, sensory, or health factors.

(4) When evaluating a student suspected of having an emotional impairment, the multidisciplinary evaluation team report shall include documentation of all of the following:
   (a) The student's performance in the educational setting an in other settings, such as a adaptive behavior within the broader community.
   (b) The systematic observation of the behaviors of primary concern which interfere with educational and social needs.
   (c) The intervention strategies used to improve the behaviors and the length of time the strategies were utilized.
   (d) Relevant medical information, if any.

(5) A determination of impairment shall be based on data provided by a multidisciplinary evaluation team, which shall include a comprehensive evaluation by both of the following:
   (a) A psychologist of psychiatrist
   (b) A school social worker

Children in the category of "Emotionally Impaired" may include but are not limited to those with Rule 340.

INTRODUCTION

Students who are eligible for special services due to Emotional Impairment may or may not have a communication impairment. There is a high co-occurrence of language disorders within this population; however, communication impairments may also include articulation, voice, or fluency disorders. Once a student has been identified as Emotionally Impaired, speech and language services can be added and removed as a related service as needed.

PREVALENCE

Of communication impairment in the emotionally impaired population
There is a high co-occurrence of language disorders within this population; however, (Brinton & Fujiki, 1993; Gallagher, 1999; Giddan, 1991; Prizant, Audet, Burke, Hummel, Maher & Theadore, 1995; Hummel & Prizan, 1993).

Gallagher (1999) reports the following statistics which suggest a large overlap of students with emotional impairment and students with communication impairment:

- 62-95% of students with emotional or behavioral problems exhibit a moderate-severe language impairment
- 50-75% of students with a communication impairment exhibit emotional or behavioral problems.

NATURE OF IMPAIRMENT

Students who exhibit an emotional impairment with a concomitant communication issue often have difficulties in pragmatic language. These pragmatic issues can include (Gallagher, 1999):

- Expressive language is unable to be changed for multiple listener needs
- Less positive verbal reactions during social interactions
- Problems with conversational topic maintenance and turn-taking
- During cognitive tasks which require organization and planning, there is not enough verbalization
- Difficulty comprehending abstract language in social situations (i.e. metaphors, sarcastic humor, etc.)

Issues Common to this Population

Speech and language services may be added as a related service once a student has been identified as Emotionally Impaired. Services are based on the individual student's needs and should be flexible. Speech and language services may be altered throughout the educational student's career dependent upon their changing needs.

ROLE OF SLPS

The SLP has several roles when working with students who are Emotionally Impaired. The SLP should educate teachers, administrators, and parents regarding the prevalence and nature of communication issues related to students with emotional or behavioral problems. The SLP needs to be a valuable member of a multidisciplinary evaluation team for students suspected of emotional impairment to assess the student's language as it impacts their behavior in school. The SLP may consult with the general education

classroom teacher(s) and/or a teacher of the emotionally impaired classroom to structure their lessons and/or classroom with appropriate language models. Finally, the SLP may provide direct therapeutic services.

ASSESSMENT CONSIDERATIONS

Language issues related to emotional problems are often difficult to identify as they are less obvious at first glance. It is important that SLPs are aware of the types of medication a student is on and every attempt is made to assess the student under optimal conditions. Assessment with students who have already been determined to be Emotionally Impaired should include all of the recommended procedures from the Language section of this document with particular attention to pragmatic language. Language samples that reveal conversational problems, instruments which assess the understanding and use of abstract language and observation in multiple settings (e.g., classroom, lunch room, recess, and special classes) are tools that may demonstrate the student's understanding and use of pragmatic language. Assessment tools in the language section that may be helpful include The Pragmatic Protocol (page L-31) and Clinical Discourse Analysis (page L-33).

Hummel and Prizant (1993) outline a number of considerations for assessment and intervention for students with co-occurring communication and emotional/behavioral impairments.

1. The student's self confidence as a communicator and self-esteem
2. The relationship between past experience and the student's socio-communicative problems.
3. The legitimacy of the student's feelings
4. The need for input from a multidisciplinary team

INTERVENTION CONSIDERATIONS

Students certified as Emotionally Impaired who have additional speech and language problems are best served through a team approach. Teams may work together in many different ways such as social skills groups with the social worker, strategies in the classroom with the general education teacher, and medicine effects/monitoring with the school psychologist.

The service delivery model should be flexible enough to allow for all of the therapeutic activities an SLP might provide throughout the course of intervention. For example, the SLP may use pull-out therapy to teach conversational turn-taking. Then as the student's skills improve, the SLP may use a classroom-based or consultative services model to help the student apply it in the school environment.

A variety of pragmatic treatment approaches are available for students with these types of language issues. SLPs should choose treatment approaches which are research-based and provide evidence of its effectiveness. Typically, pragmatic treatment approaches include the following (Gallagher, 1999, Hummel & Prizant, 1993)

- Enhancing communication while promoting successful relationships

- Using a facilitative approach: Building on the behaviors evident by developing ways to communicate an cope with difficult situations (targeting more socially acceptable communicative alternatives)
- Direct instruction on replacement vocabulary, phrases and their use (i.e. emotional vocabulary)
- Use of language scripts for common social situations
- Role play techniques to practice using language in social situations
- Analysis and planning of antecedent events which trigger problem behaviors
- Manipulation of consequent events to foster positive social interactions and confidence with a sense of success
- Beginning with areas of strengths and promote higher tolerance for mistakes

REFERENCES

Brinton, B. & Fujiki, M. (1993). Clinical forum: Language and social skills in the school-age population, language, social skills, and socioemotional behavior. *Language, Speech and Hearing Services in Schools, Volume* 24, p. 194-198.

Gallagher, T.M. (1999). Interrelationships among children's language, behavior, and emotional problems. *Topics in Language Disorders, 19(2),* 1-15.

Giddan, J.J. (1991). School children with emotional problems and communication deficits: Implications for speech-language pathologists. *Language, Speech and Hearing Services in Schools, Volume* 22, p. 291-295.

Prizant, B.M., Audet, L.R., Burke, G.M., Hummel, L.J. Maher, S.R., & Theadore, G. (1995). Communication disorders and emotional/behavioral disorders in children and adolescents. *Journal of Speech and Hearing Disorders, Volume* 55, p. 179-192.

HEARING IMPAIRED (HI)

DEFINITION

Students are found eligible as Hearing Impaired under special Education Rule .340.1707.

R.340.1707 Hearing impairment explained; determination.
Rule 7.

(1) The term "hearing impairment" is a generic term which includes both students who are deaf and
those who are hard of hearing and refers to students with any type or degree of hearing loss that interferes with development or adversely affects educational performance. "Deafness" means a hearing impairment that is so severe that the student is impaired in processing linguistic information through hearing, with or without amplification. The term "hard of hearing" refers to students with hearing impairment who have permanent or fluctuating hearing loss which is less severe than the hearing loss of students who are deaf and which generally permits the use of the auditory channel as the primary means of developing speech and language skills.

(2) A determination of impairment shall be based upon a comprehensive evaluation by a multidisciplinary evaluation team, which shall include an audiologist and an otolaryngologist or otologist.

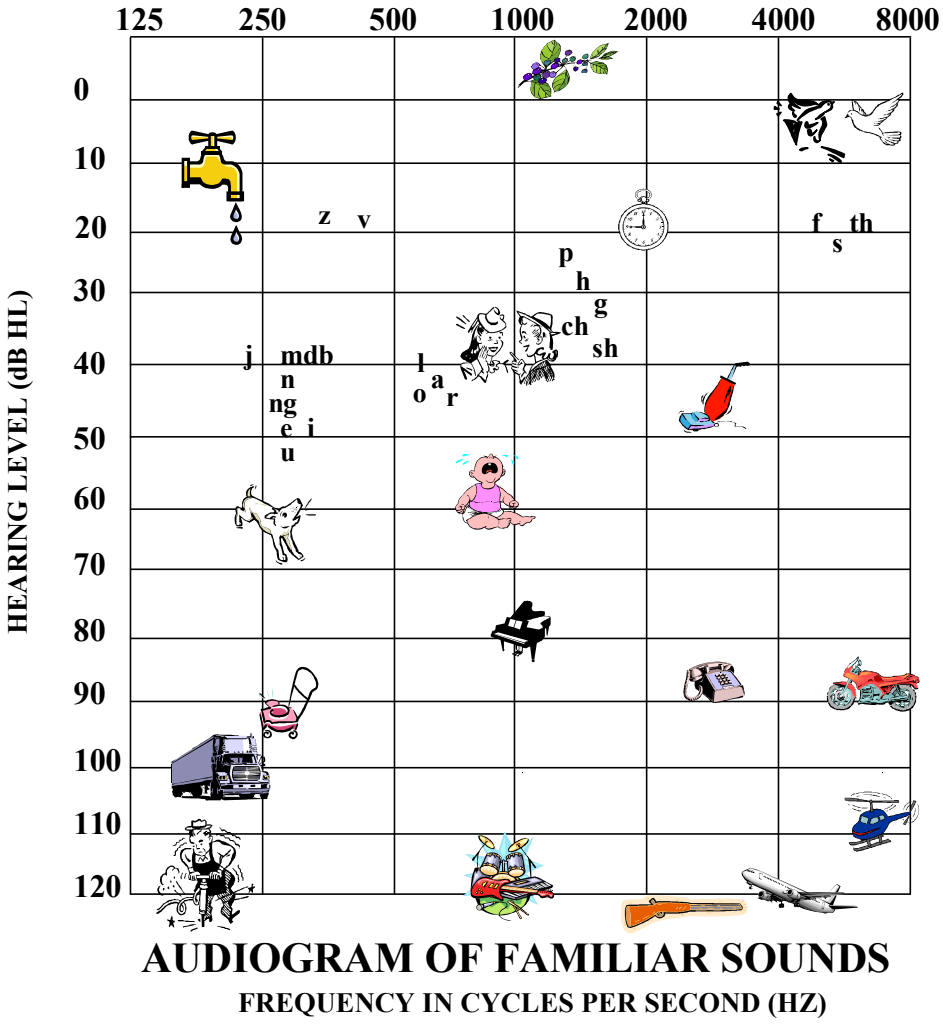
ROLE OF SLP IN THE HEARING IMPAIRED POPULATION

Most students with hearing impairments require the services of the speech-language pathologist at some level: direct, collaborative, consultative, and/or a combination of these, at some point, during their academic career. For the student who does not require direct remedial services, the speech-language pathologist may assist in designing and implementing support for the classroom teacher. This may include preferential seating, room amplification, listening centers, and personal FM system. The role of the speech-language pathologist who serves the deaf student who does not use an amplification system, and uses American Sign Language with no speech for communication may serve the classroom teacher as a consultant for literacy issues. Speech and language therapy is a related service and should be reviewed at the annual IEP and added and deleted as each individual students' needs change throughout their educational career.

It is suggested that SLPs consult an educational audiologist throughout their work with students with hearing impairments. SLPs should become informed about a student's hearing and hearing history such as the onset of hearing loss or when the student gained access to sound through amplification or implant, as well as how the student benefits from amplification. The audiologist can help interpret the student's auditory performance with amplification.

It is sometimes useful to compare a student's audiogram to an audiogram that indicates at which frequencies familiar sounds are heard. At times this can be made into a transparency and used as an overlay as a visual tool to educate parents and teachers. See Figure H-1

Figure H-1 **Audiogram of Familiar Sounds**



Learning Challenges of Having a Hearing Loss (McConkey-Robbins, 2006)
Students with hearing loss experience a variety of challenges in school. Effort should be made to help the school team to be aware that distortion continues even when amplification brings detection of sounds within normal limits. School teams should also understand that even though the student may show normal or close to normal hearing thresholds, access to sound does not guarantee understanding.

Students with hearing loss may be linguistically and/or experientially deprived compared to peers. This results in increased difficulty understanding classroom discourse and content. They may be missing the prerequisites and shared knowledge other children have on any given topic and this may vary greatly for a student across topics. Students with hearing loss may need more time to learn and may need more explicit instruction. The greatest success understanding language is often when the meaning is made clear by concrete examples and repetition so that it has become "transparent".

Most Common Types of Speech Errors (Roth & Worthington, 2005)
Children with hearing loss frequently exhibit some of the following speech errors:

Students with hearing loss in the moderate, profound and deaf range

- Omission of final consonants
- Substitution of voiced consonants for voiceless
- Substitution of stops for nasals, fricatives, and affricates
- Omission of consonants in blends

Students with hearing loss in the profound and deaf range

- Omission of initial consonants
- Substitution of schwa for other vowels (neutralization)
- Insertion of schwa into words or added to the ends of words
- Substitution of vowels for other vowels
- Nasalization of vowels

To measure speech production abilities the *Phonetic Level Speech Evaluation,* developed by Daniel Ling, and found in his book, *Speech and the Hearing-Impaired Child: Theory and Practice*, provides a comprehensive method of measuring speech production as well as providing goals and methods for therapy.

ASSESSMENT CONSIDERATIONS

There are several factors to consider when assessing a student with a hearing impairment. Prior to assessment activities the SLP should ensure that:

- The student's amplification system is operating properly. The SLP can look at the battery for signs of corrosion or rust. The ear mold can be inspected visually for wax or other blockage. The SLP may also check for identification of the Ling sounds, /a/, /i/, /u/, /s/, /S/, and /m/ using audition only.
- Adequate lighting, the absence of ambient noise, and appropriate seating are provided. It is helpful to have minimal distance between the examiner and the student (approximately 16-18 inches).
- FM systems are available and in working order, if the student uses one.
- An oral or sign interpreter is available for students who use sign language.

INTERVENTION CONSIDERATIONS

There are considerations that relate to the severity of a student's hearing loss for amplification and classroom accommodations.

Unilateral or Minimal Hearing Loss

Students with a *unilateral or minimal hearing loss (15-25 dB)* may require intervention due to language delay. This type of hearing loss is often overlooked until the student exhibits a delay in language development. These students typically do not wear hearing aids, but may benefit from a personal amplification system, room amplification, or listening centers. Classroom intervention to support the curriculum may be necessary; with classroom-based (push-in) activities developed in cooperation with the classroom teacher, and pull-out if necessary for articulation, voice or fluency disorders.

Mild To Moderate Hearing Loss
Students with a *mild (26 to 40 dB) to moderate (41 to 55 dB) hearing loss* often require the use of hearing aids and use an FM system in the classroom. An evaluation of communication skills may indicate delays in all areas of language development delays in vocabulary development, articulation or phonological delays, and voice problems. Classroom-based services may be required to support the language of the curriculum and to provide other supports, such as monitoring the student's voice quality and articulation carry over. Pull-out may be required for a period to remediate articulation delays and voice differences. The classroom teacher or the speech-language pathologist should monitor hearing aid and FM status, and provide optimal classroom acoustics.

Moderate-To-Severe, Severe & Profound Hearing Loss
The student with a *moderate-to-severe hearing loss (56 to 70 dB), severe hearing loss (71-90 dB), or a profound hearing loss (91 dB or more)* will require the use of hearing aids or cochlear implant, and should use an FM system in the classroom. These students may be enrolled in an auditory/oral program, a total communication program, or participate fully in general education classes. The role of the speech-language pathologist may include: monitoring amplification systems* (check batteries, ear molds and tubing, microphone obstructions, volume setting, etc.), monitoring classroom acoustics, evaluating and remediating speech and language skills, assisting the classroom teacher with language activities that support the curriculum, monitoring student's speech, language, hearing activities, and voice production in the classroom. Some students also benefit from intervention to remediate articulation delays, improve voice production, improve speech reading skills, or auditory perceptual skills. These students may require interpreters (oral or sign), and note takers when functioning in general education classes.

*Useful equipment for hearing aid or FM check: hearing aid stethoscope, battery tester, alcohol swabs, cerumen pick, battery supply (especially when working with young children), tubing, dry aid kit.

Listening/Auditory Skills
There are several aural rehabilitation programs that emphasize specific auditory skills such as Auditory Skills Instructional Planning System (ASIPS), the Developmental Approach to Successful Listening II (DASL II), Speech Perception Instructional Curriculum and Evaluation (SPICE). There is also software and other supports useful such as software that provides visual feedback to sounds the child produces like the Visi-Pitch III. There are a variety of *s*oftware with games and activities to work listening skills such as Earobics and Reader Rabbit.

Modifications and Accommodations (McConkey-Robbins, 2006)
Students with hearing loss often need curricular modifications and accommodations in order to make adequate progress. The following is a sample of the type of strategies and accommodations that may be helpful. These will not all apply for any one child, as the team will need to assess the types of supports that allow each student to progress in the general curriculum.

STRATEGIES TO IMPROVE AUDITORY PERFORMANCE

Strategies for Teachers

Classroom environment

- Reduction of noise/minimize distractions
- Preferential seating away from noise
- Use of classroom amplification system

Teaching techniques

- Clear enunciation at a slow-moderate rate of speech
- Insert purposeful pauses between concept, let the words *hang in the air*
- Keep directions or commands short and simple and have student repeat directions
- Use praise often and be positive
- Provide visual cues during lecture/directions (such as written outline on the board)
- Provide repetition of oral information and steps of assignment
- Give breaks between intense concepts taught for comprehension
- Check for comprehension early/often and check knowledge of prerequisite information
- Preview and review concepts for lecture
- Offer short essay tests as an alternative to multiple choice
- Record lectures for repeated listening
- Offer closed captioning for videos
- Make connections with other material whenever possible – refer often to previous lessons
- Augment information, especially with visual materials (show a film; look on web; find additional books about topic; act it out; recommend family activity; fieldtrip)

Peer assistance

- Use of a positive peer partner for comprehension of directions or proofing work
- Use of cooperative learning groups
- Use of a note-taker

Assignment modifications

- Allow extended time to complete assignments and/or tests
- Offer short essays as an alternative to multiple choice
- Provide visual instructions
- Preview language of concept prior to assignment
- Frequent checks for comprehension at pre-determined points
- Vary grading techniques

Strategies for Student

- Teach use of visual cues to supplement auditory information
- Teach use of short and long term memory techniques (i.e. rehearsal, chunking, mnemonics, visual imagery)
- Teach student to listen for meaning rather than every word
- Teach active listening behaviors
- Teach student to advocate for themselves by asking frequent questions about the material, asking for multiple repetitions or requesting speaker to "write it down"
- Use of tape recorder for assignments
- Teach organizational strategies for learning information
- Teach use of an electronic note-taker or word processor

Strategies for Parents

- Keep directions or commands short and simple
- Use praise often and be positive
- Use visuals or gestures at home to compensate for listening difficulties
- Assist the student in asking clarification questions and being their own advocate
- Preview and review classroom material and review tape recorded information

RESOURCES

ASHA Special Interest Divisions
ASHA member and students may want to consider joining the related Special Interest Division and receive newsletter with articles on this topic, members-only e-mail listservs, and Web forums.

ASHA Special Interest Division 7, Aural Rehabilitation and Its Instrumentation
This special interest division is dedicated to creating and maintaining a forum allowing clinicians and researchers to affiliate formally with one another to focus on (a) the study, development and application of amplification systems and communication devices, (b) techniques for amelioration of expressive and receptive communication problems in children and adults with hearing impairments, and (c) technology for habilitation of deafened children and adults, such as cochlear implants and vibrotactile aids. The underlying purposes of this division are to foster an exchange of information among its affiliates sharing the common interest of aural rehabilitative methodologies and to disseminate this information to other professionals as well as consumers of audiological services.

ASHA Special Interest Division 9, Hearing and Hearing Disorders in Childhood
Special Interest Division 9 has as its main focus all areas related to childhood hearing. The mission is to provide a unified voice and advocacy for childhood hearing issues within ASHA. Other functions of the division are to permit interaction between members who share the same concerns; to provide for study sections within the division, with members of other divisions, and with members of allied health groups; to provide a forum for demonstration and sharing of new technologies, research, clinical developments, and treatment outcomes; and to provide a vehicle for input into education and training issues related to hearing in childhood.

The Alexander Graham Bell Association for the Deaf and Hard of **Hearing** www.agbell.org – AG Bell focuses specifically on children with hearing loss, providing ongoing support and advocacy for parents, professionals, and other interested parties. This is an excellent resource that provides a wealth of the most current information.

John Tracy Clinic www.johntracyclinic.org – provides a home program for parents of hearing impaired children, ages 0-5 yrs.

Products Mentioned in the Text:
ASIPS Auditory Skills Instructional Planning System Foreworks 503-653-2614

CASLLS - Cottage Acquisition Scales for Listening, Language & Speech
Sunshine Cottage 210-824-0579 ext. 244 or TTY/ 824-5563

DASL II _ Developmental Approach to Successful Listening II Cochlear Corporation
800-523-5798

SPICE _ Speech Perception Instructional Curriculum and Evaluation CID Publications
877-444-4574 (ext. 133)

Visi-Pitch III Kay Elemetrics Corp. 973-628-6200

Earobics Software Cognitive Concepts 888-328-8199

Reader Rabbit Riverdeep - The Learning Company, Inc. 617-778-7600

Other Helpful Resources

Firszt, J. & Reeder, R. (1996). *Classroom GOALS*. Washington, DC: AG Bell

Graham, T.L. (1992). *Listening is a way of loving*. Atlanta: Humanics Learning, Ltd.

Maxwell, M.J. (1981). *Listening games for elementary grades*. Washington, DC: Acropolis Books, Ltd.

Robbins, A. (2000). Rehabilitation Following Cochlear Implantation. In Niparko (Ed.) *Cochlea implants – principles and practices*. Philadelphia: Lippincott, Williams & Wilkins.

Siegel, L. (2000). *The complete IEP guide*. Nolo Publishing. www.nolo.com

Sindrey, *Cochlear implant guidebook*. Wordplay, London, Ont. CANADA.

REFERENCES

Anderson, K. (1989). *Screening instrument for targeting educational risk (S.I.F.T.E.R.)*. Tampa, FLA: The Educational Audiology Association.

Flexer, C. (1999). *Facilitating hearing and listening in young children*. Clifton Park, NY: Thomson Delmar Learning

Ling, D. (2002). *Speech and the hearing-impaired child: Theory and practice*, (2nd edition). Washington: Alexander Graham Bell Association for the Deaf and the Hard of Hearing.

