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Dr. Janice Pyne, Consultant, Student Support Services
Department of Education

Ms. Kim Lawlor, Consultant, Student Support Services
Department of Education

Speech-Language Pathologists: Ms. Sheila Walsh, Corner Brook/Deer Lake/St. Barbe School District; Ms. Stephanie Briggs, Stephenville/Port aux Basques School District; Ms. Carolyn Forsey, Baie Verte/Central/Connaigre School District; Ms. Margaret Dohan, Avalon East School District; Mr. Mike Foley, Avalon East School District; Ms. Kelly Harris, Avalon West School District.

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Ms. Brenda Kelleher-Flight, Director, Student Support Services
Department of Education

Mr. Donald Hayes, Coordinator (Interdepartmental Services)
Department of Education

Ms. Brenda Smith, Consultant, Student Support Services
Department of Education

Ms. Linda Coles, Program Development Specialist, Curriculum
Division, Department of Education

Dr. Lenora Perry-Fagan, Director, Evaluation, Testing, and
Certification, Department of Education

Ms. Joanne Rideout, Special Education Teacher, St. George's
Elementary, Avalon East

Ms. Colleen Reid, Classroom Teacher, St. Edward's, Avalon East

Ms. Joyce Bishop, Classroom Teacher, Holy Redeemer Elementary,
Avalon West

Ms. Suzette Strong, Special Education Teacher, Musgravetown High,
Vista

Ms. Anita Noseworthy, Classroom Teacher, St. Anne's Elementary,
Avalon West

Ms. Judy Wells, Speech-Language Pathologist, St. John's Health Care
Corporation

Ms. Leona Lewis, Speech-Language Pathologist, St. John's Health Care
Corporation

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Introduction

Background

Communication skills are of vital importance in today's society. Anything that interferes with communication creates a serious problem for a child (Day, 1985). Speech and language development are the primary elements of communication. Children need good speech and language skills to succeed in school and in life. This book is designated to be used as a guide to understanding and providing support for children with communication impairments. The basis for developing this handbook is to provide guidelines on how to help all children improve their speech and language skills and use this to maximize their potential. With public education, some speech and language problems can be prevented.

This communication handbook should be used in conjunction with other Department of Education documents, namely:

- Special Education Policy Manual (1992)
- Profiling the Needs of Children/Youth (1997)
- Programming for Individual Needs: Behavioral Challenges, A Supportive Shared Approach (revised 1997)
- Programming for Individual Needs: Individual Support Services Plans (1997)
- Programming for Individual Needs: Physical Disabilities (1996)
- Programming for Individual Needs: Pre-referral Intervention (revised 2000)
- Programming for Individual Needs: Using Our Strengths (1992)
- Programming for Individual Needs: Using Technology to Enhance Student's Differing Abilities (1996)
- Reading and Writing Difficulties: An Educators Handbook (1990)
- Spelling Handbook: Spelling in Context (1995)
- Spelling in Context: Directions for Teaching and Learning (1998)
- Selecting Children's Literature: An Annotated Bibliography (1999)
- Early Beginnings (July 1997)
- Foundation for the Atlantic Canada English Language Arts Curriculum (1996)
- Primary English Language Arts Curriculum Guide (1999)

- Elementary English Language Arts Curriculum Guide (1998)
- Pathways to Programming and Graduation (1998)
- The Evaluation of Students in the Classroom (1990)
- Technology in Learning Environments: Enabling Tomorrow's Learners Today (1995)

Purpose of the Handbook

The purpose of this handbook is to:

- Define communication impairments and outline the needs of children with communication impairments.
- Discuss the role of the individuals who work with communicatively impaired children.
- Discuss how communication needs are met.

An understanding of growth and development in the area of communication is vital when determining if there is a discrepancy between a child's level of functioning and what would be expected. To assist the ISSP team the stages of normal growth and development are included in Appendix F. The term "communication impairment" refers to delays/disorders that interfere with the normal flow of speech/language in the day to day communications of the child (for the purpose of this document this refers to individuals between birth and the age at which they leave school). Children with communication impairments are also at risk for academic, social, and/or emotional impairments. Communication impairments fall under the following categories: language, articulation/phonology, fluency, voice, augmentative and alternative communication, and hearing.

What is a Language Impairment?

Language impairment results from the delayed or disordered development of the content, form, or use of spoken language. The content of language refers to what individuals talk about or understand. The form of language refers to the shape and sound of the units of language and their combinations such as word endings, the words, or sentence structure. The use of language refers to the reasons why individuals speak and the ways they construct conversations depending upon what they know about the listener and the context (Bloom, 1988). The child with a language impairment may have difficulty in any or all of these areas. Language impairment can be further broken down into receptive and expressive language impairments. It may be helpful to determine whether the child has a receptive or an expressive impairment or both, prior to examining form, content, and use. Reviewing the information below should help you in the pre-referral process of screening and identification.

What is a Receptive Language Impairment?

A receptive language impairment is the difficulty in listening to and/or understanding language. The difficulty may be in the word level [vocabulary/word knowledge] and/or the sentence level [syntax/morphology] (Harris, 1994). The following characteristics may indicate that the child is having difficulties understanding language. The child has:

- an inadequate attention span, particularly during oral presentations.
- poor listening skills
- difficulty following directions
- poor memory for information presented verbally
- difficulty retaining concepts from one day to the next

- limited receptive vocabulary
 - difficulty understanding words with multiple meanings
 - difficulty categorizing related words or concepts
 - difficulty understanding figurative language
 - difficulty with concepts of space, time, and quantity
- Impairment in Language Form**
- difficulty comprehending simple sentences. e.g. Can the child point to pictures or perform an action from a spoken target sentence?
- e.g. Do they understand Cat vs. Cats?
- Impairment in Language Content**
- difficulty understanding vocabulary used in the grade level curriculum. e.g. If the theme is The Sea, do they comprehend words in this category?
 - difficulty pointing to a picture or performing an action based on a given target to display comprehension. e.g. Point to the picture that shows “the whale is in the water”.
- Impairment in Language Use**
- difficulty comprehending social language and react age appropriately
 - i.e. - difficulty using appropriate eye contact
 - difficulty using turn taking appropriately
 - difficulty displaying comprehension of social greetings.

What is an Expressive Language Impairment?

An expressive language impairment is difficulty with the production of language that adequately represents the child’s/youth’s intended message and may include problems with word retrieval, word use, sentence formulation, and/or conversational skills (Harris, 1994). The following characteristics may indicate difficulties in producing language.

The child:

- speaks in words, phrases, incomplete or inaccurate sentences
- relies upon gesture to supplement or substitute for oral language
- uses pronouns, plurals, and possessives incorrectly
- has difficulty with the agreement of subjects and verbs
- has difficulty telling a story or describing an event or procedure in a logical sequence
- uses run-on sentences
- has limited expressive vocabulary
- has difficulty finding the appropriate word (s) to express meaning overuses filler words such as “ah” or “um”

- avoids speaking in class
- has difficulty interacting with peers or adults

Impairment in Language Form

English grammatical morphemes (e.g., plural-s, past-ed) develop in a more or less predictable sequence. Present progressive usually develops first and third person irregular is one of the last to develop. The reason for this sequence of development lies in the linguistic complexity of the morpheme. An impairment in language form may show a child developing these morphemes in an unusual order or an inability to use grammatical morphemes appropriately.

Impairment in Language Content

Children who have expressive language disorders/delays in language content often give grammatically correct responses that do not make sense. They correctly use all the grammatical morphemes but give inappropriate responses (Lahey, 1988).

These children are sometimes described as hyperverbal. They have appropriate articulation, intonation and stress patterns but are weak in content. (Lahey, 1988).