McConkey-Robbins, A. (2006). *The learning challenges of having a hearing loss*. A presentation to the Macomb/St. Clair Speech-language hearing association. Clinton Township, MI.

Roth, F.P. & Worthington, C.K. (2005). *Treatment resource manual for speech-language pathology* (3rd edition). Clinfton Park, NY: Thomson Delmar Learning.

LEARNING DISABILITIES (LD)

INTRODUCTION

Language impairments are thought to be intrinsic for most, if not all, students with a learning disability (Kamhi & Catts, 2001; Nelson, 1998, Paul, 2001). It is also can be viewed as a sequelae to a language impairment. Many students who are identified with language impairments in preschool or early elementary school, go on to be identified as having a learning disability. Nelson (1998) poses the question, in these situations, "What changes? Do children change, or only labels?" p. 99. Many authors have recognized this overlap by using the term, "language-learning disability" (Paul, 2001; Nelson, 1998; Stone, Silliman, Ehren, & Apel, 2004). Further adding to the lack of distinction, are the categories of learning disabilities for oral expression and listening comprehension. The use of these eligibility labels varies widely across districts, or even across teams within a district. Some of these label changes related to district practices that services are specific to eligibility, such as changing the educational label to LD when the student needs to receive resource room or more intensive service than the students with speech and language disorders normally receive in the district. However, some administrators feel that the eligibility category does not have to match the service. These practices and decisions should be discussed by teams with their administrator. Decisions related to the overlap of language and learning disabilities are not easy and there is no one answers that will work across students or even across time for the same student. Certainly the reciprocal nature of spoken and written language where competence in one builds on the other for general language competence should be recognized by all persons working with students with learning disabilities (ASHA, 1993, Stone et al, 2004).

Relevant state rules and federal regulations for IDEA 2004 will be considered here first, followed by guidelines related to:

- SLPs' Role in the Prevention & Early Intervening for Learning Disabilities (LD-7)
- SLPs' Role in the Initial Determination of Eligibility as Learning Disabled (LD-10)
- Intervention Consideration and Removal of service (LD-16, L-19)

IDEA 2004

The definition of learning disability is changing. The reauthorization of IDEA (2004) will be quoted here first. The state rule will follow, however, it will be apparent to the reader that the state rule will need to change based upon the new Federal Law.

§300.8 A Child with a Disability

(10) Specific learning disability. (i) General. Specific learning disability means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia.

(ii) Disorders not included. Specific learning disability does not include learning problems that are primarily the result of visual, hearing, or motor disabilities, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage.

§300.306 Determination of eligibility.

(a) General. Upon completion of the administration of assessments and other evaluation measures--

(1) A group of qualified professionals and the parent of the child determines whether the child is a child with a disability, as defined in §300.8, in accordance with paragraph (b) of this section and the educational needs of the child; and

(2) The public agency provides a copy of the evaluation report and the documentation of determination of eligibility at no cost to the parent.

(b) Special rule for eligibility determination. A child must not be determined to be a child with a disability under this part--

(1) If the determinant factor for that determination is--

(i) Lack of appropriate instruction in reading, including the essential components of reading instruction (as defined in section 1208(3) of the ESEA [*NCLB*]) ;

(ii) Lack of appropriate instruction in math; or

(iii) Limited English proficiency; and

(2) If the child does not otherwise meet the eligibility criteria under §300.8(a).

(c) Procedures for determining eligibility and educational need. (1) In interpreting evaluation data for the purpose of determining if a child is a child with a disability under §300.8, and the educational needs of the child, each public agency must--

(i) Draw upon information from a variety of sources, including aptitude and achievement tests, parent input, and teacher recommendations, as well as information about the child's physical condition, social or cultural background, and adaptive behavior; and

(ii) Ensure that information obtained from all of these sources is documented and carefully considered.

(2) If a determination is made that a child has a disability and needs special education and related services, an IEP must be developed for the child in accordance with §§300.320 through 300.324.

(Authority: 20 U.S.C. 1414(b)(4) and (5))

Additional Procedures for Identifying Children With Specific Learning Disabilities

§300.307 Specific learning disabilities.

(a) General. A State must adopt, consistent with §300.309, criteria for determining whether a child has a specific learning disability as defined in §300.8(c)(10). In addition, the criteria adopted by the State--

(1) Must not require the use of a severe discrepancy between intellectual ability and achievement for determining whether a child has a specific learning disability, as defined in §300.8(c)(10);

(2) Must permit the use of a process based on the child's response to scientific, research-based intervention; and

(3) May permit the use of other alternative research-based procedures for determining whether a child has a specific learning disability, as defined in §300.8(c)(10).

(b) Consistency with State criteria. A public agency must use the State criteria adopted pursuant to paragraph (a) of this section in determining whether a child has a specific learning disability. (Authority: 20 U.S.C. 1221e-3; 1401(30); 1414(b)(6))

§300.308 Additional group members.

The determination of whether a child suspected of having a specific learning disability is a child with a disability as defined in §300.8, must be made by the child's parents and a team of qualified professionals, which must include—

(a)(1) The child's regular teacher; or

(2) If the child does not have a regular teacher, a regular classroom teacher qualified to teach a child of his or her age; or

(3) For a child of less than school age, an individual qualified by the SEA to teach a child of his or her age; and

(b) At least one person qualified to conduct individual diagnostic examinations of children, such as a school psychologist, speech-language pathologist, or remedial reading teacher.

(Authority: 20 U.S.C. 1221e-3; 1401(30); 1414(b)(6))

§300.309 Determining the existence of a specific learning disability.

(a) The group described in §300.306 may determine that a child has a specific learning disability, as defined in §300.8(c)(10), if--

(1) The child does not achieve adequately for the child's age or to meet State-approved grade-level standards in one or more of the following areas, when provided with learning experiences and instruction appropriate for the child's age or State-approved grade–level standards:

(i) Oral expression.
(ii) Listening comprehension.
(iii) Written expression.
(iv) Basic reading skill.
(v) Reading fluency skills.
(vi) Reading comprehension.
(vii) Mathematics calculation.
(viii) Mathematics problem solving.

(2)(i) The child does not make sufficient progress to meet age or State-approved grade-level standards in one or more of the areas identified in paragraph (a)(1) of this section when using a process based on the child's response to scientific, research-based intervention; or

(ii) The child exhibits a pattern of strengths and weaknesses in performance, achievement, or both, relative to age, State-approved grade-level standards, or intellectual development, that is determined by the group to be relevant to the identification of a specific learning disability, using appropriate assessments, consistent with §§300.304 and 300.305; and

(3) The group determines that its findings under paragraphs (a)(1) and (2) of this section are not primarily the result of--

(i) A visual, hearing, or motor disability;
(ii) Mental retardation;
(iii) Emotional disturbance;
(iv) Cultural factors;
(v) Environmental or economic disadvantage; or
(vi) Limited English proficiency.

(b) To ensure that underachievement in a child suspected of having a specific learning disability is not due to lack of appropriate instruction in reading or math, the group must consider, as part of the evaluation described in §§300.304 through 300.306--

(1) Data that demonstrate that prior to, or as a part of, the referral process, the child was provided appropriate instruction in regular education settings, delivered by qualified personnel; and

(2) Data-based documentation of repeated assessments of achievement at reasonable intervals, reflecting formal assessment of student progress during instruction, which was provided to the child's parents.

(c) The public agency must promptly request parental consent to evaluate the child to determine if the child needs special education and related services, and must adhere to the timeframes described in §§300.301 and 300.303, unless extended by mutual written agreement of the child's parents and a group of qualified professionals, as described in §300.306(a)(1)--

(1) If, prior to a referral, a child has not made adequate progress after an appropriate period of time when provided instruction, as described in paragraphs (b)(1) and (b)(2) of this section; and

(2) Whenever a child is referred for an evaluation.

(Authority: 20 U.S.C. 1221e-3; 1401(30); 1414(b)(6))

§300.310 Observation.

(a) The public agency must ensure that the child is observed in the child's learning environment (including the regular classroom setting) to document the child's academic performance and behavior in the areas of difficulty.

(b) The group described in §300.306(a)(1), in determining whether a child has a specific learning disability, must decide to--

(1) Use information from an observation in routine classroom instruction and monitoring of the child's performance that was done before the child was referred for an evaluation; or

(2) Have at least one member of the group described in §300.306(a)(1) conduct an observation of the child's academic performance in the regular classroom after the child has been referred for an evaluation and parental consent, consistent with §300.300(a), is obtained.

(c) In the case of a child of less than school age or out of school, a group member must observe the child in an environment appropriate for a child of that age.

(Authority: 20 U.S.C. 1221e-3; 1401(30); 1414(b)(6))

Note: Since the Reauthorization of IDEA, the Michigan Department of Education has given districts the option of using an RTI approach or a discrepancy model. Changes in the state rules are anticipated.

R340.1713 of the Michigan Special Education code provides the following definition of a specific learning disability as of May 20, 2005:
Rule 13.

(1) "Specific learning disability" means a disorder in 1 or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations. The term includes such conditions as perceptual impairments, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include children who have learning problems that are primarily the result of a visual, hearing, or motor impairment, of a cognitive impairment, of an emotional impairment, of autism spectrum disorder, or of environmental, cultural, or economic disadvantage.

(2) The individualized education program team may determine that a child has a specific learning disability if the child does not achieve commensurate with his or her age and ability levels in 1 or more of the areas listed in this subrule, when provided with learning experiences appropriate for the child's age and ability levels, and if the multidisciplinary evaluation team finds that a child has a severe discrepancy between achievement and intellectual ability in 1 or more of the following areas:
   (a) Oral expression.
   (b) Listening comprehension.
   (c) Written expression.
   (d) Basic reading skill.
   (e) Reading comprehension.
   (f) Mathematics calculation.
   (g) Mathematics reasoning.

(3) The individualized education program team shall not identify a child as having a specific learning disability if the severe discrepancy between ability and achievement is primarily the result of any of the following:
   (a) A visual, hearing, or motor impairment.
   (b) Cognitive impairment.
   (c) Emotional impairment.
   (d) Autism spectrum disorder.
   (e) Environmental, cultural, or economic disadvantage.

(4) At least 1 individualized education program team member other than the student's general education teacher shall observe the student's academic performance in the general education classroom setting. For a child who is less than school age or who is out of school, an individualized education program team member shall observe the child in an environment appropriate for a child of that age.

(5) For a student suspected of having a specific learning disability, the documentation of the individualized education program team's determination of eligibility shall include a statement concerning all of the following:

(a) Whether the student has a specific learning disability.
(b) The basis for making the determination.
(c) The relevant behavior noted during the observation of the student.
(d) The relationship of that behavior to the student's academic functioning.
(e) The educationally relevant medical findings, if any.
(f) Whether there is a severe discrepancy between achievement and ability that is not correctable without special education and related services.
(g) The determination of the team concerning the effects of environmental, cultural, or economic disadvantage.

(6) Each individualized education program team member shall certify, in writing, whether the report reflects his or her conclusion. If it does not reflect his or her conclusion, the team member shall submit a separate statement presenting his or her conclusions.

(7) A determination of learning disability shall be based upon a comprehensive evaluation by a multidisciplinary evaluation team, which shall include at least both of the following:
(a) The student's general education teacher or, if the student does not have a general education teacher, a general education teacher qualified to teach a student of his or her age or, for a child of less than school age, an individual qualified by the state educational agency to teach a child of his or her age.
(b) At least 1 person qualified to conduct individual diagnostic examinations of children, such as a school psychologist, an authorized provider of speech and language under R340.1745(d), or a teacher consultant.

RESPONSE TO INTERVENTION

A response to intervention (RtI) approach can be used for the prevention and identification of learning disabilities (IDEA, 2004). In a response to intervention framework, schools work to ensure that the most effective instructional programs meet students' learning and behavioral needs, reducing difficulties in these areas. Regular assessment or progress monitoring is necessary to determine which students are progressing adequately toward curricular benchmarks. The implementation of an RtI model has several advantages for the delivery of reading, writing and math services. Within an RtI model the special education team provides more direct services related to prevention. Using curriculum-relevant assessment and early intervening practices during pre-referral also enable teams to use their expertise to affect the educational progress of a larger group of students and to hone in on the specific challenges faced by a student of concern. Providing indirect or direct intervention as part of early intervening to determine the student's response to intervention gives special education teams a powerful vehicle to determine whether instructional changes and accommodations are needed or whether the student experiences a learning disability and needs direct intervention.

Prevention of Learning Disabilities

Speech-language pathologists are an important part of a school's resources as schools try to meet the learning needs of all children. With the passing of No Child Left Behind, the reauthorization of IDEA in 2004, and the changing definition of learning disabilities, schools are challenged in new ways to monitor the progress of ALL children, provide differentiated instruction, and develop capable, literate students who can speak, listen, read, and write using language. Prevention efforts are aimed at ensuring that all students attain reading, writing and math skills that allow them to make progress in school without being labeled as special education.

SLP ROLE IN PREVENTION AND EARLY INTERVENING FOR LEARNING DISABILITIES

Speech-language pathologists have an important contribution in the prevention of learning disabilities (ASHA, 2001). The SLPs role as a member of the special education team is to bring their expertise of communication development to broaden the team's understanding about the role language plays in reading and writing as well as to help design and implement early intervening plans with at-risk students. This may involve broad activities such as participation on a curriculum committee to choose a reading series, presentation of in-service to general and special education staff members about the relationship between language and literacy. SLPs should participate in a team approach to develop and implement early intervention strategies which target reading, writing, and math. Having an SLP involved in the pre-referral or early intervening process can be a great asset to both the evaluation team and student.

SLPs are part of school teams that may look at the progress of students as a whole or at the concerns about groups of students and how their progress might be enhanced. When particular students of concern are identified, the following process may be helpful in planning and monitoring early intervening services. This may be documented in a variety of ways. Some school districts may have their own form for this purpose. An example of such a form is the General Education Assistance Plan for Early Intervening Services, found on page LD-8. This form, or a similar one, is completed by the team to guide the plan for early intervening services. A description of its components is summarized on the page following the form.

General Education Assistance Plan for Early Intervening Services

Name: _____ DOB: _____ Grade: _____
Meeting date: _____ Follow-up date: _____

Persons Attending the Meeting

Name:_____ Name:_____
Name:_____ Name:_____
Name:_____ Name:_____

Person(s) who referred: _____
Specific Concerns: _____
_____

Review of Pertinent Information

_____
_____

Current Accommodations and Modifications	Progress and Results	Time Frame

Hypothesis of Problem: _____
_____
_____

New Early Intervening Plan	Who is Responsible	Time Frame	Response to Intervention

Parent Notification and/or Signature: _____Date:_____
Recommendations: _____
_____
_____
_____
_____
_____

Specific Concerns
At the early intervening meeting, the teacher describes the specific concerns regarding the student's skills related to the curriculum. They discuss how these concerns relate to reading, writing, and math skills.

Review of Pertinent Information
In order to design a plan for the student, the team collects information about the student including: identifying data, any relevant developmental or medical history, family history, possible cultural or linguistic differences, previous academic test results, test results from outside sources, educational records, previous educational supports or placements and attendance. If it is indicated that the student speaks another language, the SLP should refer to the culturally and linguistically diverse portion of the Language section within this document and complete the process outlined in that segment. The team should also analyze environmental and economic differences at this time. For example, attendance issues or a lack of stable schooling opportunities could be explored.

Documentation of Current Accommodations and Modifications
Current accommodations and modifications already being used in the classroom, as well as the staff specific strategies and programs being used with the child should be analyzed. The student's responses to these attempts are examined as well as the length of time that these strategies have been implemented to determine the direction for further intervention.

Hypothesis of Problem
Based on an analysis of the student's background information and response to classroom accommodations and/or modifications, the team may have a hypothesis about which specific area(s) of reading, writing, or math present the most difficulty in the curriculum. The team asks: what specific academic area(s) are lacking for the student to access the curriculum? The team members may need to do some observation or inquiring to develop a more specific hypothesis about which literacy or math skills and/or strategies are lacking or they may have adequate data to form this preliminary hypothesis. If it is difficult to define at this time, the team may want to refer to curriculum-based assessments in that specific academic area.

Design of New Early Intervening Plan, Parent Notification and/or Signature, Implementation
The team then designs an early intervening plan. The plan might include consultative intervention provided by another professional or direct intervention delivered in classroom-based or pull-out service delivery models. The purpose of the intervention is to determine what is needed for the student to be successful in the general education curriculum.

The team reviews with the parent the specific area(s) of difficulty the student is having, what has been attempted and aspects of the new early intervening plan. It is recommended that the teams indicate assent that the parent is aware of special education involvement with the student. The plan is then executed.

Response to Intervention and Recommendations
If the student begins to progress adequately then the team might begin to transfer the responsibility for strategy implementation to the teacher. The team may consult as the treatment period is ended to promote continued progress. In this example no referral is necessary.

If the team determines that the student is not making adequate progress based on data collected, then the plan is redesigned and another period of intervention is attempted. Throughout the trial intervention attempts, the team reconvenes as needed and monitors progress using data to evaluate the student's response to intervention and the effectiveness of the strategies being used. If the team determines that the student is not making adequate progress and multiple strategies or intervention plans have been attempted, the team may initiate a formal referral for learning disabilities. All referrals for learning disability certification should develop as an outgrowth of lack of response to pre-referral interventions.

Evaluation Review/Consent
Once the decision has been made that a formal referral for learning disability certification is needed, an Evaluation Review meeting should be held with the team members and the parent. The purpose of this meeting is to review all the pertinent data collected to this point. This data should include results of the pre-referral interventions. In addition, the team should ask themselves what more information is needed in order to determine the presence of a disability or adverse educational effect. Parental consent for the formal evaluation is gained at the meeting.

SLP ROLE IN THE INITIAL DETERMINATION OF ELIGIBILITY AS LEARNING DISABLED

The primary goal of the initial assessment is to both determine eligibility for learning disabilities and to identify an appropriate treatment plan. As previously discussed in the guidelines document, this means that the team must determine:

- Presence of a Specific Learning Disability
  Subrule (1) states that "Specific learning disability" means a disorder in 1 or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations.
- Adverse Educational Effect
  The presence of a disorder does not necessarily mean that there is an adverse effect on educational performance, therefore the team must also determine whether the disorder adversely affects educational performance (academic, social, or vocational).
- An Intervention Plan
  The assessment must provide appropriate information to design and implement appropriate intervention that will enable the student to progress in the general curriculum.

SLP's are frequently, if not always, part of the Multidisciplinary Evaluation Team for LD eligibility. The contributions of the SLP's assessment and interpretation of student performance will often be a significant contribution for the team to better understand the student's difficulties. The team will complete a variety of activities in order to accomplish these objectives. They then make a collective determination as to whether the student qualifies for learning disability services. An Individualized Education Plan (IEP) is created and the student is given a program

which is consistent with the least restrictive environment (LRE) and based on the student's individual academic needs.

Determining When to Add Speech and Language as a Related Service

The team must determine whether to add speech and language services first during the initial determination of eligibility for a learning disability and then throughout the student's school career. According to Lahey and Bloom (1994), students with language learning disabilities may vary in their performance across time and contexts. Language learning disabilities present different challenges at different points in the curriculum. For example as the abstract aspects of the curriculum increase and the information processing demands increase in middle and high school, students who may have been compensating well may need some assistance. However, the assistance can be specific to what the student needs to participate in the curriculum and may not always need to be long term, depending on the combination of supports already offered to that student.

Fluid Service Delivery - Dismiss or Add Services Year-By-Year

When students experience other primary disabilities that include a communication impairment, they will need considerations for those communication needs throughout their education. However, many students with other disabilities receive special service and may also have adapted or modified curricula. The need for speech and language intervention will increase and decrease as the student experiences different stages of development or has different education team members. It is important that students who need the support of a speech-language pathologist receive that support. Similarly, it is important that if a student does not currently need the service but may in the future, be removed from service until the student again demonstrates a need. Even when it is anticipated that the student may need services again, services may be discontinued, as it is not necessary to continue services just in case.

Documentation

MET Requirements

There is no MET required to add speech and language services to the educational program of a student with a MET eligibility in another area. The SLP writes a diagnostic report that explains the need for services. The MET report should contain the results of multiple forms of assessment data gathered by the team to determine this need. After a period of intervention, the team may determine that the student no longer needs speech and language services. They document this in another report explaining why services are no longer recommended. This may mean that the short-term outcomes were met and the student is now progressing with the other special education supports received. In other cases, it may mean that the student did not respond to intervention at this point in time or there were some other mitigating factors that inhibited progress, and the team is recommending discontinuation of speech and language services. Certainly this same student may have speech and language services added to his/her program at another time.

A caveat to this guideline relates to districts that choose to use dual certification. It should be noted that if the SLP and team elect to use MET paperwork and make a secondary eligibility as speech and language impaired, then the MET paperwork is also needed to discontinue services.

Diagnostic Reports
The rule (340.1745) indicates that a diagnostic report is required to add speech and language as a related service, although does not specify what needs to be included in the diagnostic report. Furthermore, the rule does not require standardized testing of students whose primary disabilities are other than speech and language to determine eligibility. Because they have another disability that qualifies them to receive special education services, they are already eligible for speech and language services as a related service if it is shown that the service is needed. The basis for determining the provision of related services is the responsibility of the team, including an SLP, by assessing the student's need for speech and language service in addition to other special services. The information collected by the SLP and other team members should continue to include multiple forms of assessment. The diagnostic report should lay the foundation for intervention by outlining how the SLP's service will assist the student to progress in the curriculum.

IEP Requirements
Some districts document speech and language services added for a student with a different disability as a related service in the "related service section" and some school districts document these related services under speech-language services on the IEP form. When there is question as to how an IEP is written, it is recommended that the SLP confer with his/her district administrator.

ASSESSMENT CONSIDERATIONS

Evaluation to Determine Whether to Add Speech and Language as a Related Service

This assessment may happen when

- A student has been previously identified as SLI and the primary certification is being changed to LD.
- A student is being found eligible for the first time as LD.
- The student has been labeled as LD for some time, and the team is now considering whether to add speech and language.

In any of these situations, the SLP completes an assessment of the student's language performance within the curriculum. The assessment will have many similarities to the procedures described in the language section. The extent to which the SLP is familiar with the student (such as through previous intervention as a student labeled SLI, or the provision of early intervening services) will significantly impact the nature of the assessment and direct the depth of assessment activities needed to make the determination of whether speech and language services are needed. The *LD Determination Speech-Language Service Summary* form located on page LD-12 may be useful in organizing and documenting this assessment process. After the form, a description of each section in the summary is provided beginning on page LD-13.

LD Determination of Speech-Language Service Summary

This worksheet assists the SLP in determining whether speech-language services are needed as a "Related Service" for students previously found eligible for special education as learning disabled.

Student _____ Birthdate_____ Date_____

Speech-Language Pathologist _____ Team Members_____

Special Education Services Received_____ General Education Classes _____

Specific area of concern:			*Does not support the need for speech-language as a related service*	*Supports the need for speech-language as a related service*
Gathering Input	**Teacher Input** Obtain teacher input related to specific educational concerns	Special Ed. Provider(s)		
		General Ed. Provider(s)		
	Parent Input Obtain parent input related to specific educational concerns.			
	Student Input Obtain student input related to specific educational concerns.			
File Review	**Prior/Current SLP Intervention** Consider goals and outcomes of previous speech-language services and other special education services.			
	Educational Record and assessment			
Current Accommodations/Modifications Identify strategies currently used in the general education classroom to support the student's access to the curriculum.				
Curriculum-Based Assessments Watch the student attempt a curricular task reported to be difficult either with you or in the classroom. Determine whether the student's language is adequate for successful participation in that curricular task or whether the student lacks the language skills and strategies needed. Inquire how the current special education services support the student.				
Language Samples/ Portfolio Assessment Collect oral and written language samples to further investigate the student's language function within the curriculum for the specific area of concern.	**Word level:** Phonology**,** morphology, semantics, reading decoding, spelling, word retrieval, and pragmatics			
	Sentence level: Morphology, syntax, semantics, formulation, and pragmatics			
	Discourse level: Organization, semantics, syntax, formulation, cohesion, and pragmatics			
Dynamic Assessment / Trial Intervention Provide intervention for a trial period.				
Results/ Student's response to intervention Evaluate the student's response to your intervention. Determine the level of accommodation or intervention strategies that the student requires to be successful in the curriculum. Could the student be successful if the classroom teacher used these strategies or are special education services needed?				
Test Results Administer specific tests **in the areas of concern** as needed for planning intervention and decision-making. Test results will not be the *primary* determination of adding speech and language service.				
Consideration of cultural / linguistic differences Refer to the Culturally and Linguistically Diverse section if indicated.				
Consideration of environmental or economic differences Provide documentation from team reports, teacher, and parent interviews if needed.				
Need for Related Service to benefit from Special Education Determine whether recommendations could be provided through another service provider/teacher or whether services of a SLP are needed				
Summary of Speech and Language Service Recommendations (Circle one)			**Service Not Recommended**	**Service Recommended**
Services recommended	**Goals:**			
	Timeframe:			
	Service Delivery models:			

Input
When completing an evaluation to add speech and language services for a student eligible as LD, the SLP must collect information from the team regarding the speech and language needs that are not met by the program designed to meet the needs of the learning disability.

Teacher Input
Even if this student was previously an SLI student, gathering current teacher input will be essential for both determination of services and to design intervention. The teacher may be best positioned to discuss potential language difficulties, interfering with participation in the curriculum to begin to judge whether the LD support services can meet (or is already meeting) those needs. In order to accomplish this in a meaningful way, the SLP may need a few interactions with the teacher as other information is collected and impressions are made.

Parent Input
Gathering input from the student's parents is another important component. Interviews often offer the most relevant results as the SLP can talk with the parents about their concerns for their child and how the parents feel that their child's communication difficulties are making school difficult.

Student Input
It is also important to identify how the student feels about their academic difficulties and the effect of these difficulties on school performance. This is particularly important for older students and adolescents. The student input forms in the language section may be helpful.

Review of Pertinent Information
This information should have been gathered during the pre-referral process for the student. However, some data may not have been available or present during the initial pre-referral phase. This information is useful for determining adverse educational effect.

Consideration of Cultural/Linguistic Differences
When a student's native language is other than English, it is important to consider that the language or cultural differences may be the root of the educational and language difficulties. The SLP should first complete the process in the culturally and linguistically diverse portion of the Language section, if indicated. Consideration needs to be given as to whether the student's difficulties are due to cultural or linguistic differences.

Consideration of Environmental or Economic Differences
A student's environmental or economic differences may be the root of the child's educational difficulties. The SLP should provide documentation from team reports, teacher, and parent reviews in consideration of these factors, if indicated.

Current Accommodations and Modifications
The team should also review current changes, accommodations, modifications, or interventions that are currently being provided to the student. If assistive technology is being provided to the student it should be assessed for its effectiveness related to educational success. These strategies and the student's response to them need to be documented.

Additionally, the SLP should analyze the types of accommodations, modifications, and intervention strategies provided by the school's special education classroom teacher (i.e. resource room) as it relates to communication. This information will assist the team in determining appropriate programming options for the student and if speech and language as a related service is deemed necessary. For example, the SLP might analyze how the special education teacher creates opportunities for language comprehension and expression as it relates to the curriculum. Or, the SLP might observe the special education teacher's ability to accommodate the specific language needs of the students in their classroom.

Curriculum-Based Language Assessment

Curriculum-based language assessment initially begins during the prevention stage when the child has been identified as "at-risk." The special education team gains information on the child's ability to respond to intervention through prevention efforts. However, such assessment during that period will be brief in form. During the assessment phase, more comprehensive information may be required about the student's academic functioning in several aspects of the curriculum. When a formal learning disability assessment is indicated, the team then gathers additional information through student, parent, and teacher interviews to identify aspects of the curriculum that present the greatest challenges to the student. The team focuses assessment activities on the student's specific academic abilities within the activities described as challenging by the teacher(s), parents, and student. The guiding considerations can be stated as assessment questions:

- What skills are needed for successful participation in this part of the curriculum?
- What does the student usually do when attempting this task?
- What skills and strategies might the student acquire to become more successful?
- How should the task be modified?
  (Nelson, 1989; Nelson, 1998)

These are discussed in the Language sections of this document.

Language Samples/Portfolio Assessments & Dynamic Assessment/Trial intervention

These reviews should also be curriculum-relevant. See the Language section for further information.

The dynamic assessment process gives the SLP an opportunity to consider whether language intervention strategies will help the student successfully access general education curriculum as well as the special education adapted curriculum. These strategies can be shared with the student's teacher to be implemented in the general education classroom. Additionally, these strategies may also be shared with the special education classroom teacher. Implementation of these strategies in the general education setting may be sufficient support to allow the student to continue as a general education student. Furthermore, implementation of specific language strategies taught to the special education teacher may also be sufficient to allow a student to remain within a special education classroom without speech and language as a related service.

Results/Response to intervention

During the assessment phase, the team needs to summarize the data regarding the student's response to pre-referral intervention. The team should determine the level of accommodation the

student needed in order to be successful in the curriculum. These types of accommodations should be evaluated to determine if the teacher is able to utilize these strategies or whether special education strategies are required. If special education strategies are required, the SLP should evaluate whether these strategies are sufficient for the student to be successful in the special education environment or if there is a need for additional language intervention strategies. The documentation gathered during the pre-referral intervention phase should be used as evidence in this summary as it relates to eligibility.

Standardized Test Profile
There are many issues to consider in the selection and use of standardized tests. Please refer to the introduction of the section, "SLI as a Primary Disability" for a review of issues related to standardized testing.

Need for Related Service to benefit from Special Education
Based on the information gathered, the SLP and team discuss whether the language difficulties the student experiences require the services of an SLP.

Summary of Recommendations
Level of Special Education Programming
The level of programming for a student with learning disabilities can significantly impact the determination for adding speech and language as a related service. The SLP should determine whether the student's language needs can be met by their programming. For example, a student who receives Teacher Consultant services two times a week in the areas of reading and writing may require additional speech and language intervention with the general education teacher to be able to access the curriculum in Science and Social Studies for success. However, a student who receives Resource Room services daily in the areas of reading and writing may receive sufficient language intervention to meet their needs and exhibit success within that setting. In this case, speech and language as a related service would not be warranted. On the other hand, the special education teacher(s) in the Resource Room may not be equipped to intervene with a particular student's language needs. In this situation, the SLP may choose to add that student to their speech and language caseload in order to foster more in depth language intervention. Ultimately, the decision should be individualized to the student and stem from the multiple forms of language assessment performed by the SLP.

Level and Type of Language Accommodations and/or Modifications Needed
Using curriculum-based assessments and dynamic assessments, the SLP should be able to determine the level of intensity required for language intervention as it relates to the curriculum. If the student requires minimal language intervention or language supports that are familiar to the other providers to meet their needs within the program they are being serviced, speech and language as a related service may not be warranted. If, however, the student requires more intense language accommodation, with collaboration or instruction by the SLP than speech and language as a related service should be considered. For example, if the student merely requires a simplified and shortened sentence length in oral directions and written questions, the SLP can relay that information to the student's service provider (T.C. or RR) who can then carry out such an accommodation without adding that student to their caseload. However, if the student requires more intense instruction in the comprehension and expression of inferential questions as

it relates to the curriculum, then the SLP may choose to add that student onto their caseload in order to foster language success. Eventually, the SLP must decide how much and of what type of intervention the student requires in order to be successful in their educational program. If it is determined that the student requires a high intensity level for language accommodations, modifications, collaboration or instruction in order to be successful, then speech and language as a related service should be considered.

INTERVENTION CONSIDERATIONS

Once a student with learning disabilities is identified as requiring speech and language as a related service, the SLP has several intervention considerations. These include: setting appropriate goals, implementing an appropriate time frame for service, and choosing the appropriate service delivery model.

Goals

In addition to the typical considerations for writing goals as stated in depth within the Language section of this document, there are some special considerations with a student who has a learning disability. Sharing responsibility for the student's goals is vitally important to their progress in intervention for all disabilities; however, for students with learning disabilities it is crucial. The student will have language and learning goals and objectives addressed by the whole team. When the two services are added the team defines how the SLP uniquely adds to the service and how each provider is going to contribute to the efforts. The SLP and primary service provider should collaborate to write goals which address the student's needs within the framework of the curriculum. All school professionals who service the student can track progress as to how they specifically address that goal during intervention. The crucial component in goal writing and progress monitoring is that responsibilities are shared. The goals are the student's goals in which service providers give intervention.

Time Frame

The SLP should carefully consider the time frame for services rendered. A statement of prognosis can be made regarding other factors which affect therapeutic language intervention including home involvement, attendance, motivation, and presence of social/emotional or medical conditions. Students who are already receiving some form of special education intervention from a primary service provider which share responsibility of the student's goals with the SLP may not need long term speech and language intervention. It is not necessary to provide speech and language services until the student's three year required re-evaluation. The SLP may choose to set a shorter time frame to re-evaluate the student's need for speech and language services. This can be modified as needed while the student's progress is monitored by the primary service provider and the SLP.

Service Delivery Models

There are a multitude of service delivery options the SLP may choose to utilize when delivering speech and language services to a student with a learning disability. It is recommended that the SLP consider the educational relevancy and impact on performance in the classroom as service delivery is planned (Keeping in mind that relevancy is not about location – wherever the treatment takes place, but rather about how the activities support the curriculum and are presented within the context of the curriculum. Flexibility in scheduling to provide the types of

supports needed by students at various points in the curriculum and in the therapeutic process (ASHA, 2002). A combination of service delivery models can be used, and is often quite effective in offering specific instruction in new strategies or skills and then facilitating putting them into practice while identifying other targets through classroom interactions.

In a consultative model, the SLP would work with both the student's general education teacher(s) and special education teacher(s) to plan lessons and/or classroom accommodations/modifications which meet the student's language needs. Ehren (1994) termed this model a content enhancement model in which specific techniques are taught to teachers which do not require inordinate amounts of time and provide services to a whole classroom of students. This would foster a true collaboration of the student's IEP goals as well as provide the student with the least amount of disruption to their educational program. The push-in model is another viable alternative when working with students who have learning disabilities. This model would allow the SLP to co-teach a whole classroom of students in either the general education setting or special education setting. It would also provide the SLP the opportunity to work with students in small groups within the classroom setting on their particular curriculum assignments. Pull-out models can be effective for aspects of therapy, but should be considered most restrictive. It can often be more disruptive to the student's educational program and progress may be slower. It may be most likely warranted in cases of articulation, voice or fluency therapy. A pull-out option should be considered cautiously as a way to address the student's individual educational needs.

Removal of Speech and Language Services

On at least an annual basis, team should determine whether the student continues to need speech and language as a related service or whether the communication needs can be met within their educational program. If not, what is the extent of service required by the SLP to meet the student's needs? If the student's communication needs are able to be met within their particular educational program with minimal assistance by the SLP then speech and language services may be discontinued.

The procedures for removing speech and language as a related service when the student is certified (and will remain certified as learning disabled) include a diagnostic report and IEP. It is not necessary to wait until the student's re-evaluation year to remove services. A re-evaluation of the student's communication abilities can occur at any time an SLP feels it is necessary and should include the activities completed during an assessment phase previously discussed. SLPs should consult their administrator regarding the paperwork the administrator would like completed such as the Evaluation Review/Consent form. A comprehensive report citing the assessment results and evidence as to why the SLP is removing the student should be attached to the IEP.

SPECIAL CONSIDERATIONS FOR STUDENTS WITH LEARNING DISABILITIES

There are many and varied interpretations as to when to certify a student as having a Learning Disability (LD) in Oral Expression and/or Listening Comprehension rather than Speech and Language Impaired (SLI). As these terms appear redundant and no clear guidelines defined in the law as to how these certifications are qualitatively different, the SLP should follow the policies set forth by their individual school district.

RESOURCES

ASHA Special Interest Division 1, Language Learning and Education
ASHA member and students may want to consider joining the related Special Interest Division and receive newsletter with articles on this topic, members-only e-mail listserves, and Web forums. This Special Interest Division is a vehicle for ASHA members to promote activities related to: (1) the linguistic knowledge and communicative interaction of infants, children, and youth from diverse cultures; (2) how knowledge, interactions, and culture affect language learning and literacy; (3) the ways in which contexts, such as school events, influence children's communication; and (4) assessment and intervention approaches for people with developmental disabilities or speech-language-hearing disorders.

REFERENCES

American Speech-Language-Hearing Association (ASHA). (1999). *Guidelines for the Roles and Responsibilities of the School-Based Speech-language Pathologist.*

Catts, H.W. & Kamhi, A.G. (2005). *The Connections Between Language and Reading Disabilities*. Pearson Education Limited: Auckland, New Zealand.

Cole, Dale, & Thal. (1998).

Disney, Whitmire, Plante & Spinello (2003).

Ehren, B. (1994). *New directions for meeting the academic needs of adolescents with language learning disabilities*. In Wallach & Butler, *Language learning disabilities in school-age children and adolescents: Some principles and applications*. Allyn and Bacon: Boston, MA.

Individuals with Disabilities Education Improvement Act of 2004 (IDEA), 20 U.S.C. § 1400 *et seq*. (2004).

Lahey, M. & Bloom, L. (1994). *Variability and language learning disabilities*. In Wallach & Butler, l*anguage learning disabilities in school-age children and adolescents: Some principles and applications*. Allyn and Bacon: Boston, MA.

Lidz, C. (1991) *Practitioners guide to dynamic assessment*. New York, NY: Guilford.

Mann, V.A. (2003). *Language processes: Keys to reading disability*. In Swanson, H. Lee; Ed; Harris, Karen R.; Ed; Graham, Steve; Ed; *Handbook of learning disabilities*. New York, NY: Guilford Press.

Moore-Brown, B.J. & Montgomery, J.K. (2001). *Making a difference for America's children: Speech-language pathologists in public schools*. Eau Claire, WI: Thinking Publications.

National Association of State Directors of Special Education, Inc. (2005). *Response to intervention: Policy considerations and implementation*. Alexandria, VA: Author, 1-60.

Nelson, N. W. (1989). Curriculum-based language assessment and intervention. *Language, Speech, and Hearing Services in Schools, vol.* 20, pp. 170-184.

Nelson, N.W. (1998). *Childhood language disorders in context: Infancy through adolescence.* Boston: Allyn & Bacon.

Stone, A., Silliman, E., Ehren, B., & Apel, K. (eds.) (2004). *Handbook of Language and Literacy: Development and Disorders*. New York, NY: Guilford Press.

SPEECH AND LANGUAGE SERVICES FOR STUDENTS WHO ARE OTHERWISE HEALTH IMPAIRED (OHI)

DEFINITION

Students are found eligible as Otherwise Health Impaired under Special Education Rule 340.1709a. Children in the category of "Other health impairment" may include but are not limited to those with asthma, attention deficit disorder (ADD), attention deficit hyperactivity disorder (ADHD), and lead poisoning.

R340.1709a Other health impairment defined; determination.

Rule 9a. (1) "Other health impairment" means having limited strength, vitality, or alertness, including a heightened alertness to environmental stimuli, which results in limited alertness with respect to the educational environment and to which both of the following provisions apply:

(a) Is due to chronic or acute health problems such as any of the following:
- (i) Asthma
- (ii) Attention deficit disorder
- (iii) Attention deficit hyperactivity disorder
- (iv) Diabetes
- (v) Epilepsy
- (vi) A heart condition
- (vii) Hemophilia
- (viii) Lead poisoning
- (ix) Leukemia
- (x) Nephritis
- (xi) Rheumatic fever
- (xii) Sickle cell anemia

(b) The impairment adversely affects a student's educational performance.

(2) A determination of disability shall be based upon a comprehensive evaluation by a multidisciplinary evaluation team, which shall include 1 of the following persons:
- (a) An orthopedic surgeon
- (b) An internist
- (c) A neurologist
- (d) A pediatrician
- (e) A family physician or any other approved physician as defined in 1978 PA 368, MCL333.1101 et seq.

INTRODUCTION

Students eligible for special services as Otherwise Health Impaired may or may not have communication impairments. Communication impairments may include articulation, language, voice, or fluency. Once a student has been identified as Otherwise Health Impaired, speech and language services can be added as a related service if needed.

DETERMINING WHEN TO ADD SPEECH-LANGUAGE SERVICES

The responsibility of the SLP in evaluating the students with other health impairments include collaborating with other professionals to integrate the medical history into speech assessments and to assess the effect of the impairment on communicative interactions. Procedures for determining the addition of speech and language services would follow the guidelines presented in the area for which the deficit is noted (i.e., articulation, fluency, language).

ISSUES COMMON TO THIS POPULATION

Students identified as Otherwise Health Impaired must be considered on an individual basis, as their needs are specific to their medical condition and its effects on communication. Intervention strategies align themselves with medical indicators.

- Flexibility may be necessary in scheduling treatment, if appropriate, due to extended absences.
- In the event of frequent medically related absences, responsibilities for treatment may rely heavily on the individual and their communication partners.
- Medicinal effects may impact an individual's performance.

There are many different health impairments that students may experience. It is suggested that the SLP learn about the health issues of the student and how the issues relate to communication. It is often important that the SLP learn about the nature of co-occurring speech and language disorders with the student's health impairment. There are many reference books about speech and language associated with various syndromes or birth defects, such as *The Source for Syndromes* (Richards & Hoge, 1999) and *Birth Defects and Speech and Language Disorders (*Sparks, 1984). One health issue that often co-occurs with language impairments is Attention Deficit Hyperactivity Disorder.

ADD/ADHD Considerations

The prevalence of students diagnosed with attention deficit disorder (ADD) or attention deficit/hyperactivity disorder (ADHD) has expanded over the last several years in the United States. Although ADD and ADHD are separate diagnoses, this document will primarily refer to ADHD in its discussion with the understanding that not all students exhibit a hyperactivity component. Tetnowski (2004) reports that researchers agree there is a high co-occurrence of language impairment with ADHD; although the relationship has not been sufficiently analyzed so as to be relatively clear. SLPs have a role in educating students and their families about ADD/ADHD and how it affects their language in school.

Nature of Language Problems Associated with ADHD

Students with ADHD often exhibit generalized problems with executive functioning and working memory. These deficits can result in specific types of language problems involved in self-regulation or pragmatic language (Westby & Watson, 2004). According to Westby and Watson (2004), these problems include:

- General delay in syntax or semantics use
- Deficits in discourse organization
- Excessive verbalizations

- Difficulties with conversational turn-taking and topic maintenance
- Poor listening comprehension skills
- Reduced expressive language in tasks requiring planning and organization
- Reduced verbal problem-solving abilities
- Difficulties adjusting language to varying contexts

Assessment and Treatment Considerations

When assessing a student diagnosed with ADD/ADHD, the SLP should make sure the student is under optimal conditions for testing (e.g. medication, ambient noise, distraction-free space, etc.). Cultural differences should be analyzed by the SLP for how a specific culture views and treats children with either ADD/ADHD or language impairment. See the Culturally and Linguistically Diverse section of this document for further direction if the student is from a culture different from the SLP. Treatment approaches should be collaborative with other relevant team members and involve multiple service delivery models. Parent education/counseling is a recommended component when working with students who have ADHD and a language impairment (Pierce & Reed, 2004). This may be a collaborative effort with the school social worker or school psychologist as they may have more expertise on the pharmacological component as it relates to overall functioning.

REFERENCES

Pierce, C.D. & Reid, R. (2004). Attention deficit hyperactivity disorder: Assessment and treatment of children from culturally different groups. *Topics in Language Disorders, 25*, pp. 233-240.

Richards, G.J. & Hoge, D.R. (1999). *The Source for Syndromes*. East Moline, IL: Lingui Systems, Inc.

Sparks, S. N. (1984). *Birth Defects and Speech and Language Disorders*. Boston: MA, College-Hill.