They may be the hardest to identify with the specific problem as they sound like everyone else except they lack appropriate vocabulary in their communication.

Impairment in Language Use

Children who have expressive language use delays/disorders have learned how to use language to code ideas but have not learned to use it to communicate. (Lahey, 1988).

Ask whether the child:

- responds appropriately to social greetings?
- maintains the topic of conversation?
- initiates conversation with peers
- uses non-verbal communication appropriately?

Word Finding or Word Retrieval

Some children may have difficulty coming up with the word they wish to use. They often give the attributes of the item they are trying to name, or frequently use words such as this, that, thing and stuff. This may occur occasionally or constantly. In some children, word finding problems can greatly affect their spoken and written language as they have very few words that they can readily access. The skill of retrieving words needs to be directly addressed with these children.

What is a Phonological Awareness Impairment?

Phonological awareness is the ability to think about the form of language independent of its meaning (Rosner, 1993). It is the awareness of the sounds and syllables of words. Research suggests (Kahmi and Catts, 1989) this is a prerequisite for written language, i.e., reading and spelling development.

The following characteristics may indicate that a child is having difficulties with phonological awareness. The child has difficulty:

- recognizing long and short words
- counting syllables or beats in words
- recognizing and producing rhymes
- identifying beginning, final and middle sounds of words
- segmenting words into their component sounds
- discriminating differences between sounds
- learning letter-sound correspondences
- learning decoding skills
- learning spelling patterns

The following is a developmental continuum for the acquisition of phonological awareness skills.

- syllable awareness
- rhyme recognition
- rhyme production
- initial phoneme identification
- initial phoneme deletion
- final phoneme identification
- final phoneme deletion
- whole word segmentation

Although research has demonstrated a hierarchy in the development of phonological awareness skills, individual children may vary in their ability to master these skills. (Walsh, 1995, P.7).

What is a Pragmatic Language Impairment?

Pragmatics refers to the understanding and use of social language. It may include eye contact, topic maintenance, turn taking, and/or the appropriate use of social cues (Harris, 1994). The following characteristics may indicate that a child is having difficulties with social language. The child:

- has difficulty interacting with peers and/or adults
- violates conversational rules
- has limited eye contact
- interrupts frequently
- makes odd, irrelevant comments

- repeats content
- confuses listeners
- has poor topic maintenance
- dominates conversation
- violates personal space
- is unable to interpret and use non-verbal cues

Pragmatics refers to the use of language as was discussed briefly in expressive and receptive language. It has been included as a separate category as some children may have a distinct impairment in this area of language.

What is an Articulation Impairment?

An articulation impairment refers to errors in the production of speech sounds which are not consistent with the child’s chronological and/or cognitive ability (Alberta Health, 1993). The following characteristics may indicate that a child is having difficulty with articulation.

The child:

- is not understood by the teacher or unfamiliar listeners
- omits, substitutes or distorts sounds
- is in Grade 1 or higher and has difficulty with any sounds

Guidelines for articulation sound development.

Articulation Guidelines ¹		
As a general guideline, children are expected to produce the following sounds correctly at these ages:		Most common error sounds at these ages:
By age 3 years	p, b, m, w, h	
By age 4 years	n, t, d, k, g, ng	k, g
By age 5 years	f, y, sh, ch	sh, ch, k, g, f,
By age 5 years, 6 months	l, j, v	l, sh, ch, j
By age 6 years	s, z, th and blends e.g., sm, gl, bl, ps	s, l and blends
By age 6 years, 6 months	r	s, r

¹ Adapted by speech language pathologists, Elk Island Public Schools from: Sander, E. K. (1972) “When are speech sounds learned?” *Journal of Speech and Hearing Disorders*, 37, 55-63. Reprinted by permission of the American Speech-Language-Hearing Association.

This is a guide only. If a child is not correctly articulating a number of sounds and is difficult to understand, a referral should be made to a speech-language pathologist.

There are many reasons why children may have articulation errors. Following is a discussion of one of these reasons - motor speech impairments.

Motor Speech Impairments

Many diverse structures and systems combine together to produce speech. They are all regulated by the nervous system. Any damage or disease that affects this system will disrupt the ability to produce speech, resulting in a motor speech impairment. Children with these impairments are usually very difficult to understand and have many articulation errors.

Children with physical disabilities such as cerebral palsy often have motor speech disorders. However, children without physical disabilities can also have a motor speech impairment. Some children present with poor control of the muscles in the face and mouth. This creates problems in articulating and combining sounds in the rapid way necessary for speech.

Verbal Apraxia and dysarthria are types of motor speech impairments. Verbal Apraxia is the inability to perform coordinated movements with the tongue, lips and jaw. Dysarthria results from impaired motor control of the throat, tongue or lips.

Children with these motor speech impairments need intervention from a speech-language pathologist.

Children with any motor speech impairment may present with any or all of the following characteristics:

- drooling
- imprecise consonant articulation
- distorted vowel sounds
- difficult to understand
- groping of the tongue when speaking
- inability to move the tongue and lips on command

What is a Fluency Impairment?

A fluency impairment is more commonly referred to as stuttering. Stuttering is the disruption in the flow and rhythm of speech. These disruptions may be repetitions of words or parts of words, prolongation of a sound, or unusually long hesitations between words. A person who stutters may also exhibit behaviours such as facial grimaces or unusual body movements (Alberta Health, 1993). Stuttering often has a significant impact upon the child's/youth's self-esteem and social success. The following characteristics may

indicate that a child is having difficulties with fluency. The child:

- repeats sounds, syllables or words
- hesitates or blocks when speaking
- inserts sounds or fillers such as “um” or “ah”
- prolongs sounds within words
- exhibits frustration or embarrassment when speaking
- inserts the schwa vowel in repetitions
e.g. w wə wə want

Children who present with any of these characteristics should be referred to a speech-language pathologist.

What is a Voice Impairment?

A voice impairment exists when a speaker’s voice differs significantly along one or more of the dimensions of pitch, loudness, and quality in relation to the speaker’s age, and sex (Alberta Health, 1993). The following characteristics may indicate that a child is experiencing problems in the area of voice. The child:

- produces a pitch that is too high or too low
- sounds hyponasal (like you have a cold)
- has a harsh, hoarse or breathy sounding voice
- uses inappropriate volume when speaking, i.e., speaks too softly, too loudly, or with too little loudness variation (monotone)
- talks through their nose (hypernasal)

If you notice any of the above characteristics the child should be referred to the speech-language pathologist and/or family doctor. They will then refer to an ear, nose, and throat doctor to rule out medical causes.

What is a Hearing Impairment?

Children with hearing impairments can have mild, moderate, severe, profound, or total hearing loss. The loss may be congenital or acquired during or after language acquisition. It may originate in the middle ear, the inner ear, or both and may be fluctuating or progressive. Any degree or type of hearing loss in childhood can reduce exposure to spoken language, thus delaying the development of speech and language skills. This has academic implications for development of listening, speaking, reading, writing, and social skills. The following characteristics may indicate that the child is having difficulty hearing. The child:

- consistently speaks using inappropriate volume
- constantly asks for information to be repeated
- has a family history of hearing loss
- has “tubes” in the ears
- complains of earaches
- is inattentive or distractive

If you suspect a child has a hearing loss he/she should be referred to any one of the following; itinerant teacher for the deaf and hard of hearing, the speech-language pathologist, public health nurse, audiologist or family physician for a hearing screening.

**What are Other
Areas of Speech/
Language
Concern?**

There are a number of additional disorders that commonly have speech/language impairments as secondary to other conditions. These include conditions such as attention deficit/hyperactivity disorder, autism, emotional/behavioural disabilities, cerebral palsy, fetal alcohol syndrome, learning disabilities, or traumatic brain injury. Descriptions of these and other related conditions are given in Appendix A.