Tetnowski, J.A. (2004). Attention deficit hyperactivity disorder and concomitant communication disorders. *Topics in Language Disorders, 25*, pp. 215-224

Westby, C. & Watson, S. (2004). Perspectives on attention deficit hyperactivity disorder: Executive functions, working memory, and language disabilities. *Topics in Language Disorders, 25*, pp. 241-254.

SPEECH AND LANGUAGE SERVICES FOR STUDENTS WITH PHYSICAL IMPAIRMENTS (PI)

INTRODUCTION

Students experiencing physical impairments may or may not have communication impairments. Communication impairments may include articulation, language, voice, or fluency. Once a student has been identified as having a physical impairment, speech and language services can be added as a related service if needed.

DEFINITION

Students are found eligible as Physically Impaired under Special Education Rule 340.1709.

> R340.1709 Physical impairment defined; determination.
>
> Rule 9. (1) "Physical impairment" means severe orthopedic impairment that adversely affects a student's educational performance.
>
> (2) A determination of disability shall be based upon a comprehensive evaluation by a multidisciplinary evaluation team, which shall include assessment data from 1 of the following persons:
>
> (a) An orthopedic surgeon
> (b) An internist
> (c) A neurologist
> (d) A pediatrician
> (e) A family physician or any other approved physician as defined in 1978 PA 368, MCL 333.1101 et seq.

DETERMINING WHEN TO ADD SPEECH-LANGUAGE SERVICES

Students with a physical impairment may exhibit communication deficits with or without a cognitive component. To determine eligibility for students who have a cognitive impairment in addition to a physical impairment, the reader is referred to the section on cognitive impairment (CI). The section on language impairments may be referenced for students who are physically impaired with language impairment, but have no cognitive deficits.

Students with a physical impairment may be identified and referred for speech and language services due to a problem or combination of problems in the areas of voice, fluency, and articulation. These students are referred to as having dysarthria. Documenting the need for speech services involves assessing the student's motor speech system, ability to improve their speech production skills, and determining if the student's skills and overall speech intelligibility allow the student to effectively express their wants and needs, communicate in the classroom, and participate in life experiences.

The reader is referred to specific sections on articulation, voice, and fluency for additional information on assessment and intervention methods. Intervention strategies may include techniques to improve a student's respiratory capacity, phonation, articulation, resonance, and prosody. A student may also be working concurrently on using compensatory strategies to

improve their overall speech intelligibility, such as increasing eye contact, using gestures, slowing their rate, and emphasizing sounds and syllables in words.

Students may no longer warrant speech services when a variety of therapeutic approaches have been tried and results documented. For example, a clinician working with a student who has cerebral palsy and some articulation deficits may try an intervention technique and track the student's progress through data collection. If there is a lack of progress in the student's articulation skills, the treatment method and/or frequency of treatment is then adjusted. The clinician continues to collect data on progress. If the student speech skills eventually plateau, the student may be dismissed at that time.

ISSUES COMMON TO THIS POPULATION

Speech Intelligibility

Individuals with physical impairments may have severely reduced speech intelligibility. When this occurs, augmentation communication strategies should be offered as early as possible during treatment. Use of augmentative communication should begin while efforts to improve speech intelligibility continue.

Assistive Technology

As a member of the student's educational team, the SLP may help in designing and implementing use of other AT supports (i.e., environmental control, switch access, etc.) Please see the section on assistive technology for more information.

Feeding and Swallowing

Children with PI may have feeding and swallowing problems. The SLP serves as part of the school-based feeding and swallowing team. Please see the guideline sections on feeding and swallowing for more information.

SEVERE MULTIPLE IMPAIRMENT (SXI)

DEFINITION

Students are found eligible as Severely Multiply Impaired under Special Education Rule 340.1714.

R340.1714 Severe multiple impairment; determination.
Rule 14.

(1) Students with severe multiple impairments shall be determined through the manifestation of either of the following:

(a) Development at a rate of 2 to 3 standard deviations below the mean and 2 or more of the following conditions:

(i) A hearing impairment so severe that the auditory channel is not the primary means of developing speech and language skills.

(ii) A visual impairment so severe that the visual channel is not sufficient to guide independent mobility.

(iii) A physical impairment so severe that activities of daily living cannot be achieved without assistance.

(iv) A health impairment so severe that the student is medically at risk.

(b) Development at a rate of 3 or more standard deviations below the man or students for whom evaluation instruments do not provide a valid measure of cognitive ability and 1 or more of the following conditions:

(i) A hearing impairment so severe that the auditory channel is not the primary means of developing speech and language skills.

(ii) A visual impairment so severe that the visual channel is not sufficient to guide independent mobility.

(iii) A physical impairment so severe that activities of daily living cannot be achieved without assistance.

(iv) A health impairment so severe that the student is medically at risk.

(2) A determination of impairment shall be based upon a comprehensive evaluation by a multidisciplinary evaluation team, which shall include a psychologist and, depending upon the disabilities in the physical domain, the multidisciplinary evaluation team participants required in R340.1707, R340.1708, or R340.1709, R340.1709a, or R340.1716.

INTRODUCTION

Students whose primary disability is Severely Multiply Impaired may present with communication difficulties and be provided speech and language intervention as a related service. These students require modification of the environment to insure optimal success. Different strategies for varying environments may be needed. Instructional programs and assessment practices should have reasonable and achievable expectations of performance.

DETERMINING WHEN TO ADD SERVICES

The student needs to be assessed using a functional and dynamic methodology. Ideal assessments begin with procedures that inventory and describe the student as a whole. A full range of student's performance in educational, living, leisure, vocational, and working environments may be considered. Environmental assessment should be evaluated where individuals have a specific need or obligation to communicate. Form and function of communicative acts should be observed. Communication partners (family, peers, educational staff, etc) should be involved in designing the treatment program.

There are many similarities between students with multiple disabilities and students with cognitive impairments. The reader is referred to the section on CI for suggestions for assessing this population.

It may be appropriate for programming suggestions and strategies to be given to the classroom staff or to the communicative partners, rather than to the individual student. It should be remembered that services may be provided or discontinued as environmental situations change and needs vary. Best practice indicates that proper documentation be written and filed whenever service delivery changes.

ISSUES COMMON TO THIS POPULATION

- Motoric issues may preclude the development of normal speech patterns.
- Visual impairments or field neglect may impact performance.
- Hearing abilities and the effects of hearing loss may need to be monitored and treated accordingly.
- Feeding/swallowing issues may require teaming with other professionals or medical evaluation.
- AAC strategies may be useful in treatment. Refer to AAC section for further information.

TRAUMATIC BRAIN INJURY

DEFINITION

Students are found eligible as Traumatic Brain Injured under Special Education Rule 340.1716.

Rule 340.1716. Traumatic brain injury defined; determination.
Rule 16.

(1) "Traumatic brain injury" means an acquired injury to the brain which is caused by an external physical force and which results in total or partial functional disability or psychosocial impairment, or both, that adversely affects a student's educational performance. The term applies to open or closed head injuries resulting in impairment in 1 or more of the following areas:

(a) Cognition
(b) Language
(c) Memory
(d) Attention
(e) Reasoning
(f) Behavior
(g) Physical functions
(h) Information processing
(i) Speech

(2) The term does not apply to brain injuries that are congenital or degenerative or to brain injuries induced by birth trauma.

(3) A determination of disability shall be based upon a comprehensive evaluation by a multidisciplinary evaluation team, which shall include an assessment from a family physician or any other approved physician as defined in 1978 PA 368, MCL333.1101 et seq.

INTRODUCTION

Traumatic brain injury is the result of an impact to the brain presenting a variety of possible cognitive, communicative, physical, and behavioral changes. The consequences of traumatic brain injury vary greatly and depend on many factors. The nature of the illness or injury, the age of the individual, the area of the brain injured, and the individual's prior knowledge and skills all influence the effects and the prognosis. The individual may experience disability ranging from barely detectable to profound.

Students in the category of Traumatic Brain Injured will present with, but are not limited to impairments in orientation to person, place, time and condition, memory functions including immediate recall, short term memory, recall of general information, attention and sensory processing (including auditory visual, tactile, gustatory areas), abstract reasoning, problem solving, organization, language functions (including receptive, expressive, and pragmatic skills), and oral motor and articulation functions. Impairments in any of these areas can affect educational performance.

Cognitive and communication problems are first addressed in a rehabilitation setting. Reentry into school occurs when the child is medically and physically stable. The school day may be altered to adapt to the student's fatigue level. Ideally, the rehabilitation therapist and school speech-language pathologist will coordinate therapy goals.

ASSESSMENT CONSIDERATIONS

The assessment of communication problems should be a continual, ongoing process. As the brain continues to heal, spontaneous recovery can occur. Blosser & DePompei (2003) designed an assessment matrix for teams to use in evaluations of communication competence of children and adolescents with traumatic brain injury based upon nine areas for assessment. Please see the interactive communication matrix model in Figure 1.

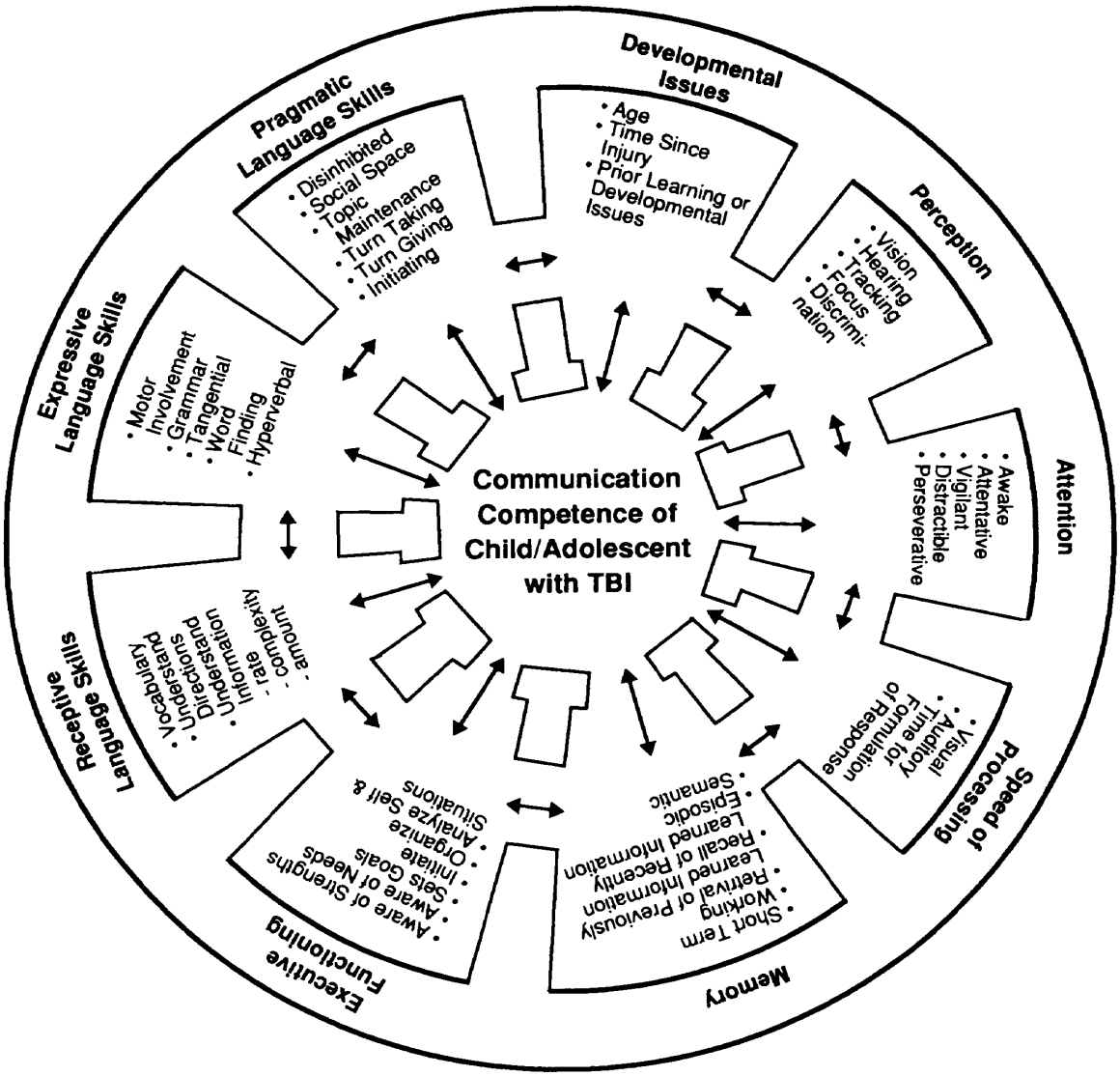


Figure 1. Interactive communication matrix
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DePompei describes ways to assess the student in each area on this matrix using both formal and informal measures. Names of formal measures can be referenced in Blosser & DePompei's book, *Pediatric Traumatic Brain Injury: Proactive Interventions*, if teams have a need for standardized score comparison. Knowing that a student is eligible for speech and language service secondary to TBI, SLPs do not need standardized assessment scores for eligibility as the student qualifies under the area of related service, although standardized testing may be helpful for treatment planning. Assessing the student's strengths and weaknesses in relevant areas as they pertain to the student's educational performance will be central in determining whether the student needs additional related speech and language intervention as well as determining the focus of treatment. The following informal assessment considerations are recommended by Blosser & DePompei (2003).

Developmental Issues
Is there evidence that the student's prior development (motor, cognitive, social, emotional, language) and type of injury will impact the student's response to treatment?
Consider:
- The age of the student at the time of injury.
- The type and location of the injury to the brain.
- The amount of time that has passed since the injury.
- The level of developmental skill that the student achieved prior to the injury.
- The level of knowledge the student had prior to the injury.

Perception
Is there evidence of perceptual problems that will interfere with performance in communication?
Consider:
- Ability to focus visually or auditorally on pictures, objects, voices.
- Ability to visually track across a page or among several pictures or objects.
- Ability to visually or auditorially discriminate among pictures, sounds, objects.

Is data sufficient to define the student's strengths and needs and to direct treatment? If yes, develop goals related to perception. Next consider attention.

Attention
Are there problems with impaired attention skills that will affect performance in communication?
Consider:
- Level of arousal (to people, time of day, stimulus presented.)
- Vigilance: Can attention be maintained to task completion?
- Distractibility: Ability to maintain attention to task in noisy, busy environment.
- Perseveration: Ability to shift from one task to another or one topic to another.

Is data sufficient to define the student's strengths and needs and to direct treatment? If yes, develop goals related to attention. Next consider speed of information processing.

Speed of Information Processing
Is there evidence that slowed processing of information affects performance in communication?
Consider:
- Are responses based on visual input different than responses from auditory input?
- If pauses are inserted when presenting information, is response more accurate?

- If response is not cued or question not repeated, how long does it take for response?
- Is question forgotten if too much time elapses?
- Are directions requested for same task frequently?

data sufficient to define the student's strengths and needs and to direct treatment? If yes, develop goals related to processing speed. Next consider memory.

Memory

Is performance indicative of memory problems that will affect performance in communication? Consider:

- Short term memory skills:
  - Ability to follow increasingly complex directions.
  - Ability to respond to verbal or written directions one at a time, two at a time, etc.
- Working memory:
  - Can direction be held long enough to complete task?
  - Can piece of information (phone number, page of math assignment) be recalled long enough to complete task?
  - What is memory span for unrelated words (numbers, random words, visual symbols)?
  - Long-term memory:
    - Episodic:
    - Can retell events of the day, week?
    - Can re recount experiences of interest (outings, parties) from past?
    - Can re count experiences from present-new game, classroom activity, work experience?
  - Semantic:
    - What vocabulary is retained in conversation?
    - Where are gaps in previously learned information?
    - How is previously learned skill (addition, typing) completed now?
    - How are rules for games learned preinjury recalled?
    - What is present academic achievement level?
  - Retrieval
    - What is skill in recalling information given or activity performed immediately versus, a half hour later, end of day, next day?
    - Is ability to retrieve information aided by visual or auditory cueing?
    - What is recalled best – facts, main idea, supporting details, episodic events?
    - Is information retrieved by recognition, free recall, or cueing?
    - Is recall increased with:
      - Difference in task (recalling as many fruits as possible spontaneously versus recalling the ones that are fruits from a presented word list?)
      - Providing a reward as incentive to recall?
      - Providing a memory strategy (chunking, imagery) as help?
    - Does academic pressure, such as answering questions or recitation in class, decrease efficiency of word finding?
    - Does a stressful social situation with peers, family, or teachers decrease word-finding efficiency?

Is data sufficient to define the student's strengths and needs and to direct treatment? If yes, develop goals related to memory. Next consider executive functioning.

Executive Functioning

Does behavior demonstrate possible problems with executive functioning that may affect performance in communication?

Consider:

- What is cognitive understanding of personal strengths and needs?
- Prior to formalized testing, how does student predict he/she will do?
- How does student evaluate how he/she performed after subtest or test?
- Can student set goals to achieve completion of a task (work or play) without external direction?
- Is plan devised to attempt goals?
- Is plan self-initiated and appropriate to age?
- Is problem-solving skill used if a problem with the plan arises?
- Do inappropriate behaviors interfere with completion of plan and does child try to inhibit these behaviors?
- Is self-talk employed to monitor behaviors during an activity?
- Are there demonstrated abilities to evaluate self on completed test or therapy tasks?

Organization

- Is there ability to describe steps in an activity such as baking a cake?
- Is there ability to describe tools needed to complete activity such as mowing the lawn?
- Is there ability to sequence steps for activity such as studying for a test?
- What ability to categorize (by class, function) is present?
- What ability to associate within and across categories is noted?

Is data sufficient to define the student's strengths and needs and to direct treatment? If yes, develop goals related to executive functioning. Next consider receptive language.

Receptive Language

Does understanding verbal or written communications suggest performance in communication may be affected because of receptive language problems?

Consider:

- Is vocabulary at age level?
- Does vocabulary development keep up after injury?
- Are there gaps in curriculum-specific vocabulary?
- Is there a difference in ability to follow written versus verbal directions?
- Is there a difference in following directions if gestural or tactile information is provided?
- Does rate, amount, or complexity of information presented verbally or in writing affect receptive abilities?
- Is there a difference in ability to comprehend based on communication demands of a person or environment?
- Is comprehension of facts different than comprehension of inference when presented either verbally or in writing?

Is data sufficient to define the student's strengths and needs and to direct treatment? If yes, develop goals related to receptive language. Next consider expressive language.

Expressive Language

Do verbal or written communications suggest performance in communication may be affected because of expressive language problems?

Consider:

- Are there oral-motor weaknesses (dysarthria, apraxia) noted?
- Is there a problem swallowing various textured foods?
- What is ability to use words in naming tasks related to familiar or unfamiliar contexts?
- Is there a difference in verbal versus written output? (Using a detailed picture, if story is told, then written, what changes in ideas, word choice, details and grammar occur?)
- What differences are noted in verbal output when topic of conversation is structured versus unstructured?
- When asked a question, is response tangential or on topic?
- Is confabulation present and can it be redirected?
- What is amount of verbalization? Is being withdrawn or hyperverbal in a conversation a concern?
- Can information from several sentences be condensed into main idea (telegram)?

Is data sufficient to define the student's strengths and needs and to direct treatment? If yes, develop goals related to expressive language. Next consider pragmatic language.

Pragmatic Language

Do pragmatic language skills indicate potential difficulty in communication?

Consider:

- Is disinhibition observed in conversation?
- Is there a problem understanding use of social space (proxemics)?
- Is nonverbal communication used appropriately?
- Is nonverbal communication understood and responded to adequately?
- In unstructured conversation:
  - What is ability to introduce topic?
  - What is ability to maintain topic?
  - What are turn-taking skills?
  - What are turn-giving skills?
  - What are repair/revision strategies?
- What are specificity/accuracy skills?

Does increased stress in social situations with family and peers (observe in natural settings of different types and circumstances) affect interactions?

Is data sufficient to define the student's strengths and needs and to direct treatment? If yes, develop goals related to pragmatic language. Next consider discourse analysis.

Discourse Analysis

Although the area of discourse analysis is not included in DePompei's matrix of assessment considerations, it is important to evaluate the student's ability to use language in a conversational manner with accurate content, coherency, and sequence of information.

Does the use of expressive and pragmatic language suggest possible deficits in discourse abilities?

Consider:
- Does the child talk a lot, but fail to include the most important information?
- Does the child seem to lose train of thought while talking?
- When the child gives instruction (e.g., how to play a game) can sequence of steps be followed?
- Does child have difficulty paraphrasing information from his/her textbook?
- Is he/she able to sequence ideas to make a coherent response during class discussion?

For further assessment, use the Discourse Analysis worksheet (Damico, 1988) on page L-35. Is data sufficient to define the student's strengths and needs and to direct treatment? If yes, develop goals related to discourse. Consider other portions of the matrix.

Other Factors in the Assessment Process

There are many other areas for consideration when developing an assessment plan. Many professionals provide information from a perspective that contributes to a complete assessment, including health-related problems, socioeconomic concerns, and community supports. Other factors from a school perspective include peer relationships, the student's attitude toward school, and teaching the student an understanding of their disability.

Families as Participants in the Assessment Process

Families are essential to the assessment process (DePompei & Blosser, 1993; Singer et al., 1999). They provide information about the communication skills of their child that no one else can. Families should be involved in informal assessments and aid the SLP in selecting the aspects of communication most important to the student. The student's participation in functional, natural communication events may demonstrate subtle language and pragmatic difficulties that will not be apparent in formalized testing. Every attempt to include families in the assessment process must be made. Lash (1998) suggests that families are the ultimate case managers. She offers many ideas about how the family should participate in learning to manage a child's reintegration to home, school, and community.

INTERVENTION CONSIDERATIONS

Intervention considerations are based on results from formal and informal assessment measures. DePompei (2003) suggests treatment goals encompassing the areas of attention, memory, organization and planning. More traditional areas of receptive and expressive speech and language intervention may be provided, if warranted. The SLP may provide a range of service, including direct intervention and consultation services to the classroom teacher to assist with designing and implementing strategies to improve attention, memory, organization and planning. When providing intervention techniques, the student's perception, ability to process information, and response to visual, auditory, and tactile methods should be considered. Many of the strategies used in treatment may address several areas needing intervention. For example, strategies that may be used to improve a student's planning and organizational ability, may also provide a compensatory technique to aid the student's memory.