Pre-Referral

As an educator you may have a child in your classroom with a communication impairment, if so you can try some of the strategies outlined in this chapter. If these strategies do not help the child, a referral should be made to the speech-language pathologist.

If you have concerns and are unsure how to address them with the communicatively impaired child, you should discuss this with the speech-language pathologist. He or she will be able to offer support for the child. This support may take different forms depending on the needs of the child and the existing caseload of the speech-language pathologist. See Chapter 3.

It is important to remember that the ideas listed in this chapter are only suggested guidelines and the list is not complete. As a teacher you may have strategies of your own to try. Remember to record the things you have tried and how the child responded. This will be important to people working with the child in the future.

How to Help the Child with a Language Impairment

Implementing Communication Strategies: General Principles for Stimulation

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All day, everyday:

1. **Get down to the child's physical level.**
 - get face to face
 - sit on the floor
 - use a lower chair
2. **Slow down your rate of speech.**
 - this allows time for the child to process your message
 - keep this rhythm natural
 - try inserting pauses at natural phrase breaks.
(e.g., "Good morning, John... pause ... How are you today?" or "Today is Friday, ... pause ... November 18th.")
 - a recommended rate is 60 words per minute
3. **Wait for the child to respond.**
 - children need time to process a message and to generate an answer

- count at least 10 seconds before providing prompts or rephrasing a question

4. **Take equal communication turns. We are already adept communicators.**

- simplify and shorten your language so that you are just one step ahead of the child

i.e., if he/she is using one word phrases, your instructions should be no longer than 3 words

- give the child opportunities to “break into” conversations
- play games and sing songs that involve repetition and participation

☆ These 4 principles are the core for stimulating communication development.

☆ Try to brush up on your use of these techniques by focusing on one area at a time until you become an expert.

☆ Even experts must continually monitor how they use these techniques. Evaluate your performance from time to time.

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C o m m u n i c a t i o n Technique: Questioning
Techniques

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The adult uses questioning techniques throughout an activity to elicit a response from the student and maintain the conversation. Asking interrogative type questions such as Who? What? When? Where? Why? What will happen next? assist in encouraging a response and modeling an answer.

Technique: Modeling

Modeling involves the teacher modeling appropriate language during the conversation. If the student has difficulty pronouncing words, the teacher models the appropriate way to pronounce the word. The

goal is to provide opportunities for the student to hear appropriate language.

Technique: Expansion

Language expansion entails taking what the student has said and expanding it to include more words. This method assists in increasing the repertoire of words the student uses and to indicate interest and maintain a conversation.

Purpose:

1. To reinforce a student's attempt to communicate.
2. To give additional information on the topic to the student.

Technique: Self-Talk

Self-talk involves talking through the sequence of events in the activity you are involved in with the student. The teacher speaks about exactly what he/she is doing. Now I will ...; Then I will..; Next ...

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ONGOING OPPORTUNITIES FOR LANGUAGE DURING THE DAY

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Context	Opportunity for Intervention
Arrival	Pragmatics; initiating conversation; communication cycle; intelligibility; handling transition
Homeroom	Comprehension of and following directions; organization of day; planning
Social Studies	Using contexts of units for vocabulary expansion, word meaning; intelligibility; thought organization
Math	Categories; quantitative terms; synonyms; opposites; time; logic; cause-effect; prediction; closure
Reading	Listening; phonic comparisons; sound-symbol relationships; retelling a story; prediction; “wh” concepts related to stories; pronunciation
Language Arts	Sentence construction; verb agreement; translating thoughts into writing; making words say what you mean; topic selection; description
Lunch	Sequencing; organization; computation; quantity concepts; communication cycle; requesting; listening
Science	Prediction; cause-effect; attributes; categorization; sequencing; questioning; quantitative-qualitative concepts
Hallway transitions	Managing time; conversation; organization; social skills
Dismissal	Sequencing; planning; organization; social discourse rules

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Receptive Language Strategies

If it is suspected that a child has a receptive language impairment (difficulty listening to or understanding language), some of the strategies below can be used. The strategies are not specific to form, content, or use. They are more general. As you work through them you may be able to determine the specific areas of strength and need of the child in question.

- Has the child had a hearing test in the last twelve months?
- Give the child a visual cue with verbal directions.
- Say the child's name or touch them on the shoulder to cue them when directions are being given.
- Teach listening rules in the classroom, i.e. look at the person who is talking, keep your body still and quiet while someone else is talking, ask for clarification when you do not understand, and summarize the directions for the teacher when he/she finishes talking. Summarizing the directions can be done privately between one child and the teacher as a practice exercise until the child can do it independently and silently.
- Give one direction at a time, i.e. go to the story corner, when the children get there then give the next direction; look at page 5 in your reader and Sarah will read. This can be difficult to interpret if all three steps are given at once while students move around.
- Teach the meaning of words. Talk about what words mean if you suspect some students do not know. This can be done in the context of the lesson. ie. The focus is on simplifying fractions in math class. The teacher tells the students that if you end up with a prime number as the denominator when simplifying fractions, you can't simplify any further. To apply this, the student needs to know the meaning of denominator, prime, and simplify. Within the math lesson these words should be defined many times. It may not be sufficient to only define the words the first time they are presented. The student with a receptive language impairment will need to hear the definitions over and over.

It is important to consider the match between child language and teacher talk when teaching the child with a receptive language impairment. Consider the language we use within the classroom and how different this is from language used elsewhere in the child's world. Oral and written language are the primary media by which we attempt to educate and some children struggle with the comprehension and interpretation of these modalities.

Expressive Language Strategies

If you suspect a child in your class has an expressive language impairment (difficulty producing language), you can try some of the strategies below. The strategies are not specific to form, content, or

use. As you work through them you may be able to determine the specific areas of strength and need of the child in question.

- Has the child had a hearing test in the past twelve months?
- Create opportunities for the child to verbally interact with peers. Pair children to share stories of what they did on the week-end and then have the children report to the class what they have learned from their peer. If this is very difficult for the child who has weaknesses in expressive language, accept a short phrase response and model elaborating for the child. Praise them for offering the information. Accept all child responses.
- Model full sentence responses for the child when conferencing one to one. If the child responds in an incomplete sentence, acknowledge their response and offer a full sentence.
- Plan activities or lessons that focus on talking about what things are. This is referred to as oral vocabulary. This may be difficult for expressively impaired children. Begin with items familiar to the child. i.e. Tell me what a book is, a car, or a pet.
- Encourage the child to speak in class, create an accepting environment where everyone's opinions are valued.

Pragmatics

Pragmatics or the understanding and use of social language involves both receptive and expressive language. Some children will need direct instruction in the social aspects of language. Try the following activities.

- Practice appropriate body language. Make facial expressions and ask students to tell you how they think you feel. e.g., mad, happy, sad, angry, or excited.
- Teach conversational skills in the classroom.

☆ Components

- turn-taking
- recognizing and responding to a topic
- ensuring clarity of your part of the conversation
- requesting clarification
- topic transitions and time factors
- terminating a topic

☆ Strategies for Teaching Conversation Skills

- Start with short conversations on one topic.
- Provide additional cues if the student does not respond (gestures, clarification).
- Provide the student with time to process information when beginning a conversation.

- Allow the student time to spontaneously initiate a conversation.
 - If the student does not initiate a topic, choose a topic which is of interest to him/her.
 - Encourage the student to listen to others as they speak.
 - Do not ask questions which require only a yes/no response.
 - Keep the conversation going by asking questions, responding to questions and acknowledging statements. Confirm statements by repeating them.
 - Use other people in the environment to keep the conversation going.
 - Give the student indicators that the topic is going to change.
 - Clarify unfamiliar topics.
 - Help the student develop strategies to fix a conversation that is not going well.
- Practice accepting criticism and compliments. Do this by giving examples and showing how to appropriately respond. e.g. Model how to respond to a friend who says, "I really like your coat".
 - Practice initiating conversation. Have students practice this with a peer using role playing. e.g. What do you do if you need help in a store? One person is the store clerk and the other student is the one looking for information.

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For more information on pragmatics or social language activities see Appendix E.

How to Help the Child With an Articulation Impairment

If the child is intelligible (understandable):

- Try to identify the sounds the child is having difficulty with.
- Model a word beginning with a sound he is having difficulty with. Ask the child to repeat it after you. i.e. If you identified /k/ as a sound the child has difficulty with say "kite". If the child repeats "kite" correctly then continue to remind him/her, on an individual basis, to use the /k/ sound. Also tell the parents to remind the child. Monitor this child's speech and if there are no improvements in 6-8 weeks refer the child to the speech-language

pathologist. If the child is unable to repeat “kite” correctly then a referral to the speech language pathologist is necessary.

The speech-language pathologist may provide suggestions for home and school and work directly with the child or they may provide home and school ideas and monitor the child.

If the child is unintelligible a referral to the speech language pathologist should be made as soon as possible. The speech-language pathologist will provide suggestions for all members of the ISSP team.

How to Help the Child who Stutters

Tips for talking with the child who stutters:

- Use a relatively slow, relaxed rate in your own conversational speech.
- Listen to what the child is saying. Respond to that, rather than the stuttering.
- Give appropriate responses to what the child is saying such as head nods, smiles, and “uh-huhs”.
- Keep natural eye contact when the child is talking.
- Don’t rush the child by interrupting or finishing words for him. Don’t let others rush or tease the child.
- Be a good listener and maintain normal eye contact with the child.
- Reduce speed and tension in the environment.
- Don’t make too many demands on the child in general.
- Don’t tell the child to slow down or “relax”.
- Don’t complete words for the child or talk for him or her.
- Be generous with praise and positive encouragement to build up the child’s self-image.
- If you have questions or concerns, contact the school speech language pathologist.

(Taken from Therapy in Action: The School-age Child Who Stutters. Stuttering Foundation of America.)

How to Help the Child With a Voice Impairment

Due to the possibility of a medical cause of a voice problem, all children with voice impairments, as described in chapter one, should be referred to the speech-language pathologist or the child’s family doctor for referral to an ear, nose and throat specialist.

How to Help the Child With a Sensory Impairment

Helping the child with a hearing or visual impairment requires collaboration with the itinerant teacher for the deaf and hard of hearing and/or the itinerant teacher for the blind and visually impaired and the speech language pathologist. Refer to chapter three for programming suggestions.

**Classroom
Strategies for
Meeting
Communication
Needs**

How does speech/language programming support children in meeting the outcomes of the language arts curriculum?

The Atlantic Canada English Language Arts Curriculum recognizes the interdependence of listening, speaking, reading, viewing, writing and representing skills.

Language is learned most easily when the various language processes are integrated and when skills and strategies are kept within meaningful language contexts. The curriculum specifies that English language arts be taught in an integrated manner so that the interrelationship between and among the language processes will be understood and applied by children. This integrated approach should be based on children's prior experience with language and on meaningful activities involving speaking, listening, reading, viewing, writing, and other ways of representing (Atlantic Provinces Education Foundation Language Arts Committee, 1997). Although listening and speaking will be referred to separately for the purpose of describing classroom strategies, it is understood that development of any one process is dependent on and will affect the development of the other processes.

The general curriculum outcomes of the Atlantic Canada English Language Arts Curriculum identify what children are expected to know upon completion of the language arts curriculum. There are three general curriculum outcomes for speaking and listening.

Children will be expected to:

- speak and listen to explore, extend, clarify, and reflect on their thoughts, ideas, feelings, and experiences
- communicate information and ideas effectively and clearly, and to respond personally and critically
- interact with sensitivity and respect considering the situation, audience, and purpose (Atlantic Provinces Education Foundation Language Arts, 1997).

Listening and speaking form the basis for developing reading and writing skills. For most children, the development of listening and speaking skills in the preschool years progresses naturally to the learning of early literacy skills in the primary years. However, this is frequently not the case for children who have speech/language impairments. Teachers and SLPs support children with communication impairments in meeting the

outcomes of the language arts curriculum by facilitating their speech/language development. They also support these children by making all of the curriculum more accessible to them.

How Can Teachers Support Children Who Have Communication Impairments?

The implementation of classroom strategies enable a child's more general communication goals to be met in the regular classroom by addressing communication needs while capitalizing on the child's strengths. Depending upon the child's needs, strategies can also be used at home to promote consistent modelling of appropriate communication (Programming for individual needs: Pre-referral intervention, 2000).

The teaching of strategies for improving communication and learning in the classroom is based on several assumptions:

- learning of strategies is more effective than learning content alone
- children and teachers can learn strategies to aid classroom communication
- children and teachers can apply strategies across content and tasks (Florida Department of Education, 1995).

The following section lists strategies for use by children who have communication impairments. At support services planning meetings, team members select strategies that help meet child needs. These strategies are then used by children and personnel in all environments. When used consistently, classroom strategies and interventions contribute to increased academic and social success. Many strategies listed below are appropriate for any communicative environment: school, home, or community. For a comprehensive listing of classroom strategies and interventions for children who have communication impairments, see The Pre-Referral Intervention Manual (Hawthorne, 1993) and The Speech and Language Classroom Intervention Manual (Hawthorne, 1990).

How to Support Children Who Have Language Impairments

Impairments of language include varying degrees of difficulty in receiving, processing, interpreting, organizing, formulating and/or expressing symbolic information. One or more of the following areas of language may be involved morphology, syntax or semantics. Language impairments may result from a congenital disorder or syndrome (see Appendix A for a list of conditions associated with communication impairments) or an acquired disorder or condition. There are many cases of delayed language acquisition in the absence of any known disorder. In these cases

the cause of the language impairment is difficult to determine (Health and Welfare Canada, 1982).

Many different programs for language intervention are available commercially and in the professional literature. Programs, which range from naturalistic to structured may have a global language emphasis or focus on a specific linguistic area such as language form or content. When required, programs are adapted by the SLP to meet the needs of the child. The SLP may choose to adopt a developmental sequence based on the information available about normally acquired language or choose to work on specific structures related to the major area of need. The words and structures taught enable the child to talk about objects, people, and events in the academic, home and community setting. Many language stimulation methods help the SLP address the child's language needs. Examples of methods commonly used are imitation, modelling, expansion, parallel talk, self talk, sentence completion, word substitution, combination of words and sentences, and question formulation (Health and Welfare Canada, 1982).

Receptive Language (Listening) Strategies

Children can use strategies to help themselves comprehend and retain verbally presented information. Some strategies that can be taught to children who have receptive language impairments are to:

- rehearse the teacher's information internally after the teacher finishes speaking
- signal the teacher when directions have not been understood
- ask for repetition of directions
- ask for clarification of directions by focusing on the specific part of the direction that was not understood
- know the teacher's cues for classroom routines
- watch faces and body language for cues to meaning
- sit close to the speaker and/or as far from distractions as possible
- request seating in a quiet place (Florida Department of Education, 1995).