Attention

The SLP may assist in developing appropriate accommodations to aid a student's attention. This may include strategies to reduce distractions in the student's work area. Cues, consisting of verbal words or nonverbal gestures, could be used as a signal to gain a student's attention or

improve attention to topic. Classroom work can also be divided into smaller segments or chunks for a student to successfully complete. Picture or word cues could be used to assist the student when shifting to a new topic or task.

Memory

Memory strategies may include having the SLP assist the teacher in slowing or breaking down complex directions. The student may use a school planner or assignment sheet containing information for each class. Some simple devices may be used as external memory aids, such as a handheld tape recorder, may be used to record important information for a student to remember for each class or assignment. The SLP may consult with the classroom teacher on ways to link newly learned information to prior knowledge or provide the student with many examples of associated vocabulary or information being presented. Information could also be categorized, chunked together, or summarized to help a student with TBI see connections between sets of information and aid recall. Information may need to be repeated often. The student may be asked to recall and summarize the information. The student could be provided with written cues or a graphic organizer to assist with summarizing or retelling information from class.

Executive Functioning

Executive functioning refers to a student's ability to regulate their emotional reactions and organize and plan daily events. Students with traumatic brain injury may have difficulty with this, especially as new demands and stimuli increase. This may result in the student being seen as having behavioral problems, sometimes due to a student's inability to inhibit their thoughts and actions. Aspects of executive functioning skills can be emphasized through intervention. Students can learn to define their strengths and needs and to set goals and objectives. Students work toward formulating their own responses and strategies for problem solving specific situations that may occur during the school day. One strategy is learning to "self talk" during an activity to monitor behavior or to respond to a new situation or schedule change. Visual strategies help some students set goals and plan for task completion. Students could then also evaluate their performance and/or completion of a task.

Organization and Planning

Strategies for improving a student's organization and planning may include providing the student with a written daily schedule or checklist of the steps or items needed to complete a task and having the student then check each step when completed. Color-coding information provides visual cueing to aid students in knowing which information belongs with each class or assignment. Providing the student with a "coach" (possibly another student) who can assist them with organization at the beginning and end of each day helps some students. Verbally sequencing the steps in tasks also facilitates organization and planning.

Other Areas of Speech/Language Intervention for Students with TBI

Students with deficits due to TBI may also have difficulty with receptive language and their ability to follow directions or expressive language such as language formulation and word retrieval. Intervention may include providing students with oral and written directions, having them repeat the directions, underlining important parts of the direction, and breaking the direction down into simple steps. Word retrieval strategies, discourse organization, and written language strategies may all be part of a student's treatment plan.

Please see other sections of this document to refer to intervention suggestions for additional speech/language areas, such as feeding/swallowing, articulation, language, fluency, voice, AAC/A.T.

REFERENCES

Blosser, J. & DePompei, R. (2003). *Pediatric traumatic brain injury: Proactive interventions.* New York: Delmar.

DePompei, R. (2004). *Challenges & solutions for students with traumatic brain injury: An interactive problem-based session*, a presentation to Macomb/St. Clair Speech-Language-Hearing Association. Clinton Township, MI.

Lash, M., Khan, Wolcott, (1998). *When Your Teenager Is Injured: Preparing for Work and Adulthood.* Research and Training Center in Rehabilitation and Childhood Trauma. Boston: New England Medical Center.

Singer, B.D. & Bashir, A.S. (1999). What are executive functions and self-regulation and what do they have to do with language-learning disorders? *Language, Speech, and Hearing Services in the Schools, vol.* 30(3), pp. 265-273.

RESOURCES

Bilbao, Alvaro, et al, 2003. *The ICF: Applications of the WHO model of functioning disability and health to brain injury rehabilitation,* Neuro Rehabilitation, 18, 239-250.

Blosser, J. L. & DePompei, R. (1989). The Head-Injured Student Returns to School: Recognizing and Treating Deficits. *Topics in Language Disorders, v9* n2 p65-77.

Brain Injury Association of America, formerly called National Head Injury Foundation. Website: www.biausa.org

DePompei, R. & Cluett, B. (1998) *All about the Wake Forest,* NC: Lash & Associates Publishing/Training, Inc. www.lapublishing.com

DePompei, R. & Cluett, B. (2000) *Asi soy yo!,* NC: Lash & Associates Publishing/Training, Inc. www.lapublishing.com

DePompei, R. (2000) *All about me: My life as a teenage.* Wake Forest, NC: Lash & Associates Publishing/Training, Inc.

DePompei, R., & Tyler, J. (2004) *Learning and cognitive*.

Dise-Lewis, J.E., Calvary, M.L., & Lewis, H.C. (2002). *Brainstars. Brain injury: Strategies for teams and re-education for students.* Denver, CO: University of Colorado Health &

Science Center & Children's Hospital.

Rochhio, C. (2004). *Ketchup on the baseboard: Rebuilding life after brain injury*, Wake Forest, NC: Lash & Associates.

Savage, R. (1999) *The child brain injury and development*. Wake Forest, NC: Lash & Associates.

Singer, B. & Bashir, H. (1999). *What are executive functions and self-regulation and what do they have to do with language learning disorders? Language Speech and Hearing in the Schools,* 30 **(**3) 265-273.

Ylvisaker, M. (1998). *TBI rehab for children & adolescents,* 2nd Ed. Heinemann.

VISUAL IMPAIRMENTS (VI)

INTRODUCTION

Students eligible for special services as Visually Impaired may or may not have communication impairments. Communication impairments may include disorders of articulation, language, voice, or fluency. Once a student has been identified as Visually Impaired, speech and language services can be added as a related service, if needed.

Students with visual impairments learn language in ways that closely match their sighted peers. In the absence of additional cognitive deficits, many students with visual impairments can acquire language without any delay. Others may have a possible mild delay in language and/or speech onset in general, in the use of pronouns in particular, and in various other aspects of communication due to their lack of vision. These mild delays, however, usually resolve themselves by the time they start school. Nevertheless, subtle problems with semantic and pragmatic development may persist as a result of missing experiences that need to be acquired through vision (Munoz, 1998).

DEFINITION

Students are found eligible as Visually Impaired under Special Education Rule:

R340.1708 Visual impairment explained; determination.

Rule 8. (1) A visual impairment shall be determined through the manifestation of both of the following:

(a) A visual impairment which, even with correction, interferes with development or which adversely affects educational performance. Visual impairment includes both partial sight and blindness.

(b) One or more of the following:

(i) A central visual acuity for near or far point vision of 20/70 or less in the better eye after routine refractive correction.

(ii) A peripheral field of vision restricted to not more than 20 degrees.

(iii) A diagnosed progressively deteriorating eye condition.

(2) A determination of impairment shall be based upon a comprehensive evaluation by a multidisciplinary evaluation team, which shall include an ophthalmologist or optometrist.

(3) If a student cannot be tested accurately for acuity, then functional visual assessments conducted by a teacher certified in visual impairment may be used in addition to the medical evaluation for determination of impairment.

(4) For students with visual impairment who have a visual acuity of 20/200 or less after routine refractive correction, or who have a peripheral field of vision restricted to not more than 20 degrees, an evaluation by an orientation and mobility specialist shall be conducted. The orientation and mobility specialist shall also include in the report a set of recommended procedures to be used by a mobility specialist or a teacher of students with visual impairment in conducting orientation and mobility training activities.

DETERMINING WHEN TO ADD SPEECH-LANGUAGE SERVICES

Students with a visual impairment may exhibit communication deficits with or without other components. For example, to determine eligibility for students who have multiple impairments in addition to a visual impairment, the reader is referred to the section on multiple impairment (SXI). In addition, the section on cognitive impairment (CI) may be referenced for suggestions for assessment in determining the student's ability to effectively express their wants and needs, communicate in the classroom, and participate in life experiences.

Students with a visual impairment may be identified and referred for speech and language services due to a single problem or combination of problems in the areas of voice, fluency, articulation, and language. Procedures for determining the addition of speech and language services would follow the guidelines presented in the area for which the deficit is noted, i.e., articulation, language, voice, fluency. For example, the section on language impairments may be referenced for students who are visually impaired with a language impairment, but who have no other deficit areas.

Any student with a visual impairment whose language skills are significantly different from those of sighted peers should be assessed. Munoz (1998) proposed the following indicators in a student who is visually impaired which may suggest the possible need for a speech-language assessment and/or service (p. 13):

a. Hearing, motor or cognitive impairments
b. A prolonged period of babbling, sometimes followed by little vocal activity
c. Use of echolalia for self-stimulation with limited communicative function
d. Excessive or inappropriate use of verbalism, or words that have little or no meaning for the child
e. Excessive use of sentences or words that are above the child's chronological or developmental age, especially when they do not match the discourse context
f. Disorganized or perseverating expressive language
g. Excessive use of question forms with limited use of statements
h. Difficulty learning to read, particularly in comparison to other children with visual impairments.

Responsibilities of the SLP in evaluating and treating students with visual impairments include assessing the effect of the impairment on the student's communicative interactions in addition to collaborating with other professionals (e.g., teacher of the visually impaired, classroom teacher, orientation and mobility specialist, etc.). Such collaboration is necessary in order to locate and utilize appropriate materials that the student with a visual impairment can see. In particular, when planning and conducting an assessment, SLPs need to consult with a teacher for the visually impaired in determining the student's visual needs and abilities (e.g., lighting, print size, contrast, colors, layouts/arrangements of the materials, the angles from which materials can be presented if the student has visual field restrictions, the use of VI assistive technology, etc.).

When using standardized tests, the SLP should try to use subtests that do not have visual stimuli because any test adaptations may change the nature of the task. If the use of subtests

with visual stimuli becomes imperative, then the SLP should substitute the stimuli with large print, real objects, Braille, or tactile equivalents. Furthermore, students with low vision need extra time to scan and process the visual stimuli. In addition to standardized tests, informal assessment procedures (such as interviews, observations, and language samples obtained in functional contexts) can be very helpful in differentiating experiential deficits from a speech-language impairment.

ISSUES COMMON TO THIS POPULTAION

Since auditory/tactile input cannot completely replace visual information, students with visual impairments may have impaired concept development that is very subtle and often disguised by the students' seemingly normal verbal skills. For example, a student who is totally blind cannot truly understand how high the sky is, how big an elephant is (unless s/he has a chance to explore it), or how dynamite explodes. In addition, the student's language development is tremendously influenced by his/her interaction with the environment. In general, the more and the better the interaction with the environment, the better the student's language development. Due to their lack of vision, these students often either do not take the initiative or are not allowed to explore the environment that they are in. As a result, both the quality and extent of their interaction with the environment are enormously limited thereby impacting language development.

Consequently, students identified as Visually Impaired must have their needs considered on an individual basis, relative to the amount of visual loss and its impact on their communication skills. Assistive technology supports may be needed to help the student achieve optimal communication and academic performance. The SLP may help in designing and implementing such strategies and tools and is referred to the section on assistive technology for additional information.

INTERVENTION CONSIDERATIONS

When working with students with visual impairments who have accompanying language disorders, SLPs need to explicitly teach the connection between the language that these students hear or use and their experiences, making their speech-language more functional and relevant to the students' daily experiences. SLPs also need to model appropriate language for the students to meet their communicative needs (e.g. requesting, maintaining a conversation, etc.) rather than allowing the students to express these needs inappropriately by using echolalia or excessively using questions. SLPs should work on expanding students' experiences and providing the language needed to talk about those experiences.

In addition to or as an alternative to direct treatment, consultative services containing programming suggestions and strategies may be provided to classroom staff or family communication partners. Services may be initiated or discontinued as the student's environment and needs change. For example, a student who has deteriorating vision may require an increased level of services prior to additional loss of vision to prepare the student in using strategies while vision is still remaining.

REFERENCE

Munoz, M. L. (1998). *Language Assessment and Intervention with Children Who Have Visual Impairments: A Guide for Speech-Language Pathologists*. Austin, TX: Texas School for the Blind and Visually Impaired.

ASSISTIVE TECHNOLOGY (AT)

DEFINITIONS
IDEA 2004 includes the following definitions for terms related to assistive technology.

Assistive technology.

(a) Each public agency shall ensure that assistive technology devices or assistive technology services, or both, as those terms are defined in §§ 300.5-300.6, are made available to a child with a disability if required as part of the child's-
  (1) Special education under § 300.26;
  (2) Related services under § 300.24; or
  (3) Supplementary aids and services under §§ 300.28 and 300.550(b)(2).

(b) On a case-by-case basis, the use of school-purchased assistive technology devices in a child's home or in other settings is required if the child's IEP team determines that the child needs access to those devices in order to receive FAPE.

Assistive technology device.

Assistive technology device means any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of a child with a disability. The term does not include a medical device that is surgically implanted or the replacement of such a device

Assistive technology service.

The term *Assistive technology service* means any service that directly assists a child with a disability in the selection, acquisition, or use of an assistive technology device. The term includes-

(a) The evaluation of the needs of a child with a disability, including a functional evaluation of the child in the child's customary environment;
(b) Purchasing, leasing, or otherwise providing for the acquisition of assistive technology devices by children with disabilities;
(c) Selecting, designing, fitting, customizing, adapting, applying, maintaining, repairing, or replacing assistive technology devices;
(d) Coordinating and using other therapies, interventions, or services with assistive technology devices, such as those associated with existing education and rehabilitation plans and programs;
(e) Training or technical assistance for a child with a disability or, if appropriate, that child's family; and
(f) Training or technical assistance for professionals (including individuals providing education or rehabilitation services), employers, or other individuals who provide services to, employ, or are otherwise substantially involved in the major life functions of that child.

The application of assistive technology (AT) to the assessment, treatment, and management of speech and language disorders can assist students with these impairments to progress in the curriculum. SLPs who practice in school settings may employ AT to support students in various ways: hearing, speaking, reading, composing and editing written material, note taking, organizing information, and studying. For example, assistive listening devices (such as FM systems), augmentative communication devices (ACDs), adaptive feeding equipment, computers, computer peripherals (e.g., touch screens, switches, and adaptive keyboards), specialized software (e.g., screen readers, talking word processors, on-screen keyboards and scanning software), adaptive writing equipment (such as pencil grips and large lined paper), and other electronic devices (e.g., note takers) can all be considered assistive technology.

The law requires that each Individual Educational Planning Team (IEPT) annually determine the student's need for assistive technology devices and services to support the student in their educational environment. (34 CFR 300.346(a) (2)(v). The team, with input from the SLP, decides what type of AT is appropriate for the student throughout the day.

The SLP may be required to take the lead in documenting how Assistive Technology may be necessary for a child with a communication impairment to progress in the general curriculum. Local or regional (intermediate) school districts may have policies and/or procedures in place for technology determination assessment. SLPs should work within the established framework.

Assistive technology may be considered high tech (technology) or low tech. Examples of low-tech systems include picture schedules which help students comprehend and sequence the steps in an activity or communication boards for students who are nonverbal. Pencil grips and cassette recorders are examples of low tech supports for writing. High-tech AT supports could include a voice output communication aid (VOCA) with a dynamic display or computers with text-to-speech and word prediction software to support reading and written language.

SLPs may utilize AT to help students with severe expressive communication disorders through their implementation of augmentative and/or alternative communication (AAC) devices and strategies. Such technology for AAC including speech generating devices (SGDs) or voice output communication aids (VOCAs) falls under the broader category of AT.

Technology Supports for SLPs

Not all technology that SLPs use for assessment and intervention is AAC. Technology is also used to support articulation, voice, fluency, and language learning intervention. Technology for the purpose of speech evaluation includes software that analyzes language and speech samples. Other types of technology used in assessment include the instruments designed to measure nasal emission. Fluency and voice therapy may be enhanced as well. For example Delayed Auditory Feedback (DAF) devices may improve a student's fluency or personal amplification systems may assist a student with a paralyzed vocal fold. Software is sometimes used to provide visual representations of vocal parameters for students with voice disorders, or to assist in learning auditory discrimination and phonemic awareness. Technology supports for language learning intervention include software applications such as graphic organizer, language skill building, writing and reading software.

UNIVERSAL DESIGN FOR LEARNING

Universal design.

Universal design definition taken from the Assistive Technology Act…means: "Concept or philosophy for designing and delivering products and services that are useable by people with the widest range of functional capabilities, which include products and services that are directly accessible (without requiring Assistive technologies) and products and services that are interoperable with Assistive technology."

The reauthorization of the Individuals with Disabilities Education Improvement Act (IDEA 2004) has resulted in changes**,** which have an impact on the use of assistive technology**.** In particular, the principle of intervening prior to a student's certification in special education has resulted in a focus on meeting the needs of all learners in the general education classroom. The concept of Universal Design for Learning (UDL) is being applied more often resulting in the availability and production of products that are directly usable by people with a wide range of functional capabilities.

An SLP may be part of a team that uses program level accommodations, including assistive technology supports, as part of classroom design. "UDL is an approach to designing instructional methods and materials that are flexible enough from the onset to accommodate different learners" (Rose & Meyer, 2000). For example, all students in the classroom could have access to a sound field system to provide an optimal listening environment for student learning. Another example is the provision of word prediction or talking software for all students, which most heavily supports students with language learning disabilities as well as students who are not identified as having a learning disability but struggle in reading or in writing. The emphasis is on providing all students with the flexible tools, varied media and materials they need to understand new information, share what they know with others, and to become engaged learners. Implementation of a UDL approach requires collaboration between general and special educators. Co-teaching and classroom-based service delivery models support the implementation of this approach as students who are identified with special needs are supported within their curricular environment while all students benefit from the expertise of the SLP or special educator, especially as it relates how to maximize the benefits of using technology to support language and learning.

Law and policy focus on providing access to general education for students enrolled in special education, providing accountability and assessment through No Child Left Behind with state assessment and Adequate Yearly Progress measures, as well as the use of technology to assist student learning. This also includes making written instructional materials more accessible by use of digital, varied print. The National Instructional Materials Standard (NIMAS) was named in IDEA 2004 as the standard file format that will guide the production and distribution of curricular materials so that they can be more easily converted to accessible formats.

ASSESSMENT CONSIDERATIONS

Assessment for students who need assistive technology devices and services must be a team approach. Team members should include the student's IEP team such as the SLP, teacher(s),

occupational therapist, and physical therapist, the student and his/her family are central to the team. A systems perspective should be used so that the assessment explores the environment and communication partners and identifies barriers to communication as well as the individual's needs and capabilities. Teams should keep in mind that student assessment will be ongoing throughout the provision of services.

The assessment may be organized in various ways. One approach is The SETT Framework (Zabala, 1994). In the SETT framework, the team considers the student's (S)kills, such as language development and motor ability; (E)nvironment, such as the classroom, CBI site, home; the (T)asks the student is required to do; and the (T)ools or AT that is available to assist the student. An example of a SETT form to use for this approach is included on the following page (p. AT-5).

There are also some published assessment tools to guide AT team in making decisions. Some examples include:

WATI Assessment Package by Wisconsin Assistive Technology Initiative
http://www.wati.org/products/products.html

WATI Assessment Forms (free) by Wisconsin Assistive Technology Initiative
http://www.wati.org/products/pdf/assessment_forms_only.pdf

Assistive Technology Screening and Initial Toolkit (free) by Georgia's Tolls for Life
http://www.gatfl.org/ldguide/screening.htm

CIRCUIT Evaluation Kit by Onion Mountain Technology
http://www.onionmountaintech.com/

The SETT Framework: A Collaborative Planning and Decision-Making Tool for Assistive Technology

This tool has been adapted from the work of Joy Zabala, (1994) University of Kentucky by Macomb Intermediate School District

The SETT Framework is a tool for gathering data in order to make effective assistive technology decisions. The SETT Framework considers first, the STUDENT and his goals/objectives, the student's ENVIRONMENT(S) and the TASKS required for active participation in that environment, and finally, the system of TOOLS required for the student to address the tasks. This information was gathered through interviews with parents and IEP team members, classroom observation, file review and structured interactions with the student.

Student_____ **Evaluation Team:** _____ **Date(s)** _____

STUDENT	ENVIRONMENTS	TASKS	TOOLS
SKILLS	**CURRENT**	**PRESENT TASK LAYOUT**	**CURRENT**

The SETT Framework pg.2 **Student** _____ **Date(s)** _____

STUDENT	ENVIRONMENTS	TASKS	TOOLS
NEEDS	**RECOMMENDATIONS**	**MODIFICATIONS**	**RECOMMENDED ACCOMMODATIONS AND/OR TOOLS:**

INTERVENTION CONSIDERATIONS

Assistive technology is used to support disabilities in: expressive and receptive communication, reading, writing, math, organization, listening, hearing and vision. AT for each of these areas will be summarized.

AT for Communication Disorders: Augmentative Communication

Augmentative and Alternative Communication (AAC) is the term used for assistive technology for communication. AAC supports are used for both expressive and receptive language.

AAC to Support Expressive Speech and Language Disabilities

AAC strategies benefit students who have expressive language difficulty, reduced speech intelligibility, or are considered nonverbal. AAC strategies often help students to learn language at the emerging stage of language acquisition. Goals of AAC intervention include: allowing an individual full participation in home, school, work, and community by providing a means of communication, and increasing language development, by facilitating development of spoken communication, language structures, and literacy.

A range of AAC devices and strategies can be used to support a student's expressive speech and language depending upon the complexity of the user's language skills. Typically, students will use multiple AAC strategies and devices to communicate across different situations. A continuum of AAC supports ranging from low tech (simple) to high tech (complex) is as follows:

Objects, Photographs, Picture Symbols, Sentence Strips
Communication board or book
Single message, voice output device
Simple voice output e.g., 2-8 cells for messages
Voice output device with a few levels
Voice output device with many levels
Voice output device with dynamic display

Provision of AAC devices and services for students with severe expressive communication disorders is a specialized area of practice for SLPs. The focus is on matching AAC systems to student needs, thus reducing abandonment of devices. Districts often have individuals assigned to facilitate assessment and planning. Resources may extend to county supports through the local intermediate school district and state supports including the Michigan Integrated Technology Supports (MITS), as well as private vendors who may assist or provide equipment loaners.