Some strategies that teachers can use to support children who have receptive language impairments are to:

- provide seating close to the teacher and the chalkboard away from the window and door

- reduce visual distractions
- eliminate auditory and visual distractions before giving directions or instruction
- gain attention before giving directions or instruction
- use a phrase or visual prompt before giving directions or instruction
- establish eye contact before giving directions or instruction
- speak more slowly
- speak clearly
- stress key words in a sentence
- vary loudness to increase attention
- give directions in several small steps
- give directions in a time-ordered sequence (e.g., “first...next...finally”)
- pair directions with gestures or visual cue (picture, object)
- repeat or paraphrase directions
- ask the child to repeat the speaker’s message to ensure comprehension
- use direct requests (e.g., “Please close the window” rather than “It’s cold in here”)
- modify the oral vocabulary and language structures used
- pre-teach specific vocabulary needed
- review previously learned material
- connect new vocabulary or information with that previously learned
- avoid idiomatic or figurative language
- provide more response time
- use visual aids, such as pictures, diagrams, graphs, or written key words
- avoid asking the child to listen and write simultaneously
- emphasize instructional transitions
- summarize the lesson at the end
- ask a peer to repeat or clarify instructions for the child
- ask a peer to take notes for the child
- prompt the child to use receptive language strategies and skills, following the specific recommendations of the SLP.

Teachers can also evaluate and modify the classroom environment to all children, not only children who have receptive language impairments. Teachers can:

- establish a bare wall that children can face to limit distractions
- establish several quiet areas
- reduce noise through carpets or wall coverings
- enhance classroom acoustics through an amplification system
- evaluate and modify their own voices (rate, clarity, and volume of speech) (Florida Department of Education, 1995).

Expressive Language (Speaking) Strategies

Children with expressive language impairments can use strategies to help themselves produce elaborated verbal information, such as:

- use the information given in a question to help form a response
Teacher: What is the capital city of Newfoundland?
Student: The capital city of Newfoundland is St. John's.
- expand on statements of fact, belief, or feelings (e.g., add descriptive terms such as adjectives and adverbs to sentences)
- use meaningful vocabulary within the curriculum content (Florida Department of Education, 1995).

Some classroom strategies that teachers can use to support the child who has expressive language impairments are to:

- allow time for the child to process the question and formulate an answer
- ask questions beginning with wh-words (i.e., who, when, where, why, how) rather than questions that require a "yes" or "no" answer
- ask clarifying questions if the child's message is not clear
- model sentences by repeating the child's message in a correct sentence form

Student: She runned fast

Teacher: Yes, she ran fast.

- ask the child to imitate the sentence in correct form, emphasizing target words when appropriate
- break the sentence down for imitation purposes

Teacher: "In the box", you say it

Student: In the box.

Teacher: "The ball is in the box" you say it.

Student: The ball is in the box.

- expand on the child's use of words, phrases, or incomplete sentences by repeating the child's message and adding to it
Student: Went to the park.
Teacher: You went to the park and played on the swings.
- add to the child's message by paraphrasing and expanding on it
Student: It's cold.
Teacher: Cold air is coming in because the window is open.
- prompt answers by presenting choices ("Was it X or was it Y?")
- use question cues to elicit target structures
Student: Him going to school.
Teacher: Where is he going? Who is going to school?
- repeat the child's sentence with a question intonation to encourage the child to restate it in another way
- facilitate word retrieval by using meaning cues ("A knife and a ____": "It's a type of animal")
- facilitate word retrieval by providing the first sound of the intended word (e.g., "Another word for small is "____")
- prompt the child to use expressive language strategies and skills following the specific recommendations of the SLP.

Phonological Awareness Strategies

To support the child with phonological awareness impairments teachers can provide activities to develop skills in (listed in order of difficulty):

- identifying, deleting and manipulating syllables within words
- recognizing and producing rhymes
- identification of initial and final consonant sounds in words
- segmentation of initial and final consonant sounds in words
- segmentation of all sounds in words (e.g., "c-a-t")
- manipulation of sounds in words

Phonological awareness activities can be part of the regular classroom program before formal exposure to print. In teaching phonological awareness, teachers can use the following classroom strategies:

- model the target (i.e. sound or word) frequently
- stress the target in speech
- give children having difficulty a response choice
- reward approximations of success

Examples of activities that will benefit all children in hierarchical order include:

- counting syllables in words by clapping hands, stamping feet, or moving one token for each syllable of a word
- listening to stories or poems with many rhyming words
- judging whether words rhyme
- categorizing on the basis of rhyme
- generating real and nonsense rhyming words
- listening to stories or poems with many words beginning with the same sound
- categorizing pictures, objects, or words according to the sound
- begin or end with moving blocks or tokens which represent each sound in a word while producing the sounds slowly then blending the sounds together to make the word (Walsh, 1996)

How to Support Children who Have Phonological Awareness Impairments

With their training in the sound structure of language, SLPs play a central role in the design and implementation of phonological awareness programs. Many children with speech/language impairments have difficulty learning to read partly because of their needs in the area of phonological awareness and concomitant decoding difficulties (Catts, 1991). Because SLPs provide services to these children, SLPs have the opportunity to incorporate phonological awareness activities into the children's classroom small group or individual programming. With early identification by the SLP and/or the teacher, intensive programming may begin as early as Kindergarten, thus reducing the children's risk of encountering reading difficulty.

Pragmatics (Language Use) Strategies

Children can use strategies to help themselves interact in a more appropriate manner following the social rules of conversation. Strategies that can be taught to the child who has pragmatic impairments are to:

- communicate from an appropriate distance
- face the speaker when listening or the listener when speaking
- use appropriate eye contact
- match body language to message
- use intonation to reflect meaning
- enter and exit conversations appropriately
- use standard scripts to acknowledging or to give criticism or praise

- self monitor the volume and pitch of speech
- monitor the listener's reaction and body language
- use different styles of communication with teachers, peers, family, and authority figures (Dodge, 1994; Florida Department of Education, 1995).

Some strategies that can be used to support the child who has pragmatic impairments are to:

- allow the child to initiate a conversation
- choose a topic of interest to the child
- provide the child with time to process information at the start of a conversation
- encourage the child to listen to others
- encourage the child to use words rather than actions to achieve needs
- maintain the conversation by asking questions that begin with wh-words (i.e., who, what, when, where, why, how) rather than questions that require a "yes" or "no" response
- acknowledge statements by repeating them
- engage third parties in the conversation
- use direct requests (e.g., "Please close the window" rather than "It's cold in here")
- indicate to the child when the topic is going to change
- clarify unfamiliar topics
- emphasize the rules of conversation such as eye contact, listening, and turn-taking
- provide explicit verbal feedback when the child breaks a conversational rule
- model an appropriate response when the child breaks a conversational rule
- encourage strategies to initiate, interrupt, join, maintain, repair, and terminate a conversation (Ontario Ministry of Education, 1994)
- prompt the child to use pragmatic language strategies and skills, following the specific recommendations of the SLP

How to support children who have pragmatic impairments

The SLP takes advantage of activities that enhance the use of language for communication with different types of people in different situational contexts and for different purposes. The communication situations can be natural or contrived (e.g., role

play). However, preference is given to natural situations such as those occurring in the classroom, school, home, and community environments (Health and Welfare Canada, 1982). In some cases children with pragmatic impairments need direct teaching of the skills required to participate successfully in a conversation.

Articulation

Articulation is the movement of the speech mechanism to produce speech sounds. A phonological disorder is a speech sound disorder but different from an articulation disorder. Phonology is the sound system of a language, and the rules that govern sound systems. Children with Phonological impairments are usually quite difficult to understand. While children with articulation impairments may not have reduced intelligibility, or if it is it may

be only slightly reduced. Individuals with phonological disorders are usually more severely impaired than those with articulation disorders. They are also more likely to have reading and spelling difficulties than children with articulation impairments.

SLPs teach children how to position the articulators to reproduce oral movements that result in accurate speech sound production. Generally, programming proceeds from discrimination and practice of speech sounds in isolation to practice in syllables, words, phrases, and sentences. Generalization to reading and conversational use occurs when a child is able to self-monitor and self-correct continuous speech.

How to help the child with an articulation impairment

When an articulation impairment has been identified the following things need to be considered.

Where do I start?

- Obtain a list of the sounds the child is working on.
- Find out which sounds are currently the focus of therapy.
- Can the child produce the sound in isolation? If yes then the sound can be practiced at the beginning of the word. If not the speech-language pathologist will work on the sound until it can be produced in isolation.

How to practice.

In all of the below activities picture cards can be used with the appropriate target words on them. If you do not have access to these, call your speech-language pathologist. She/he will be able to supply these for you.

What position of the word is being targeted?

e.g., the beginning of the word is the easiest place to start. From here the medial position and then the final position of the word is targeted.

Practice the sound consistently for short periods of time.

e.g., ten minutes a day is better than thirty minutes twice a week.

When the child has mastered the word level then practice in short phrases.

e.g., for working on /k/ you could use phrases with words that begin with /k/ such as “fly a kite”, “talk to Kim”, “I have a cat”.

The next step is to use the target sound in sentences.

i.e. again use the picture cards to indicate the word to put in a sentence.

Finally the child is required to use the target sound in conversational speech.

Some classroom strategies that teachers can use to support children who have articulation impairments

- say the misarticulated word, phrase, or sentence back to the student using accurate articulation and exaggerating the target word, phrase, or sentence
- say the misarticulated word, phrase, or sentence back to the student using accurate articulation and exaggerating the target word, phrase, or sentence, and ask for repetition
- provide a choice between the inaccurate production given by the student and the accurate production (“Did you say dipper or zipper?”)
- provide a visual cue to encourage self-correction (a questioning look or a hand cupped behind the ear as if to indicate “I didn’t quite hear you”)
- repeat the student’s production with a question intonation to encourage the student to say it in another form
- prompt the student to use articulation skills, following the specific recommendations of the speech-language pathologist

Some classroom strategies that teachers can use when they have not understood the child

- ask the student to repeat the word, phrase, or sentence (“Tell me again”)
- repeat the portion of the phrase or sentence that has been understood and add a question word to indicate to the student what has not been understood (“Matthew said what?”, “You went where?”)
- request the student to rephrase or elaborate on the sentence by asking for more information (“Tell me more about it”)
- ask the student a question that can be answered with a “yes” or “no” to narrow down the content (“Is it at home?”)
- request the student to give a visual or gestural clue (“Show me”)
- when the content has been understood, repeat the phrase or sentence to the student (“Oh, you went to a movie on Saturday”) to give positive feedback and provide an accurate model

Initially these activities may be done in the classroom or in the individual session room with the speech-language pathologist. These steps also need to be done at home. Practicing in different environments allows the child to transfer what he/she has learned to everyday life activities.

How to help the child with a phonological disorder

Children with phonological disorders have created new rules for sound production. They may produce sounds in the front of the mouth that are supposed to be produced in the back of the mouth. (e.g., instead of saying “car” and “good” they say “tar” and “dood”). This process is called fronting. Children with phonological disorders may have many processes that change the rule system normally in place for English speech sounds. These processes will be identified by the speech-language pathologist. Then suggestions for the sounds to work on will be provided for home and school.

How to practice

The same principles that were outlined above for articulation errors will apply unless otherwise indicated by the speech-language pathologist. It is important to remember that children with phonological disorders will probably make slower progress than children with articulation delays. The involvement and direction from the speech-language pathologist is imperative in these cases as their speech patterns are often complicated and require analysis.

Augmentative and Alternative Communication

What is Augmentative and Alternative Communication (AAC)?

Augmentative and alternative communications (AAC) are used with children who may have some language skills but have needs which preclude the exclusive use of oral expressive language (Cook & Hussey, in press). Such systems are either complimentary to oral communication (augmentative) or used solely (alternative). The use of an augmentative communication system may be used in conjunction with traditional oral language intervention. In general, exclusively non-oral approaches are used only when oral approaches have been unsuccessfully attempted (Health and Welfare Canada, 1982). The following characteristics may indicate that a child could benefit from an AAC. The child:

- has no speech
- seems unwilling to communicate
- has a particular diagnosis such as spastic cerebral palsy, pervasive developmental delay, or brain injury which makes the child's/youth's communication difficult to understand.

Decisions about AAC should always be made with the ISSP team. The speech-language pathologist should be involved in the programming for children with AAC. If you do not have access to a speech-language pathologist the child should be referred to their family doctor to rule out any medical concerns.

How to Help the Student Who Uses an Augmentative and/or Alternative Form of Communication

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- **Use the communicative behaviours that have been identified.**
 - respond to the child as though his/her behaviour is communicative
 - repeat the activity that stimulated the behaviour
 - reinforce the behaviour by providing the desired reaction
 - shape the response so that it occurs consistently
 - provide the symbolic referent for the communication you have identified (i.e., say the words, model the signs, or point to the picture symbol)
- **Establish an interactive environment.**
 - show interest in what the child is interested in
 - provide choices of activities or rewards
 - generate peer interaction through play or group activities
 - encourage students to communicate with each other through turn-taking and role-playing
 - use non-disabled peers as role models
- **Develop opportunities and motivation to communicate.**
 - provide choices
 - don't give away desired items for "free"; insist on communication
 - phrase instructions so that the student must respond
e.g., instead of "Go get your coat" try "We're going outside. What do you need?"
- **Be predictable.**

All children thrive on consistency and repetition. Building repetition into classroom routines helps the student to realize that certain events are followed by predictable results.
- **Be consistent.**

Any task is easier to learn when the expectation is the same in similar situations. Ensure that all caregivers, teachers, assistants, parents and volunteers provide the same demands for communication.

What AAC should provide for the child.

The ability to communicate wants and needs to other individuals in their environment.

The opportunity to share information with others through the use of AAC. An augmentative and alternative communication device may be used during the following classroom activities.

- | | | | |
|-------|--|-------|--------------------------------|
| _____ | Journal writing | _____ | Story writing |
| _____ | Messages from home or school | _____ | Choosing recess or lunch items |
| _____ | Morning weather routines | _____ | Sharing news |
| _____ | Morning prayer or other repeatable phrases | _____ | Calendar time |

The opportunity to establish and maintain personal relationships.

The ability to conform to social conventions and be polite.

Remember the AAC system should help the child to communicate more effectively. While you may think it is cumbersome or awkward it is not nearly as awkward as not being able to communicate. Also always try a low tech device before going to a high tech expensive system.

**Things to consider
when choosing an
AAC system for a
child?**

Is the child currently able to communicate wants and needs?

Is the child able to develop and maintain personal relationships?

Is the child able to participate in classroom activities?

Does the child have intentional communication?

Can the child choose between two things?

What things does the child need to be able to communicate?

Have you tried a simple picture board?

Can the child combine words to make phrases or sentences?

After considering these things you may want to discuss the possible AAC systems available with a speech-language pathologist.

What is available for children who need AAC?