The following list is a compilation of widely used and accepted principles for SLPs working with students who need AAC:

- Everyone has the right to communicate; see the Communication Bill of Rights (within this document)
- AAC builds on existing functional and socially acceptable communication behaviors
- There are no cognitive requirements to begin using AAC

- A systems perspective should be used in AAC practice; this means that the intervention targets the environment and communication partners and identifies barriers to communication
- Assessment and treatment are on-going/co-occurring
- AAC involves a team with a shared agenda and common goals
- AAC should relate to typical/functional routines in natural settings & environments
- Feature matching user to device should be based on optimal communication/language function
- Experiencing receptive language use of augmentative systems is important for those developing language
- AAC is best taught in an interactive format.

AAC to Support Receptive Language

AT may be used to support a student's comprehension of single words, sentences and directions, and time and sequencing of daily routines. Visual picture strategies, such as posting pictures with word labels on frequently used objects in a classroom may help students with moderate to severe receptive language problems comprehend single object words and the item location. Use of sentence strips with pictures representing words may be used to assist students in understanding the meaning of a sentence or direction. Use of pictures to represent steps in an activity or job could be used to help a student sequence and check off tasks that he/she has performed. Visual tools may also accompany a behavior plan or help a student to interpret social rules in the classroom, community, or at home (Hodgdon, 1995).

AT for Disabilities related to Reading, Writing, Math, and Organization

AT may be used to help students access and progress in the curriculum. As speech-language pathologists support students with language learning disabilities, they play a role in helping to determine whether AT tools and strategies should be considered. The SLP may also be involved in trying various AT tools and strategies with a student. Some examples of AT as curriculum support include: graphic organizer software, talking word processors, word prediction software, and spell checkers to enhance written language; text reader software, reading pens, and software focused on literacy skills to support reading comprehension, word analysis, reading fluency, and spelling; software and talking calculators to support math; and electronic note-takers and speech recognition software to increase access and speed of written output across the curriculum. Other examples include AT supporting a student in a vocational area, such as use of a personal digital assistant (PDA) or agenda to assist the student in remembering meetings or a page turner to help a physically disabled student read a book to a kindergarten class.

AT To Support Listening/Hearing/Vision

AT may be used to support a student's listening skills by providing them with optimal listening conditions and opportunity to access the classroom information. Assistive Listening Devices (ALD) may consist of amplification systems such as sound field and FM units.

DOCUMENTING AT IN THE IEP

Assistive technology is used to support students as they progress towards IEP goals and objectives. IDEA 2004 states that AT must be considered annually for each child. SLPs should

refer to their own district's policies or procedures for documenting AT in the IEP. When considering AT, the student's IEP team may determine

- AT is not needed
  That AT has been considered and is not necessary to support the IEP goals and objectives. Most often this decision is documented under the supplementary aids and services portion of the IEP.

- Need to explore
  The team may feel that more information is needed to determine AT needs. The team may choose to document the plan to explore AT with the student under the supplementary aides and services portion of the IEP.

- AT is needed
  The team has evidence that the student requires assistive technology to make progress in his/her goals and objectives. In this case the AT supports the student uses can be listed in several locations on the IEP and may appear simultaneously in numerous sections. AT may be referenced under Supplementary Aides and Services, Related Services (Special Education Support Services), Present Level of Academic Achievement and Functional Performance, Goals and Objectives, and/or Consideration of Special Factors (other Miscellaneous Considerations). In reference to the AT it is preferable to indicate the type of device (e.g. talking word processor, electronic notebook) versus the name of a specific brand.

Funding of AT for Students

The law states that access to AT and training of its use must be provided by local school systems when it is required in order for the student to receive a Free and Appropriate Public Education (FAPE). The AT chosen must be appropriate to the individual's needs, but the law does not reference using a specific brand or device. Assistive technology, including Augmentative and/or Alternative Communication (AAC) Devices, must be provided for home use if necessary for FAPE.

For a student with severe expressive communication impairment, the SLP may play a key role in securing the appropriate technology. For example, following a comprehensive evaluation of a student in which an appropriate AAC system has been determined, the SLP often works with the family to secure a device for the individual. This may include accessing service clubs for funding donations, working with Michigan Department of Career Development (MDCD) for purchase of a device if needed for job placement, or Medicaid if student is eligible. The school based SLPs should provide documentation regarding the assessment of a device that may meet an individual's needs and why a specific device is being requested.

If a school district purchases a specific piece of AT for a student to use while enrolled in school, the equipment by law would stay with the school district when the student exits. If AT is funded specifically for a student through an outside source, such as a service agency, Medicaid, or MDCD, the device would follow the student upon his exit transition from school.

RESOURCES

Websites

Augmentative Communication
http: //www.aacinstitute.org
Affiliated with Edinborough University of Pennsylvania and includes information on AAC, resources for students, professionals, and consumers. Includes lists of training institutions and research. Supported by the PrentkeRomich Company. Information of Evidence-Based Practice.

http://aac.unl.edu
University of Nebraska-Lincoln has information including AAC device tutorials, definitions of AAC terms, frequently used vocabulary lists for different age groups and other resources.

http://www.abledata.com
Abledata. A national database of information on assistive technology and rehabilitation equipment. More than 23,000 products listed on this database.

http://www.asel.udel.edu
University of Delaware Applied Science & Engineering Laboratories.

http://www.augcominc.com
Site of Sarah Blackstone's newsletter, *Augmentative Communication News.*

http://www.closingthegap.com
Resource directory for assistive technology and articles on-line.

http://www.communicationdisorders.com
An abundance of information related to communication disorders for SLPs including AAC by Judy Kuster.

http://www.lburkhart.com/sr.htm
Selected AAC vendors and manufacturers with annotations and links

http://www.pbrookes.com/aac/index.htm
Site of Brookes publishing which includes a glossary and AAC resources.

http://www.utoronto.ca/atrc/tech/techgloss.html
Provides a glossary of assistive technology terms and descriptions of products.

AT Assessment
http://www.wati.org
Wisconsin Assistive Technology Initiative. Site support school districts within Wisconsin and has developed many helpful materials such as the "AT Consideration Guide."

http://trace.wisc.edu/index.html
Includes a cooperative electronic library of selected disability documents and resources and searchable databases of assistive technology products as well as freeware and shareware to download.

National and State Resources

ASHA Special Interest Division 12, Augmentative and Alternative Communication
ASHA member and students may want to consider joining the related Special Interest Division and receive newsletter with articles on this topic, members-only e-mail listserves, and Web forums. It is the goal of the Special Interest Division for Augmentative and Alternative Communication to promote continuing education for ASHA members at introductory, intermediate, and advanced levels; advocate for ASHA membership regarding clinical service needs; and advocate for preservice and inservice personnel preparation in the area of augmentative and alternative communication.

Center for Applied Special Technology, CAST has earned international recognition for its development of innovative, technology-based educational resources and strategies based on the principles of Universal Design for Learning (UDL).

40 Harvard Mills Square, Suite 3
Wakefield, MA 01880-3233
Phone: (781) 245-2212
Phone/TTY: (781) 245-9320
Fax: (781) 245-5212
www.cast.org

Michigan Assistive Technology Project
c/o Michigan Disability Rights Coalition
740 W. Lake Lansing Road, Suite 200
East Lansing, MI 48823
Phone/TTY: 517-333-2477
Phone: 800-760-4600 (In State)
Fax: 517-333-2677
Email: cbair@match.org
Web: http://www.copower.org/AT/index.htm

Michigan's Integrated Technology Supports (MITS)
This was formerly known as **Michigan Assistive Technology Resource Center (MATR)**
1023 South U.S. 27 • St. Johns • MI • 48879
Phone: 800.274.7426
Fax: 989.224.0330
TTY: 989.224. 0346
E-mail: matr@edzone.net
Web: http://www.cenmi.org/matr

REFERENCES

Hodgdon, L. (1995). Visual strategies for improving communication. Troy, MI: Quirk Roberts Publishing.

Individuals with Disabilities Education Improvement Act of 2004 (IDEA), 20 U.S.C. § 1400 et seq. (2004).

Rose D. H., & Meyer, A. (2002). Teaching every student in the digital age: Universal design for learning. Alexandria, VA: ASCD.

Zabala, J. (1994) The SETT framework: Critical questions to ask when making informed assistive technology decisions. Presentation at Closing the Gap Conference, Minneapolis, MN.

AUDITORY PROCESSING DISORDERS

Michigan Special Education Codes does not provide a definition of Auditory Processing Disorders (APD) or Central Auditory Processing Disorders (CAPD). It is not an eligibility area for Special Education in Michigan. Occasionally, school teams will be asked about APD by families or outside agencies who have seen a student.

(NOTE: For the purposes of these guidelines, APD will be used to represent both APD and/or CAPD).

DEFINITION

The definition of APD provided by the Central Auditory Processing Disorders Ad Hoc Committee of the American Speech-Language Hearing Association (ASHA 1995) is difficulties in the perceptual processing of auditory information in the Central Nervous System as demonstrated by poor performance in one or more of the following skills:

- Sound localization and lateralization
- Auditory discrimination
- Auditory pattern recognition
- Temporal aspects of audition, including temporal integration, temporal discrimination (e.g., temporal gap detection), temporal ordering, and temporal masking
- Auditory performance in competing acoustic signals (including dichotic listening)
- Auditory performance with degraded acoustic signals

Other cognitive and language related skills such as phonological awareness, attention to and memory for auditory information, auditory synthesis, comprehension and interpretation of auditorily presented information are not included in the definition because they are considered high-order cognitive-communication or language skills. This is true even though these skills may be reliant on or associated with intact central auditory function (ASHA, 2005).

Working Definition

Auditory processing is what is done with what is heard. An auditory processing disorder implies that one cannot do what is expected with the auditory information received. The above neurophysiological behaviors provide a foundation for language learning. When the auditory system is unable to make proper use of stimuli, typical language development can be affected and difficulties can be manifested in many ways.

The Processing Continuum

Gail Richard (2001) states

> "…processing is moving back and forth between auditory features of the signal and language features of meaning. In other words, processing occurs on a continuum beginning at a level of pure auditory processing, transitions to a mix of both auditory and language processing, and ultimately ends in pure language processing".

Therefore, it seems probable that if a student has any type of cognitive or language process disorder or hearing impairment, there may be some sort of deficit at the auditory processing level. However, this should not imply that every child with a language disorder has an auditory processing problem or that there is a need for auditory interventions.

Factors That Affect Listening
Listening and auditory processing do not occur in isolation from other areas of development. The following factors may affect listening and auditory processing and should be taken into account:

- Developmental Age of the Student
  Listening skills are similar to other skills in that developmentally, younger students have less mature listening skills than older students.

- Hearing
  Students with any degree of hearing loss process information differently. It is critical to know the status of the student's hearing. It is extremely helpful if the audiologist is then able to consult with the team throughout the investigation and provide appropriate classroom strategies or strategies to improve listening as needed.

- Cognitive Ability
  Listening, auditory processing, and other language related tasks are affected by cognitive ability.

- Language Competence
  Bilingual/ESL students may not have a strong enough command of English to quickly and efficiently process classroom information.

- Other Factors
  Attention, distractibility, motivation, and emotional status can affect a student's ability to listen and process.

Characteristics of Auditory Processing Disorders
Below is an adapted list of common characteristics for students with APD:
- History of otitis media
- Behavioral problems in school
- Problems with reading and writing
- Possible mild speech and language issues
- Poor attention span
- Poor listening behaviors; does not demonstrate active listening behaviors
- Poor short and long term memory
- Difficulty following oral directions, especially in noise
- Repeated requests for speaker to repeat themselves

SLPS' ROLE RELATED TO AUDITORY PROCESSING DISORDERS
Since APD is not a special education eligibility category, a student is unable to qualify for special education services for APD alone. Often, the suggestion that a student might have APD originates from a source outside the school environment such as a parent, physician or other medical professionals. When this occurs, an SLP is typically asked to address issues related to auditory processing and academic functioning. The following list contains some of the roles an SLP may have regarding APD:

- Providing information to parents and school staff regarding APD, the definition and characteristics
- Responding to requests to investigate APD
- Understanding and acknowledging the role APD may play in other language or cognitive process disorders

INITIAL RESPONSE TO STUDENTS SUSPECTED OF APD

When a child is referred to the SLP/school team for an auditory processing disorder, the SLP or team may choose to follow the school district's child study team/early intervening policies. The first vital step is to establish that the student has normal hearing. It is extremely helpful if the audiologist is then able to consult with the team throughout the investigation. If there is not an audiologist available through the school district, the team may seek consultation from an outside audiologist throughout this process. Most of the activities are similar to any child brought for pre-referral to the child study team. These activities include:

(Hearing evaluation)

- Gather input (parent, teacher, student)
- File review
- Consider any cultural or linguistic differences
- Consider any environmental or economic differences
- Classroom observation(s)
- Brief or informal speech and language assessment using techniques such as curriculum-based language assessment, dynamic assessment, screenings)

Hearing Evaluation

The team must first rule out a hearing loss that would explain poor auditory skills. Students must exhibit normal peripheral hearing at a basic level because APD involves a disconnect of acoustic information neurologically at the brainstem or initial cortical level not explained by other factors such as hearing loss (Richard, 2001).

Gather Input

Interviews with parents and teachers can often provide valuable information about the difficulties the student may have in the classroom. Interview questions should focus on the characteristics of APD previously listed in addition to other pertinent academic and social behaviors.

There are several tools available to gather teacher input. The Screening Instrument for Targeting Educational Risk (SIFTER) is included on page APD-8. The preschool and secondary version follows. The author of these scales has made these scales available for public domain. Other commercial tools are available through various publishers, such as the Children's Auditory Performance Scale (CHAPS) (Smoski, Brunt, & Tannahill, 1998).

File Review

A review of pertinent information in the student's school file may provide valuable information as to the history of the student's academic or behavioral difficulties. Comments from previous report cards may provide information about the student's auditory and language processing.

Cultural and Linguistic Differences
Cultural and linguistic differences can be an important factor in the listening behaviors and comprehension. The SLP should examine the relationship between the student's dialect, language, and culture and how it impacts the student's learning, if indicated. Please refer to the section regarding Cultural and Linguistic Diversity (CLD) Introduction at the beginning of this document and the CLD for Language section as well for more information. The team will want to consider the years of exposure/learning of English and whether the student's Basic Interpersonal Communications Skills (BICS) may mislead adults to think that they are prepared to listen and understand fast paced curriculum content, as their ability to use and understand more complex language, called their Cognitive Academic Language Proficiency (CALP) may be less developed. CALP skills often take seven years to fully develop.

Economic and Environmental Differences
A student's environmental or economic differences may be the root of the child's educational difficulties. The SLP should provide documentation from team reports, teacher, and parent reviews in consideration of these factors, if indicated.

Classroom Observations
It is important to observe a student in the classroom to view how well the student is able to function and listen in the academic climate. The SLP should specifically target their observation with regard to the factors that affect listening previously discussed in this section.

Curriculum-based Language assessments/Dynamic assessment Speech and Language Observations/Analysis
The team will need to understand the student's receptive and expressive language functioning to rule out a language disorder. The SLP may be able to obtain adequate information from curriculum-based language assessments/observations and dynamic assessment (discussed in detail in the language section of this document). In some cases the team will feel it is necessary to complete a formal language assessment, in which case the reader is referred to the Language section of this document, where Evaluation Review, parental consent and other formal activities are discussed.

Results of Initial Investigation
Once the initial information has been gathered and analyzed, the SLP and the rest of the school's special education team, parents, and teachers discuss the results. The SLP shares information about auditory processing disorder and their initial findings. The team discusses strategies that may assist the student with the listening difficulties reported (see section below). The team may implement the strategies and then after some time, assess whether these changes helped the student. The accommodations may be altered as needed.

If the SLP is unable to demonstrate concomitant language or academic difficulties related to a special education eligibility area, then no further steps may be indicated. If the SLP and team feel there are other concerns related to language or academics which became evident during the initial investigation, it is recommended that the SLP and team follow the suggested guidelines in the relevant sections of this document.

ASSESSMENT CONSIDERATIONS

Formal assessment may take place once the SLP and special education team have completed the early intervening process for another eligibility category and determined that a formal referral for special education services is warranted. Consideration of listening behaviors/skills may continue to be explored while a formal assessment of language as it relates to other eligibility categories ensues. The following considerations may be helpful during a formal evaluation.

Multidisciplinary Team

Since auditory processing disorders occur along a continuum, it is important to use a multidisciplinary approach to look holistically at the way a student listens and interprets an acoustic signal. Members of this multidisciplinary team should include a speech and language pathologist and audiologist. An audiologist is an important member of the team as they will be responsible for assessing the student's auditory performance at the sound level at normal conversational levels. Other members may include a psychologist, building administrator, social worker, other professionals providing direct education services, parent and classroom teacher.

Exclusionary Criteria for Assessing APD

Richard (2001, pp. 72-73) suggests before assessment for APD, students should demonstrate:

- Normal peripheral hearing
- Adequate language acquisition
- Normal cognitive functioning

Difficulties in the above areas can also result in reduced performance and it is very difficult to interpret the difficulties as related to the CNS. Teams may wish to try any of the strategies to improve auditory performance suggested on page APD-6 to alleviate the presenting difficulties for students who have hearing loss, language processing, or cognitive impairments.

Language Processing Assessment Considerations

A complete language assessment may be very helpful in understanding the student's auditory behaviors of concern. The assessment should focus on language processes related to the presenting complaints, such as receptive/expressive language assessments that focus on memory, word retrieval, problem solving, formulation, identifying main ideas, or directional vocabulary.

RESULTS/RECOMMENDATIONS

If there is suspicion of a disability that adversely affects educational performance, the team considers exploring the pre-referral process for that disability area. Auditory processing difficulties can be associated and co-exist with other disorders, such as Language Impairment, Autism, Learning Disability, Cognitive Impairment, Attention Deficit Disorder, or Emotional Disorders. The SLP and team analyze the data together to determine if there may be evidence of an associated auditory processing disorder. These characteristics may be documented in the SLPs report. Regardless of the underlying cause, the team will want to explore practical strategies to improve auditory performance.

Strategies to Improve Auditory Performance

Several strategies may be used to positively improve a student's auditory performance in their educational environment. These strategies are divided into parent, teacher, and student approaches. The team may choose to utilize these strategies during an early intervening, assessment or intervention stage. Examples of such strategies are listed on the following page, which can be distributed to team members when relevant.

STRATEGIES TO IMPROVE AUDITORY PERFORMANCE

Strategies for Teachers

Classroom environment

- Reduction of noise/minimize distractions
- Preferential seating away from noise
- Use of classroom amplification system

Teaching techniques

- Clear enunciation at a slow-moderate rate of speech
- Insert purposeful pauses between concept, let the words *hang in the air*
- Keep directions or commands short and simple and have student repeat directions
- Use praise often and be positive
- Provide visual cues during lecture/directions (such as written outline on the board)
- Provide repetition of oral information and steps of assignment
- Give breaks between intense concepts taught for comprehension
- Check for comprehension early/often and check knowledge of prerequisite information
- Preview and review concepts for lecture
- Offer short essay tests as an alternative to multiple choice
- Record lectures for repeated listening
- Offer closed captioning for videos
- Make connections with other material whenever possible – refer often to previous lessons
- Augment information, especially with visual materials (show a film; look on web; find additional books about topic; act it out; recommend family activity; fieldtrip)

Peer assistance

- Use of a positive peer partner for comprehension of directions or proofing work
- Use of cooperative learning groups
- Use of a note-taker

Assignment modifications

- Allow extended time to complete assignments and/or tests
- Offer short essays as an alternative to multiple choice
- Provide visual instructions
- Preview language of concept prior to assignment
- Frequent checks for comprehension at pre-determined points
- Vary grading techniques

Strategies for Student

- Teach use of visual cues to supplement auditory information
- Teach use of short and long term memory techniques (i.e. rehearsal, chunking, mnemonics, visual imagery)
- Teach student to listen for meaning rather than every word
- Teach active listening behaviors
- Teach student to advocate for themselves by asking frequent questions about the material, asking for multiple repetitions or requesting speaker to "write it down"
- Use of tape recorder for assignments
- Teach organizational strategies for learning information
- Teach use of an electronic note-taker or word processor

Strategies for Parents

- Keep directions or commands short and simple
- Use praise often and be positive
- Use visuals or gestures at home to compensate for listening difficulties
- Assist the student in asking clarification questions and being their own advocate
- Preview and review classroom material and review tape recorded information

Other specific skill strategies which focus on auditory remediation/auditory training exist in the literature related to auditory processing disorders. The challenge of school teams is to develop intervention and prevention approaches that are educationally relevant. The most direct impact on school performance appears to result from the type of strategies above, although IEP teams make decisions about each student's needs individually.

REFERENCES

American Speech-Language Hearing Association. (ASHA 1995). *(Central) Auditory Processing Disorders Technical Report.* Rockville, MD: Author. Available at www.asha.org.

Anderson, K. (1989). *Screening Instrument for Targeting Educational Risk (SIFTER)* Tampa, FLA: The Educational Audiology Association.

Anderson, K. & Matkin, N. (1996). *Preschool Screening Instrument for Targeting Educational Risk (SIFTER.)*. Tampa, FLA: The Educational Audiology Association.

Anderson, K. (2004). *Secondary Screening Instrument for Targeting Educational Risk (SIFTER.)*. Tampa, FLA: The Educational Audiology Association.

Richard, G.J. (2001). *The Source for Processing Disorders*. East Moline, IL: Linguisystems, Inc.

Smoski, W., Brunt, M.A., & Tannahill, C. (1998). *Children's Auditory Performance Scale (CHAPS*). Tampa, FLA: The Educational Audiology Association.

S.I.F.T.E.R.

SCREENING INSTRUMENT FOR TARGETING EDUCATIONAL RISK

by Karen L. Anderson, Ed.S., CCC-A

STUDENT _____ TEACHER _____ GRADE _____

DATE COMPLETED _____ SCHOOL _____ DISTRICT _____

The above child is suspect for hearing problems which may or may not be affecting his/her school performance.
This rating scale has been designed to sift out students who are educationally at risk possibly as a result of hearing problems.
Based on your knowledge from observations of this student, circle the number best representing his/her behavior.
After answering the questions, please record any comments about the student in the space provided on the reverse side.

1. What is your estimate of the student's class standing in comparison of that of his/her classmates?	UPPER	5	4	MIDDLE	3	2	LOWER	1	ACADEMICS	☐
2. How does the student's achievement compare to your estimation of her/her potential?	EQUAL	5	4	LOWER	3	2	MUCH LOWER	1		
3. What is the student's reading level, reading ability group or reading readiness group in the classroom (e.g., a student with average reading ability performs in the middle group)?	UPPER	5	4	MIDDLE	3	2	LOWER	1		
4. How distractible is the student in comparison to his/her classmates?	NOT VERY	5	4	AVERAGE	3	2	VERY	1	ATTENTION	☐
5. What is the student's attention span in comparison to that of his/her classmates?	LONGER	5	4	AVERAGE	3	2	SHORTER	1		
6. How often does the student hesitate or become confused when responding to oral directions (e.g., "Turn to page . . .")?	NEVER	5	4	OCCASIONALLY	3	2	FREQUENTLY	1		
7. How does the student's comprehension compare to the average understanding ability of her/her classmates?	ABOVE	5	4	AVERAGE	3	2	BELOW	1	COMMUNICATION	☐
8. How does the student's vocabulary and word usage skills compare with those of other student s in his/her age group?	ABOVE	5	4	AVERAGE	3	2	BELOW	1		
9. How proficient is the student at telling a story or relating happenings from home when compared to classmates?	ABOVE	5	4	AVERAGE	3	2	BELOW	1		
10. How often does the student volunteer information to class discussions or in answer to teacher questions?	FREQUENTLY	5	4	OCCASIONALLY	3	2	NEVER	1	CLASS PARTICIPATION	☐
11. With what frequency does the student complete his/her class and homework assignments within the time allocated?	ALWAYS	5	4	USUALLY	3	2	SELDOM	1		
12. After instruction, does the student have difficulty starting to work (looks at other students working or asks for help)?	NEVER	5	4	OCCASIONALLY	3	2	FREQUENTLY	1		
13. Does the student demonstrate any behaviors that seem unusual or inappropriate when compared to other students?	NEVER	5	4	OCCASIONALLY	3	2	FREQUENTLY	1	SCHOOL BEHAVIOR	☐
14. Does the student become frustrated easily, sometimes to the point of losing emotional control?	NEVER	5	4	OCCASIONALLY	3	2	FREQUENTLY	1		
15. In general, how would you rank the student's relationship with peers (ability to get along with others)?	GOOD	5	4	AVERAGE	3	2	POOR	1		

TEACHER COMMENTS

Has this child repeated a grade, had frequent absences or experienced health problems (including ear infections and colds)? Has the student received, or is he/she now receiving, special services? Does the child have any other health problems that may be pertinent to his/her educational functioning?

The S.I.F.T.E.R. is a SCREENING TOOL ONLY

Any student failing this screening in a content area as determined on the scoring grid below should be considered for further assessment, depending on his/her individual needs as per school district criteria. For example, failing in the Academics area suggests an educational assessment, in the Communication area a speech-language assessment, and in the School Behavior area an assessment by a psychologist or a social worker. Failing in the Attention and/or Class Participation area in combination with other areas may suggest an evaluation by an educational audiologist. Children placed in the marginal area are at risk for failing and should be monitored or considered for assessment depending upon additional information.

SCORING

Sum the responses to the three questions in each content area and record in the appropriate box on the reverse side and under Total Score below. Place an **X** on the number that corresponds most closely with the content area score (e.g., if a teacher circled 3, 4 and 2 for the questions in the Academics area, an X would be placed on the number 9 across from the Academics content area). Connect the **X**'s to make a profile.

CONTENT AREA	TOTAL SCORE	PASS	MARGINAL	FAIL
ACADEMICS		15 14 13 12 11 10	9 8	7 6 5 4 3
ATTENTION		15 14 13 12 11 10 9	8 7	6 5 4 3
COMMUNICATION		15 14 13 12 11	10 9 8	7 6 5 4 3
CLASS PARTICIPATION		15 14 13 12 11 10 9	8 7	6 5 4 3
SOCIAL BEHAVIOR		15 14 13 12 11 10	9 8	7 6 5 4 3

PRESCHOOL S.I.F.T.E.R.

Screening Instrument for Targeting Educational Risk in Preschool Children (age 3-Kindergarten)

by Karen L. Anderson, Ed.S. & Noel Matkin, Ph.D.

Child _____ Teacher _____ Age _____

Date Completed ____/____/____ School _____ District _____

The above child is suspect for hearing problems which may affect his/her ability to listen, pay attention, develop language, follow teacher instruction and learn normally. This rating scale has been designed to sift out children who are at risk for educational delay and who may need further evaluation. Based on your knowledge of this child, circle the number that best represents his/her behavior. If the child is a member of a class that has students with special needs, comparisons should be made to normal learning classmates or normal developmental milestones. Please share additional comments about the child on the reverse side of this form.

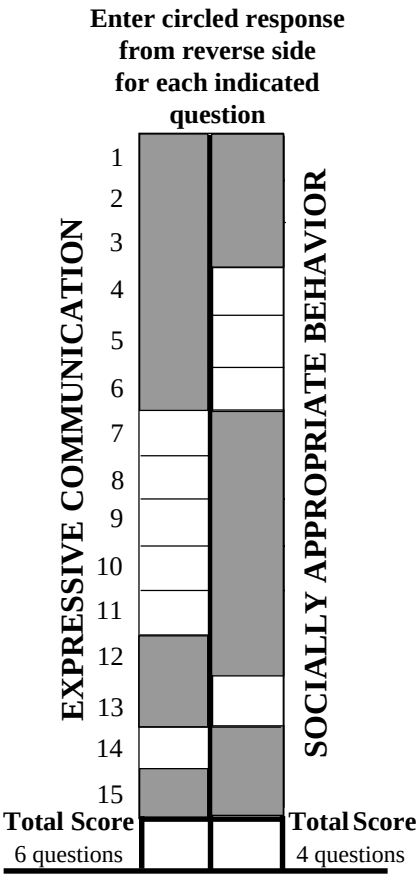
1. How well does the child understand basic concepts when compared to classmates (e.g., colors, shapes, etc.)?	ABOVE 5 4 AVERAGE 3 2 BELOW 1	PRE-ACADEMICS	
2. How often is the child able to follow two-part directions?	ALWAYS 5 4 FREQUENTLY 3 2 SELDOM 1	PRE-ACADEMICS	
3. How well does the child participate in group activities when compared to classmates (e.g., calendar, sharing)?	ABOVE 5 4 AVERAGE 3 2 BELOW 1	PRE-ACADEMICS	
4. How distractible is the child in comparison to his/her classmates during large group activities?	SELDOM 5 4 OCCASIONAL 3 2 FREQUENT 1	ATTENTION	
5. What is the child's attention span in comparison to classmates?	LONGER 5 4 AVERAGE 3 2 SHORTER 1	ATTENTION	
6. How well does the child pay attention during a small group activity or story time?	ABOVE 5 4 AVERAGE 3 2 BELOW 1	ATTENTION	
7. How does the child's vocabulary and word usage skills compare to classmates?	ABOVE 5 4 AVERAGE 3 2 BELOW 1	COMMUNICATION	
8. How proficient is the child at relating an event when compared to classmates?	ABOVE 5 4 AVERAGE 3 2 BELOW 1	COMMUNICATION	
9. How does the child's overall speech intelligibility compare to classmates (i.e., production of speech sounds)?	ABOVE 5 4 AVERAGE 3 2 BELOW 1	COMMUNICATION	
10. How often does the child answer questions appropriately (verbal or signed)?	ALMOST ALWAYS 5 4 FREQUENTLY 3 2 SELDOM 1	CLASS PARTICIPATION	
11. How often does the child share information during group discussions?	ALMOST ALWAYS 5 4 FREQUENTLY 3 2 SELDOM 1	CLASS PARTICIPATION	
12. How often does the child participate with classmates in group activities or group play?	ALMOST ALWAYS 5 4 FREQUENTLY 3 2 SELDOM 1	CLASS PARTICIPATION	
13. Does the child play in socially acceptable ways (i.e., turn taking, sharing)?	ALMOST ALWAYS 5 4 FREQUENTLY 3 2 SELDOM 1	SOCIAL BEHAVIOR	
14. How proficient is the child at using verbal language or sign language to communicate effectively with classmates (e.g., asking to play with another child's toy)?	ABOVE 5 4 AVERAGE 3 2 BELOW 1	SOCIAL BEHAVIOR	
15. How often does the child become frustrated, sometimes to the point of losing emotional control?	NEVER 5 4 SELDOM 3 2 FREQUENTLY 1	SOCIAL BEHAVIOR	

TEACHER COMMENTS: (frequent absences, health problems, other problems or handicaps in addition to hearing?)

The Preschool S.I.F.T.E.R. is a SCREENING TOOL ONLY. The primary goal of the Preschool S.I.F.T.E.R. is to identify those children who are at-risk for developmental or educational problems due to hearing problems and who merit further observation and investigation. Analysis has revealed that two factors, expressive communication and socially appropriate behavior, discriminate children who are normal from those who are at-risk. The greater the degree of hearing problem, the greater the impact on these two factors and the higher the validity of this screening measure. If a child is found to be at-risk then the examiner is encouraged to calculate the total score in each of the five content areas. Analysis of the content area score may assist in developing a profile of the child's strengths and special needs. The profile may prove beneficial in determining appropriate areas for evaluation and developing an individual program for the child.

SCORING

There are two steps to the scoring process. First, enter scores for each of the indicated questions in the spaces provided and sum the total of the 6 questions for the expressive communication factor and then the 4 questions for the socially appropriate behavior factor. If the child's scores fall into the At-Risk category for either or both of these factors, then sum the 3 questions in each content area to develop a profile of the child's strengths and potential areas of need.



EXPRESSIVE COMMUNICATION
(check one)

PASS (14 - 30) score range ☐

AT-RISK (6 -13) score range ☐

SOCIALLY APPROPRIATE BEHAVIOR
(check one)

PASS (12 - 20) score range ☐

AT-RISK (4 -11) score range ☐

SKILLS PROFILE

CONTENT AREA	TOTAL SCORE (enter)	PASS RANGE	AT-RISK RANGE	SCREENING RESULTS (circle)	
PREACADEMICS		7 - 15	3 - 6	Pass	At-Risk
ATTENTION		9 - 15	3 - 8	Pass	At-Risk
COMMUNICATION		9 - 15	3 - 8	Pass	At-Risk
CLASS PARTICIPATION		7 - 15	3 - 6	Pass	At-Risk
SOCIAL BEHAVIOR		9 - 15	3 - 8	Pass	At-Risk

Sum the responses to the 3 questions in each content area from the reverse side. Enter the total score for each content area in the Total Score column above.

SECONDARY S.I.F.T.E.R.

Screening Instrument For Targeting Educational Risk in Secondary Students

This scale has been designed to screen for educational risk in secondary students. It will be used in a research study to indicate if there is a significant difference between the classroom performance of children who are hard of hearing (HOH) or deaf as compared to their normal hearing peers. Based on your observations and familiarity with this student, circle the number that best represents his/her behavior.

Class Subject:_____ Gr:_____ HOH / Deaf Student ☐

Other known disabilities (i.e., LD, ADHD)? Y N Student Gender: M F Normal Hearing Student ☐

Academics						
1. How frequently does the student turn in completed assignments?	Always		Usually		Seldom	
	5	4	3	2	1	
2. How do the student's general foundation skills (i.e., reading level) compare to the difficulty of work expected in class?	Above		Average		Below	
	5	4	3	2	1	
3. How does the student's ability to summarize and draw conclusions about information presented in classroom compare to class peers?	Above		Average		Below	
	5	4	3	2	1	
4. How does the student's demonstration of academic skill growth compare to class peers/expectations?	Above		Average		Below	
	5	4	3	2	1	
5. What is your estimate of the student's class standing in comparison to that of his/her class peers?	Above		Average		Below	
	5	4	3	2	1	
Attention						
1. When called upon and asked a question, how often does the student appear to have been attending to teacher instruction? (he/she is able to answer or understands the basis of the question)	Always		Often		Rarely	
	5	4	3	2	1	
2. How successful is the student at avoiding distraction by noises, visual distractions, personal items, or activities unrelated to class instruction?	Always		Often		Rarely	
	5	4	3	2	1	
3. How successful is the student at interacting with peers only at appropriate times (not chatty, doesn't bother others)?	Always		Often		Rarely	
	5	4	3	2	1	
4. How does the student's attention to detail compare to class peers/expectations (avoiding careless mistakes)?	Above		Average		Below	
	5	4	3	2	1	
5. How organized are the student's workhabits in comparison to class peers or class expectations?	Above		Average		Below	
	5	4	3	2	1	
Communication						
1. How well does the student communicate his/her needs to the teacher in comparison to class peers/expectations?	Above		Average		Below	
	5	4	3	2	1	
2. How does the student's word usage skills compare to class peers/expectations (i.e., vocabulary)?	Above		Average		Below	
	5	4	3	2	1	
3. How does the student's ability to accurately describe information compare to class peers/expectations (comprehension checks)?	Above		Average		Below	
	5	4	3	2	1	
4. What is your estimate of the student's ability to assimilate teacher instruction (presented verbally or visually) in comparison to class peers/expectations?	Above		Average		Below	
	5	4	3	2	1	
5. How proficient is the student at independently starting work following verbal directions (doesn't hesitate before starting work)?	Always		Usually		Seldom	
	5	4	3	2	1	

RETURN TO:

karenla@ix.netcom.com

#

Class Participation

1. How often does the student volunteer information to class discussions?	Frequently	4	Occasionally	2	Never
	5		3		1
2. In comparison to class peers, what is the student's present level of meaningful contribution to classroom discussions?	Above		Average		Below
	5	4	3	2	1
3. To what level does the student demonstrate a recognition that participation is an integral part of the learning process?	Above		Average		Below
	5	4	3	2	1
4. How independent is the student at completing assignments within the allowed classtime?	Above		Average		Below
	5	4	3	2	1
5. During cooperative group activities, how often does the student interact with others to achieve the goals of group work?	Above		Average		Below
	5	4	3	2	1

School Behavior

1. How often does the student come to class with an attitude of "readiness to learn" as compared to class peers/expectations?	Frequently	4	Often	2	Rarely
	5		3		1
2. Does the student demonstrate behaviors that are appropriate for age (i.e., typical maturity)?	Always		Frequently		Occasionally
	5	4	3	2	1
3. How often does the student demonstrate respectful behavior toward others in class?	Always		Frequently		Occasionally
	5	4	3	2	1
4. How well does the student follow classroom rules compared to class peers/expectations?	Exceeds		Meets Expectations		Below
	5	4	3	2	1
5. To what level does the student appear to be accepted by his/her peers?	Popular		Average		Isolated
	5	4	3	2	1

To be completed by a district specialist in hearing impairment ONLY for students with hearing loss: Circle only ONE number in each of the four areas

Degree of Hearing Loss

1 = PTA 15 - 25 dB
2 = PTA 26 - 40 dB
3 = PTA 41 - 55 dB
4 = PTA 56 - 70 dB
5 = PTA 71 - 85 dB
6 = PTA 86 - 100 dB
7 = PTA 101 - 115 dB
8 = PTA >116 dB or no response

Better ear average of 500, 1000, 2000 Hz (worse ear only if unilateral loss)

Hearing Loss Configuration (can only count reasonably symmetrical hearing losses. If loss is very asymmetrical, choose number 8)

1 = primarily a fluctuating/chronic conductive loss; no stable thresholds
2 = flat loss (no more than 20 dB variation across 500 - 8000 Hz range)
3 = primarily a high frequency hearing loss (normal through 1500 Hz)
4 = primarily rising hearing loss (i.e., low frequency responses are at least 25 dB > high frequency)
5 = primarily a cookie bite loss (islands of normal low/high Hz hearing)
6 = known progressive loss (PTA change >10 dB in last 1-2 years)
7 = unilateral loss of 50 dB or greater, other hear normal hearing
8 = none of the above

Hearing instrument wear (use, not type)

1 = binaural hearing aids customarily worn
2 = residual hearing in both ears, but child chooses to only wear hearing aid in one ear
3 = unilateral loss, hearing aid worn in worse ear
4 = chronic hearing aid repair problems resulting in inconsistent amplification use (no aids worn or only one aid worn > 25% school days)
5 = cochlear implant and speech processor worn (can also include HA use in other ear)
6 = refusal to wear hearing aid(s); typically not worn > 25% of school days

FM Use in Mainstream Classroom

1 = personal FM worn on body and attached to child's personal hearing aids (i.e. Solaris with Y-cord to aids)
2 = personal FM worn on body with no input to hearing aids (ie.,buttons, silhouettes, neck loop)
3 = personal FM worn at ear level (i.e. MicroLink, self contained BTE FM)
4 = sound field FM placed at ceiling level
5 = sound field FM with speakers placed around the classroom
6 = sound field FM placed on student's desk or kept within close proximity to student
7 = assistive listening device (i.e., Easy Listener through headphones or earbuds)
8 = no FM or assistive listening devices used in mainstream classroom

FEEDING AND SWALLOWING

Public schools are servicing an increasing number of medically fragile children resulting in the need to identify and treat associated swallowing disorders. Public school Speech-Language Pathologists may be part of feeding and swallowing teams. School teams are challenged to assure that students are fed safely and receive the nutrition they need to benefit from their education. Teams need to establish policies and procedures related to feeding and swallowing. School teams are encouraged to develop a plan for the identification, evaluation, treatment, and documentation of feeding and swallowing problems. The plan should include the following areas: consultation, therapeutic techniques and training of staff and caregivers.

Developing Feeding & Swallowing Procedures:

Feeding and swallowing procedures should include a process for identifying and addressing caregiver concerns related to feeding and swallowing problems, evaluating and developing adaptations based on each students unique needs, documenting appropriate feeding and drinking adaptations, and providing a means of consistent use of adaptations, including communication of adaptations when staff changes occur as well as ongoing problem solving during situations which may arise.

A written feeding and swallowing plan should be developed and implemented for all students who require adaptations for either skill development, maintenance, or safety reasons. See sample plan on page FS-2. This plan may include things such as use of adapted equipment, e.g. Teflon-coated spoon, cut-out cup, oral motor programming, food and texture modifications, and use of positioning techniques, e.g. upright positioning, jaw and lip closure supports, etc.

The feeding and swallowing plan is written based on the parent and staff's experience with the student's feeding and swallowing skills. The plan is implemented and the team determines the effectiveness. If the plan is effective, no further evaluation may be necessary unless a change in the student's health or skills should occur. Should the student continue to show signs and symptoms of concern, the plan will need to be modified accordingly.

Student Feeding and Swallowing Plan

Date _____

Review Date _____

Review Date _____

Student _____ **Teacher** _____

Allergies _____

Equipment Dish _____ Utensil _____

Cup _____ Straw _____

Need for help? Independent _____ Assisted _____ Dependent _____

Explain _____

_____

Food Consistency Pureed _____ Ground _____ Chopped _____ Mashed _____ Bite size _____

Liquids No liquids _____ Thickened liquids _____ (Check consistency)

Nectar Consistency _____ Honey Consistency _____ Pudding Consistency _____

Tube Fed _____

Tube Fed/ Nothing by mouth _____ Tube and Oral Fed _____ Amount fed orally _____

PROCEDURES

Amount of food per bite _____

Food placement _____

Wait time (allow time for student to swallow multiple times between bites) _____

Behavior Techniques _____

Phrases used _____

Student's Communication or signals during feeding _____

____ Keep student in upright position _____ minutes after meal

____ Encourage student to cough to clear throat ____ Offer a drink after _____ bites

Other _____

POSITIONING

1. Sitting posture _____
2. Chair/seating device _____
3. Head position/support _____
4. Trunk control/support _____
5. Other _____

Check here if there is ongoing **Oral Motor Program** _____ (See Therapist/Plan)

Recognizing Swallowing Problems:

Staff needs to be able to recognize the signs and symptoms of feeding and swallowing problems and take measures to address those concerns, ultimately utilizing appropriate feeding and swallowing procedures. Parents and educational staff should be trained to identify signs and symptoms that suggest feeding and swallowing problems, including:

- Coughing or gagging during meals
- Choking
- Vomiting
- Gurgly voice (wet sounding vocalizations)
- Gurgly sounding respiration
- Frequent fevers and/or pneumonia
- Multiple swallows
- Oral cavity not clear after swallow
- Chronic copious clear secretions
- Concerns related to weight
- Delayed swallow
- Very fussy eating behaviors

Assessing Feeding/Swallowing Problems:

If there is a feeding and swallowing concern, notification of difficulties is relayed to the feeding and swallowing team, usually the Occupational Therapist and Speech/Language Pathologist A member of the feeding/swallowing team then conducts an informal observation, observing the student's positioning, oral structure, motor function, tolerance of current food textures, and equipment currently utilized. The designated professional then contacts the parent or caregiver to inform them of these concerns and the procedure to either develop a plan based on a new evaluation or modify an existing plan if the current plan is ineffective. If the current plan is effective, it is reviewed at the student's IEP and placed in the student's permanent record (e.g., CA-60).

The designated professional from the feeding/swallowing team will then obtain input from parent/caretakers and educational staff. A sample parent input form is on page FS-4. Areas of inquiry could include:

- If the student independently feeds or requires assistance.
- The length of time the student takes to complete a meal.
- Any symptoms the student exhibits that indicate a feeding/swallowing problem.
- The types of foods the student eats.
- Which foods/liquids appear more difficult for the student to eat.
- How the student is positioned and any techniques utilized during feeding.
- The utensils or adaptive equipment used during feeding.
- If the student has ever been tube fed and when this occurred.
- If the student ever had a swallow study, when this occurred, and the results of the study.