Augmentative and Alternative Communication Strategies

Augmentative and alternative communication (AAC) systems may require a low or high degree of technology. Examples of low technology systems are signing and gestural systems, symbol systems (e.g., PIC, rebus, Blissymbolics) or pictorial and traditional orthography (spelling). In addition to these traditional methods, high technology electronic and mechanical aids are available. Many communication aids have printed and/or speech output (e.g., a word processor or a voice output communication aid such as an Alpha Talker). There is a hierarchy of abstractness of systems and the symbols they utilize (i.e., from least to most abstract: real objects, miniature real objects, colour photographs, black and white photographs, drawings, symbolic drawings, written words). The specific configuration of the communication system(s) and the complexity of the vocabulary needs to be custom designed for the individual child (Health and Welfare Canada, 1982; Newfoundland Department of Education, 1996c: 1996d). Further information on the use of technology for communication is available in Programming for individual needs: Using technology to enhance students' differing abilities (Newfoundland Department of Education 1996d).

How to support children who use AAC systems

Augmentative and alternative communication systems are developed when appropriate by the SLP and other support services planning team members. The SLP suggests ways to maximize a child's speech language and communication during natural interaction and formal classroom activities. They help develop vocabularies, design overlays, suggest strategies to facilitate integration of children into communication exchanges and incorporate speech/language development into the ISSP. Other support services planning team members who may be involved in assessment, selection, and evaluation are the child, family, occupational therapist, physical therapist, itinerant teacher for the visually impaired, challenging needs teacher, special education teacher, classroom teacher, and technical aids specialist (Newfoundland Department of Education, 1996d; Treffer, 1992).

Training the child to use the system may be long term if the child is in the process of acquiring language. The emphasis is on maximizing functional communication, the transmission of messages and the generation of spontaneous utterances. To increase the probability of the child's functional use of the communication device. SLPs can demonstrate its effective use to all individuals who have contact with the child (Health and Welfare Canada, 1982).

In teaching children to use AAC, the SLP focuses on everyday functional communication and the generation of spontaneous words, phrases, and sentences. The system is regularly reviewed by the SLP and other support services planning team members to determine system adaptations that are appropriate to changes in linguistic development or in the child's home or school environment. In addition, ongoing advances in technology continue to increase the range of communication aids that are available. The SLP is involved with children who use AAC systems on a long-term basis (Health and Welfare Canada, 1982).

Some strategies that can be used for the child who uses AAC systems are:

- acknowledge and support the child's natural forms of verbal and gestural communication
- encourage the use of naturally occurring communication such as a head nod or shake rather than directing a child to use output or a symbol
- integrate all of the child's communication systems (natural, augmentative, or alternative) into all activities throughout the school day
- continue to speak when communicating with a child using an AAC system
- encourage frequent use of the AAC system, particularly during the initial training period
- indicate clearly and consistently that a response is expected from the child
- avoid anticipating child's needs and wants
- encourage interactive use of the AAC system rather than practice or drill
- structure the classroom environment so that it facilitates natural use of the AAC system
- provide meaningful classroom situations that facilitate communication
- provide communication boards specific to classroom activities (e.g., storytelling)
- replicate communication symbols around the classroom and throughout the school so that the environment becomes a communication board
- role play to practice communication appropriate to school, home, and community
- encourage use of the AAC system in the school, home and community

- demonstrate effective use of the AAC system to other support services planning team members and to everyone who has contact with the child
- designate a support services planning team member(s) in the child's immediate environment to facilitate day-to-day use in functional communication situations at school, at home, and in the community (Florida Department of Education, 1996c: 1996d)

Autism/Pervasive Developmental Delays and Communication

Children with autism and/or pervasive developmental delays (P.D.D.) have communication difficulties that should be one of the main focuses of programming. "The characteristics included in the criteria for diagnosis of autism fall into three major categories of communication, social interaction, and unusual behaviours and interests" (Saskatchewan Education, 1998, p.9). Although the development of speech may vary, all individuals with autism display some degree of difficulty in communication. Some may be non-verbal while others may have extensive vocabularies with deficits in pragmatics. Pragmatics is the social use of language and is a common area of difficulty for children with autism and/or P.D.D.

Approximately 50 percent of autistic individuals do not develop spoken language skills. Those that develop language skills have difficulty engaging in extended conversations (Society for Treatment of Autism, pamphlet).

Common language characteristics in children with autism

- The child is primarily echolalic, repeating everything heard, or mute, saying nothing.
- Faulty prosody resulting in robot sounding speech, inappropriate pitch, rhythm, inflection, intonation, pace, and/or articulation.
- Difficulty in developing normal pronoun reference.
- Word retrieval problems in the absence of visual cues.
- Impaired ability to read nonverbal cues or body language.
- Impaired pragmatic skills (e.g., topic maintenance, eye contact, social greetings, proximity and body contact).
- Impairments in language comprehension.

Things to try with the child who has autism or PDD

Have a picture and/or word representation of the daily schedule in the classroom. Begin the day by reviewing the days events with the child. Allow him/her to feel secure and in control of their environment.

If the child is non-verbal have picture communication symbols to allow effective communication. See the section on augmentative and alternative communication. Always accompany the picture symbol with the verbal response.

Depending on the child's cognitive ability language suggestions under receptive and expressive language may be appropriate.

Social language activities may also be appropriate. See section on pragmatics in appendix E.

When working on communication with the child who has autism or PDD remember to make the activities functional and as close to real life as possible. Involve significant others and focus on the child's interests whether he/she is non-verbal and using picture communication or producing complex sentences but pragmatically incorrect.

Cognitive Delay

The American Psychiatric Association definition of mental retardation, as published in the Diagnostic and Statistical Manual (DSM IV 1994) is used to define cognitive delay in the Definitions of Exceptionalities by the Division of Student Support Services, February 1998 (see page 22). Communication is one of the domains listed as a possible area of difficulty for this population.

Children with cognitive delays will have communication impairments. They may present with speech and/or language delays/disorders. The degree of severity and the type of communication impairment may be different with every child with a cognitive impairment. All children with cognitive delay will exhibit some communicative impairment whether mild or severe. This is because the development of speech and understanding of language are dependent upon intellectual functioning. The language age of a child can not exceed their mental age.

Common speech and language characteristics in individuals with cognitive delay

- Articulation development may be normal but delayed. Depending on cognitive level they may never "catch up" with correct speech production.
- Speech problems may be a result of other physical difficulties or motor programming problems (apraxia).
- Stuttering is more prevalent in this population.
- Probably understand more than they can say.

- Language skills vary greatly with the degree of severity of the cognitive impairment.
- Most children who have cognitive delay will produce meaningful language but with the following characteristics:
 - reduced content
 - low vocabulary
 - short utterances
 - omission of function words
- Incidence of articulation errors are higher in this population.
- Intelligibility of speech is reduced.
- Most affected sounds are /s/,/sh/, /ch/,/f/,/z/,/th/ and /r/.

Things to remember when working on communication with the child who is cognitively delayed

- Activities must be meaningful to the child.
- Communication intervention should involve significant people.
- Activities promoting communication should cross multiple environments.
- Social interaction is imperative for communication development.
- Teach normal developmental milestones (see appendix F).
- Some of these children may need an augmentative and alternative communication system. See the section on augmentative and alternative communication.

Listening Skills

Listening skills need to be taught to all children. This is especially true for the cognitively delayed population. See section on receptive language.

Fluency (Stuttering)

How to support children who have fluency impairments

Some strategies that can be used to support children who have fluency impairments are to:

- avoid asking questions that require lengthy or complex oral responses but do not excuse the child from oral participation

- reduce the pressure to respond to questions immediately
- maintain eye contact with the child while listening or speaking
- respond to what the child is saying rather than how it is being said
- maintain a schedule that fosters a calm, unhurried atmosphere
- model and use a slow rate of speech (e.g., like Mr. Rogers in Mr. Rogers' Neighbourhood) when speaking individually with the child
- speak in short sentences with younger children
- pause between phrases and sentences
- prompt the child to use fluency skills following the specific recommendations of the SLP.
- in junior and senior high ask the child what you can do to help him/her with their speech.
- if everyone in the class is going to answer a question, call on the child who stutters fairly early. Tension and worry can build up the longer he/she has to wait.
- ensure all children have a fair turn to speak with lots of time.
- for more information call the Stuttering Foundation of America at 1-800-992-9392.