Parent Input — Feeding and Swallowing

Student _____ Date of Birth _____

Current Height and Weight _____ Physician _____

Allergies _____

_____

Does your child feed himself/herself?

❑ Yes, independently ❑ Yes, with assistance ❑ No

Does your child enjoy mealtime? _____

_____

How do you know when your child is hungry? _____

_____

How do you know when your child is full? _____

_____

How long does it take your child to complete a meal?

❑ 10–20 min. ❑ 20–30 min. ❑ 30–40 min. ❑ 40–50 min. ❑ >60 min.

Does your child have difficulty with any of the following?

❑ Choking during a meal	❑ Tongue thrust	❑ Very fussy eating behaviors
❑ Coughing with or without spraying of food	❑ Swallowing	❑ Spikes in temperature
❑ Chewing	❑ Breathing	❑ Chronic ear infection
❑ Noisy breathing	❑ Gurgly or "wet" voice	❑ Chronic Respiratory problems (pneumonia)
❑ Gagging	❑ Vomiting	
❑ Biting on utensils	❑ Drooling:	
❑ Being touched around the mouth	__ constant __ frequent __ occasional	

Was or is your child fed through feeding tube?

❑ Yes ❑ No

If yes, then when? _____

Why? ❑ Aspiration ❑ Medication only ❑ Transition to Oral Feeding ❑ Liquids only ❑ Other

Form courtesy of Macomb Intermediate School District

Parent Input — Feeding and Swallowing

What are your child's food preferences?

Likes	Dislikes
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

What kinds of food does your child eat?

❑ Liquids ❑ Thickened liquids ❑ Pureed ❑ Mashed ❑ Ground
❑ Chopped ❑ Bite-sized pieces ❑ Table foods (whatever your family is eating)

Does your child take any nutritional supplements?

❑ Yes ❑ No If yes, specify _____

Do certain foods/liquids appear to be more difficult for your child to eat? _____

_____

How is your child positioned during feeding?

❑ Sitting in a chair at a table ❑ Sitting in a wheelchair ❑ Sitting ❑ Held on lap
❑ Reclined ❑ Lying down ❑ Other

What utensils are used?

❑ Bottle ❑ Spoon ❑ Sippy cup ❑ Cup (no lid)
Other adaptive equipment _____

Has your child ever had a swallow study?

❑ Yes ❑ No If yes, when? _____

What were the results? _____

_____

Additional Comments or Concerns _____

_____

_____ _____
Parent Signature Date

The designated member(s) of the feeding/swallowing team then conducts a formal evaluation. This evaluation may be lead by the OT/SLP, and include other members of the student's team, e.g. parent, teacher, physical therapist, nurse, and para-professionals. The evaluation should include the following areas:

- Positioning
- Reflexes
- Tactile responses
- Food consistencies
- Food preferences
- Oral structures
- Oral structures and musculatures during feeding
- Spoon feeding
- Drinking
- Trial of therapeutic techniques
- Swallowing concerns
- Response to feeding

The SLP/OT will then complete an evaluation report. Protocol forms for documenting results may be found in various speech/language resources on dysphagia and feeding/swallowing disorders. Speech/language pathologists should scrutinize such forms to ensure that all areas assessed during an evaluation are addressed when documenting results. One example for documenting results of a feeding/swallowing evaluation is included on page FS-7.

Following the formal evaluation, the SLP/OT should hold a staffing to review the results of the feeding/swallowing evaluation and design the feeding plan. If further information from outside sources is needed, e.g. a modified barium swallow study, consult with dietician, etc., it may be requested, obtained, and included in design of the feeding plan at this time. Should the student continue to demonstrate swallowing difficulties despite the feeding/swallowing assessment and intervention attempts, the team may recommend that the family speak with the student's physician about obtaining a prescription for a modified barium swallow study.

When the feeding plan is written, it is implemented with ongoing monitoring, revision, and communication among team members. If the plan is effective, it is reviewed at the IEP and a copy placed in the student's IEP and CA-60. If there are staffing or classroom changes, members of the previous team may demonstrate the feeding plan for the new team and disseminate copies of the plan as needed. If the feeding plan is ineffective or there are new concerns, the procedure is repeated with concerns being reported to the SLP/OT and ongoing observation and assessment.

Feeding and Swallowing Evaluation

Student _____ Date _____

Evaluator(s)/Title(s) _____

Classroom Teacher _____

POSITIONING

	Concerns	Recommendations
Hips		
Trunk		
Head/Neck		
Arms/Hands		
Legs/Feet		

List Seating Equipment Used _____

_____

REFLEXES

	Normal	Hyper	Hypo	Absent
Gag reflex	❑	❑	❑	❑
Bite reflex	❑	❑	❑	❑
Rooting	❑ Yes	❑ No		

Comments _____

_____

Feeding and Swallowing Evaluation

TACTILE RESPONSES

	Response to Stimulation	Recommendations
Body		
Face		
Mouth		
Lips		
Tongue		
Teeth		

FOOD CONSISTENCIES ❑ Pureed ❑ Ground ❑ Mashed ❑ Chopped ❑ Bite size

❑ Mixed (Indicate consistencies of mixtures) _____

FOOD PREFERENCES List any food preference related to:

Texture _____

Taste _____

Temperature (i.e. hot/cold/warm) _____

Reaction to non-preferred foods _____

THERAPEUTIC SPOON FEEDING Spoon Use

Removes food with	❑ suckle	❑ suck	
Waits quietly for spoon	❑ yes	❑ no	
Opens mouth when food is presented	❑ yes	❑ no	
Active participation in removing food	❑ yes	❑ no	
Lips assist	❑ yes	❑ no	
Moves food posteriorly well	❑ yes	❑ no	
Licks lips clean	❑ yes	❑ no	
Position of tongue when spoon is present	❑ thin & cupped	❑ humped	❑ posterior
Amount consumed	_____	in _____	minutes

Recommendations _____

Feeding and Swallowing Evaluation

ORAL STRUCTURES & MUSCULATURE DURING CHEWING

		Concerns	Recommendations
Jaw	Movement		
	Bite Alignment/Pattern		
Teeth			
Tongue	Elevation		
	Left lateralization – moves from tongue to chewing surface & from side to side		
	Right lateralization – moves from tongue to chewing surface & from side to side		
	Front-to-back Movement – moves food posteriorly		
	Protrusion/Thrust		
Lips			
Palate			

Drooling ❑ yes ❑ no

Comment_____

_____

Feeding and Swallowing Evaluation

DRINKING

Liquid Consistencies	❑ Unthickened	❑ Nectar	❑ Honey	❑ Pudding
Moves liquid with		❑ suckle	❑ suck	❑ unable to use cup
Tongue thrust		❑ yes	❑ no	
Tongue retraction		❑ yes	❑ no	
Anterior loss		❑ none	❑ minimal	❑ excessive
Appropriate jaw opening		❑ yes	❑ no	
Jaw thrust		❑ yes	❑ no	
Stabilizes cup by		❑ tongue under cup	❑ biting cup	❑ other
Upper lip closes over cup		❑ yes	❑ no	
Up/down sucking motion		❑ yes	❑ no	
Coordinated breathing with sucking/swallowing		❑ yes	❑ no	

Type of cup needed _____

Response to thickened liquids _____

Recommendations _____

SWALLOWING CONCERNS

❑ pneumonia or history of pneumonia	❑ gagging
❑ delayed swallow	❑ coughing
❑ multiple swallows	❑ wet voice
❑ chronic low grade fever	❑ congestion
❑ chronic, copious, clear secretions	❑ concerns related to weight
❑ oral cavity not clear after swallow	❑ tongue pumping
❑ larynx does not elevate properly	

RESPONSE TO FEEDING

❑ alert throughout	❑ lethargic	❑ irritable
❑ facial grimacing	❑ anxious	❑ irregular or audible breathing
❑ refusal	❑ vomiting	❑ increased hypertonicity
❑ reflux	❑ fatigue	❑ facial reddening

Other _____

_____ _____

Completed by/Title **Completed by/Title**

If there are continual concerns or disagreement among members of the feeding/swallowing team, a temporary plan may be written. The temporary plan may include limiting portions or food and liquid textures as tolerated, having the family feed the student at school, or determining that the child not be fed orally at school. The family may be encouraged to consult their doctor and provide documentation in developing the temporary feeding plan. Additional referrals such as consultation with a physician, swallow study, or dietary services may be requested at this time. See sample letter to outside source on page FS-12. The school feeding/swallowing team should obtain a signed release of information to assure collaborative teamwork between physician and school. A follow up staffing to develop a permanent plan should be scheduled once the information is obtained.

Feeding/Swallowing Intervention:

Treatment of feeding/swallowing disorders may include interventions such as re-positioning the student while feeding, use of adaptive equipment, providing manual support to the facial musculature, adjusting food and liquid textures, as well as amounts, temperature, and presentation. It is usually desirable to position a student in an upright manner during mealtime with 90 degree flexion between head and torso. However, positioning should be considered on an individual basis depending on the student's ability to tolerate different positions and the SLP may wish to consult other professionals, such as OT/PT, for additional information. Adaptive equipment may include use of a Teflon-coated spoon if a student has a severe bite reflex or a cut out cup to allow a student to receive more liquid and the caregiver to monitor intake. Manual support to the lip and jaw area may be provided to assist the student in obtaining lip closure around a spoon or cup. Food textures may range from pureed to solid consistencies depending on the student's ability to manage the texture orally and swallow the food in an appropriate and timely manner. Liquids may be of a thin texture or thickened to nectar or pudding consistencies depending on the student's ability to swallow the liquid and clear it from the throat. Commercial thickeners are available through catalogs containing products for dysphagia disorders or through a local pharmacy. The SLP is encouraged to obtain and read additional information related to the area of dysphagia or feeding and swallowing intervention for those student's with severe impairments.

Intervention may also include demonstration of signs and symptoms related to feeding and swallowing difficulties, feeding procedures, and therapeutic techniques. Training may be provided by the SLP/OT or outside consultants with adequate education in the area of feeding/swallowing disorders.

Goals and objectives related to improving a student's feeding and swallowing skills can be written when the IEPT feels it is appropriate. The goals may be related to improving student's self help skills, oral motor abilities, and ability to tolerate increased food textures. The goals may be the responsibility of the SLP, OT, or teacher or shared by members of the team.

Sample Letter

Date _____

To Whom It May Concern:

You have an appointment to see our student:

Name _____ Birth Date _____

Diagnosis _____

Special Education Certification _____

Our concerns include:

1.

2.

3.

We have included our most recent feeding and swallowing evaluation to provide you with current diet consistency, presentation, and positioning.

We have included a MISD **Authorization to Obtain and Disclose Information** with this letter. In your treatment plan, please provide information to help the classroom staff develop the optimal and safest diet level and compensatory feeding and positioning strategies. Please provide us detailed information related to:

1. Safest solid and liquid consistency
2. Safest volume and rate presentation
3. Describe any compensatory strategies attempted and their effectiveness

Sincerely,

_____

Name/Title

Documenting Feeding/Swallowing Disorders in the IEP:
The feeding/swallowing plan should be referenced in the IEP. Members of feeding/swallowing teams can reference the student's performance level relative to their oral motor, feeding, and swallowing skills under the "other" section on the page of "Present Levels of Educational Performance" and "Statement of Need." If the plan is effective, a statement that the plan is required for safe eating/drinking and will be implemented and modified as needed should be included. If a temporary plan is being utilized, a statement regarding the student exhibiting feeding difficulties and implementation of a temporary plan until a long-term plan can be developed should be included. Documentation should include an emphasis on promoting safe swallowing with regard to maintaining adequate nutrition and hydration.

Procedures related to Training Staff in Safe Feeding & Swallowing Practices
SLPs should advocate that schools establish procedures for training staff. Students sometimes have very specific positioning or feeding procedures and actual demonstration of practices and techniques may be needed for anyone feeding the student. Emphasis should be placed on promoting safe swallowing and maintaining nutrition and hydration.

Professionals and paraprofessionals who work with students experiencing feeding and swallowing difficulties benefit from in-service training as well as demonstrations. This might include demonstration of signs and symptoms of feeding or swallowing difficulties, feeding procedures, and therapeutic techniques. The workshop may be provided by building therapists or outside consultants, as needed. This guided practice may also include demonstrations with students as part of the staff education.

Knowledge and Skills for Evaluations and Consultations
The speech-language pathologist and occupational therapists involved in evaluating and consulting regarding a student's feeding and swallowing issues should have adequate education in this area. The staff and administration should work together to secure additional professional development for the SLP and/or OT when needed.

RESOURCES

Guideline for Speech-Language Pathologists Providing Dysphagia Services in Schools ASHA -In Press-2006**,** will be available at www.ASHA.org

ASHA Special Interest Division 13, Swallowing and Swallowing Disorders (Dysphagia)
ASHA member and students may want to consider joining the related Special Interest Division and receive newsletter with articles on this topic, members-only e-mail listserves, and Web forums. Speech-language pathologists working with swallowing disorders are among the largest growing group in ASHA. Our university training programs have not been able to meet our educational needs so we must educate ourselves to meet the needs of students through professional affiliations and continuing education. The Dysphagia Division can provide the opportunity to have a voice in this rapidly

SELECTIVE MUTISM

DEFINITION

Selective Mutism has been defined as an anxiety disorder in which a person refuses to speak in certain situations in which they are expected to speak, but otherwise speak normally in other situations. The Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (1994) defines selective mutism as a disorder in which the student is consistently choosing or selecting not to speak at all, but otherwise can speak in other situations. Students with selective mutism typically will speak in home situations with their parents and other members of the household, but do not speak in other situations with other caregivers (e.g. grandparents, preschool teachers).

Some of the characteristics of selective mutism are excessive shyness, anxiety, dependency upon parents, oppositional behavior and isolation. The students typically have normal to high intelligence as measured by receptive language tools or nonverbal intelligence tools. Selective Mutism usually has an onset in the preschool years (Harris, 1996). It is very rare, perhaps 18 out of 10, 000 (McInnes, & Manassis, 2005). It does appear to affect more girls than boys (Kristenson, 2000; Dow, Sonies, Scheib, Moss, & Leonard, 1995).

McInnes, & Manassis (2005) describe three potential causes for selective Mutism:

- Anxiety
- Developmental Delay
- Not being a native speakers of English

These authors state that it was once thought to be the result of traumatic episodes, however, these appears to cause more global Mutism as opposed to selective Mutism.

There are many viewpoints on what approach to take with a student with suspected of being a selective mute. Most approaches recommend a team approach for assessment and intervention. One approach stresses a team comprised of a child psychologist, a speech and language pathologist, and/or other mental health professional. The focus is on a behavior model designed by the team to facilitate communication skills in selective mutes. Another team approach incorporates a psychotherapist as a member of the team; whereas the team is considering medication as a part of the treatment plan. However, some professionals have not experienced great gains in facilitating speaking in warranted situations using this approach (Schum, 2002). Other approaches advocate a "Socio-Communication" model for intervention. This model promotes a pragmatic focus on assessment and intervention for Selective Mutism. The approach is to incorporate more pragmatic aspects of communication into assessment and intervention process.

ASSESSMENT CONSIDERATIONS

A team approach is highly recommended from the literature. The team members could include:

- A School Social Worker and/or School Psychologist
  - Obtain a case history on the development and social milestones within the student's history.
  - Provide information on the child's abilities.

- Pediatrician
  Provide a medical history of the student the doctor also can provide information on whether or not the mutism is functional or organic.
  For example: is the mutism due to an impaired central nervous system concern such as cerebral palsy or a student with severe apraxia.
- Classroom teacher
  Information from child study team meeting, child's academic and social performances in the classroom.
- Speech and Language Pathologist
  Assessing a student's communication skills from a student demonstrating characteristics of a selective mute can be challenging for the Speech and Language Pathologist. Assessment of communication skills can be done utilizing a combination of a dynamic, authentic, or traditional approach to assessment.
- Referral to outside Mental Health Professional. Giddan, Ross, Sechler, & Becker (1997) recommend the following guidelines (pg. 132):
  - If more than 2 months have passed with the child not speaking in school, a speech-language pathologist should begin intervention in collaboration with the teacher and the parents.
  - If no speech is heard after 2 months in speech-language therapy, a referral should be made to a mental health professional who has had some experience with this disorder, and who can form a diagnosis and become involved in the treatment.
  - As soon as speech begins, the treatment programs should broaden to include many facets of the child's life and many more people, including other teachers, secretaries, bus drivers, and cafeteria workers.

Gathering Input
It is important to gather information related to the extent, onset and patterns of Mutism, medical history (especially hearing), developmental history, psychiatric history and family history of psychiatric disorders. Descriptions of the child's temperament and verbal and nonverbal social interactions in various settings will be quite informative. It is helpful to gather information from a variety of sources in order to compare. (McInnes, & Manassis, 2005)

Observation
Observing the student in the classroom in large and small group and attempting interaction will assist the team in discussing the potential strategies to attempt. Ask the family to record the student speaking at home. This can be very helpful in estimating language functioning and determining whether a speech and language disorder is suspected.

Dynamic Assessment
A trial period of intervention allows the team to learn how the student responds to learning experiences. Questions might be answered such as, "Will the student use nonverbal responds to communicate with you in one situation versus another? What communication mode (e.g., pointing, nodding, gesturing, writing, or whispering) will the student use if he or she is in this situation versus another?"

Assessment Across Environments
Collecting information about communication in different environments (if possible) can be very helpful. This may involve looking at the students' communication skills outside of school situations. A cassette or video tape recording of the student interacting with parents or siblings can provide valuable information on language development and pragmatic skills in a different environment.

Standardized Tests
The SLP may feel that the use of standardized tests is appropriate to assess speech and language skills. However, a word of caution, the speech and language pathologist may utilize a parent or primary caregiver that the student feels comfortable with speaking to as a tool to facilitate verbal speech but be careful of the caregiver providing cues or answers to test probes. Most likely, the speech and language pathologist may attempt to assess receptive and expressive vocabulary skills.

INTERVENTION
McInnes, & Manassis (2005) group intervention techniques by cognitive, behavioral, social-communication-oriented, and medical (using medications to treat anxiety), the most common being behavioral.

Progression Toward Vocalization
Hierarchical approaches to intervention are discussed throughout the literature (Dow, Sonies, Scheib, Moss & Leonard, 1995; Giddan, Ross, Sechler, & Becker, 1997; Harris, 1996; Newhoff, & Thompson, 1992; Schum, 2002; Simpson, 1999). Giddan, et al (1997) recommends the following progression:

1. Written messages
2. Gestures; head nods; pantomime individually or with others
3. Private tape recordings; reading stories; voice mail; conversational responses
4. Whispering; printed messages; simple responses to psychotherapist, to speech-language pathologist, to work on articulation, morphology, and syntax; to classroom teacher; to classmates in psychotherapy session; to others in school. Puppet show in psychotherapy session, with another child, or in the classroom
5. Loud whisper in all previously whispered situations
6. Vocalization., animal sounds (puppets), coughing, kazoo
7. Soft voice in all school situations
8. Full voice in school, beyond school
   (Giddan, Ross, Sechler, & Becker, 1997, p.131)

Simpson (1999) has found the following hierarchy or 'steps' successful with several students:

1. Head Nod
2. Whisper yes/no to teacher
3. Whisper yes/no to a select student
4. Whisper yes/no to a different student
5. Whiper one word to teacher

6. Use one word with teacher in a small group
7. Tell a story into a tape recorder away from the teacher
8. Tell/read a story to a peer, peer also has a turn
9. Give directions to a small group
10. Add situations / add students
11. Increase size of group
12. Continue to expand until using full voice throughout day.

The following list includes strategies that have found helpful with students suspected of selective mutism (Giddan et al, 1997; Harris, 1996).

Incorporate behavior-social-emotional within the realm of communication context.

1. Facilitate responses in a one on one setting; accepting nonverbal response from the student to communicate (writing, nodding, gesturing, drawing, role playing).
2. Provide "homework assignments that the student can do from a hierarchy of speaking from 'Talking to Mother' to moving on to talking to a relative on the phone.
3. Make audio tapes of the student. The SLP can refer to this recording in a session, and ask the student for permission to play it for others to hear.
4. Encourage the student to whisper, mouth, or use a puppet to communicate with the SLP or other peers. Sometimes the student will be willingly to whisper with peers before whispering with the SLP.
5. Provide rote activities to promote a 'can do' atmosphere.
6. Encourage other kinds of verbal responses; animal sounds, or coughing.
7. Barrier games in which the student and SLP take turns creating drawing, patterns, and shapes, that the other must produce without seeing.
8. Have the student whisper an instruction and encourage the student to produce the direction louder so other can follow along. Let the student win.
9. Encourage student to speak in a soft voice in other situations.
10. Provide opportunities through preverbal and verbal means for establishing joint attention and for calling for attention to self through intentional communication.
11. Keep a calm atmosphere, when providing the student with words and phrases for requesting information.

REFERENCES

Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (1994)

Dow, S.P., Sonies, B.C., Scheib, D., Moss, S.E., & Leonard, H.L. (1995). Practical guidelines for the assessment and treatment of selective mutism. *Journal of American Academy of child Adolescent Psychiatry*, 34.

Giddan, J.J., Ross, G.J., Sechler, L.L., & Becker, B.R. (1997). Selective mutism in elementary school: Multidisciplinary interventions. *Language, Speech and Hearing Services In Schools*, 28.

Harris, H.F. (1996). Elective mutism. *Language, Speech and Hearing Services in Schools*, 27.

McInnes, A. & Manassis, .D. (2005). When silence is not golden: An integrated approach to selective Mutism. *Seminars in Speech and Language, 26*, p. 201-210.

Newhoff, M. & Thompson, R. (1992). When the choice is theirs: Elective mutism. *Clinical Connection.*

Schum, R. (2002). Selective Mutism: An integrated approach. *ASHA Leader*, p. 4 - 6.

Simpson, L. (1999). *Successful therapy for elective mutism (STEM).* A presentation at the annual convention of the Michigan Speech-Language-Hearing Association. Grand Rapids, MI.