Programming for children who have fluency impairments involves teaching and reinforcing fluent speech and encouraging a positive attitude toward speaking. Fluency is facilitated by the SLP through teaching one or more of the following skills; rate control, relaxed breathing, gentle starts to phrases, soft articulatory contacts, and smooth blending between words. Skills are taught using a hierarchy of gradually increasing speech rate (from slow to faster), length (from syllables to conversation) and spontaneity (from highly structured to more natural exchanges) (Boberg & Kully, 1985).

Gifted Children

See the Definitions of Exceptionality, Division of Student Support Services, for a definition of gifted children. Individuals who are gifted in art or music may have a delay or disorder in speech and/or language. e.g. A child who is a gifted musician able to read and compose music but stutters. This child would need intervention to address his/her stuttering. There is also a possibility of having a child who is gifted mathematically but has an expressive language delay. In this case the child would need intervention to address his/her language concerns. Conversely there will be children who are gifted in speech and/or language.

Individuals who excel in public speaking or have a talent in writing. This too requires appropriate programming to ensure the child reaches their full potential.

All children have strengths and gifts and should be given the opportunities to demonstrate their highest potential. “Giftedness may appear in conjunction with other educational or emotional needs such as learning disabilities, behaviour disorders, attention deficits or motor difficulties (Alberta Education, Special Education Branch, p. 49, 1995) When working with a student you suspect has a language delay and/or disorder remember they may be gifted in another area and it may be an area you can focus on while addressing the area of difficulty.

Learning Disabilities

When children are suspected of having a learning disability they should receive a speech and language assessment as part of their comprehensive assessment. Early identification is vital to children identified as “at-risk” or “high-risk”. Children in this category include those from neonatal intensive care units, diagnosed medical conditions, chronic ear infections, fetal alcohol syndrome, genetic defects, neurological defects, or developmental disorders. Children who are not “at-risk” but have speech and/or language that is different from their peers should also be evaluated.

There are two main reasons to assess the speech and language of young children who are suspected of having a learning disability.

It is necessary to determine if the child has a speech and/or language disorder/delay. Secondly is this disorder/delay a function of the learning disability or is it just a speech and/or language disorder/delay without a learning disability? Some would say that all learning disabilities have a language component. It is important to answer as many questions as possible when trying to determine appropriate programming for children. Therefore, determining whether the primary concern is a learning disability or not, is crucial to appropriate intervention.

See the document [Programming for Individual Needs Teaching: Students With Learning Disabilities](#), (Department of Education 1999). Page 1 of this document defines learning disability and discusses the continuum from mild to severe disabilities. The section that follows focuses on the speech and language issues associated with learning disabilities. Refer to page 13 for information on the communication needs of children with learning disabilities.

Oral Motor Activities

Many children who have speech disorders will need to do oral motor exercises. This means exercises of the mouth and tongue. This helps to increase the range of motion of the mouth and tongue and improve precision and coordination of the movements. In doing this, speech sounds usually become more clearly articulated. Oral motor activities are usually designed by the speech-language pathologist and then may be carried out by any member of the ISSP team.

Typical Oral Motor Exercises

These are usually carried out for 10-15 minutes a day. This is especially important for children with apraxia. This is a motor programming disorder. These children are often difficult to understand. Practicing the exercises on the following page may help these children. Check with the speech-language pathologist for the most appropriate exercises to try with the child in question.

There are a number of other speech disorders that have motor speech components besides Apraxia. Dysarthria is a disorder due to the impaired motor control of the throat, tongue or lips. Children with Cerebral Palsy may present with Dysarthric speech. Children with articulation disorders or phonological disorders may also have oral motor weaknesses.

Oral Motor Activities

Exercise	Approximates	Accurately produces
<p>Open and close your mouth slowly (Be sure lips are all the way closed)</p> <p>Pucker your lips, as for a kiss, hold then relax.</p> <p>Spread your lips into a big smile, hold then relax.</p> <p>Pucker, hold, smile hold. Repeat this alternating movement.</p> <p>Close your lips tightly and press together and then relax.</p> <p>Open your mouth and stick out your tongue. Be sure your tongue comes straight out of your mouth and does not go off to the side. Hold and then relax. Work toward sticking your tongue out farther everyday but keeping it straight.</p> <p>Stick out your tongue and move it from corner to corner of your lips. Hold in each corner and then relax. Be sure your tongue actually touches each corner each time.</p> <p>Stick out your tongue and try to reach your chin with the tip of your tongue. Hold at farthest point and then relax.</p> <p>Stick out your tongue and try to reach your nose with the tip of your tongue. Don't use your bottom lip or fingers as helpers. Hold as far as you can reach and then relax. Stick your tongue out and pull it back, then repeat as many times as you can and as quickly as you can.</p> <p>Move tongue all around your lips in a circle as quickly as you can, but as completely as you can. Be sure to touch all of both upper lip, corner, lower lip, and corner in your circle and then rest.</p> <p>Open and close mouth as quickly as you can and then rest. Be sure lips close completely each time</p>		

Physical Disabilities

Children with physical disabilities may also have speech and/or language impairments. They will need specific intervention to address these impairments. See the document Programming for Individual Needs: Physical Disabilities (Department of Education 1996). On page 16 is the beginning of a discussion on communication and language in the physically disabled population. This can then be used in conjunction with the information on speech and language contained in this handbook.

Some children who have physical disabilities may require the use of an Augmentative Alternative Communication device. In addition to the information in this handbook, and in Physical Disabilities (1996) the reader is also referred to Using Technology to Enhance Students' Differing Abilities (1996), beginning on page 57. There are several examples of augmentative communication devices presented in Section IV of that document.

Frequently, children who have Cerebral Palsy present with motor speech disorders. Refer to page 1.6 of this handbook for further discussion of this area.

Children who have Spina Bifida may have language deficits despite the initial appearance of apparently adequate language skills. Upon closer observation, it may be noted that the child frequently makes comments that are not related to the conversation, may overuse certain expressions, or engage in conversations where the content is superficial. An in-depth assessment of subtle language processes would be needed to clarify particular areas of weakness and to develop programming to address these. The reader is referred to Teaching the Student with Spina Bifida (Rowley-Kelly and Reigel, 1993, Chapter 7) to supplement the sections of this document on programming for children who have language impairments.

Selective Mutism

Selective mutism has also been referred to as “voluntary silence” (House, 1999 p.121). The child in question is able to talk but chooses not to in some situations. Some of these children have other communication impairments. The DSM-IV Diagnosis in the Schools (1999) indicated that selective mutism is primarily a behavioral disturbance rather than a communication difficulty. Children who you suspect or know are selective mutes, should be referred to the school guidance counselor.

This does not refer to children who choose not to speak on an occasional basis or even those that rarely speak. A child who may be

a selective mute is one that you have probably never heard speak, or perhaps have heard or been informed that the child does speak in certain situations (e.g., the child speaks at home but nowhere else, the child speaks to stuffed animals only, or they have not spoken to anyone since a traumatic life event).

You may see one or two selective mute children in your teaching career. You will teach lots of children who are shy and do not talk often. There is a distinct difference in the two. If you are unsure contact the speech-language pathologist or guidance counselor in your school for more information.

Sensory Impairments

Language of the Blind and/or Visually Impaired child

Children who are blind or visually impaired are more dependent on speech to develop language. They develop concepts from words because they often will lack the visual experiences which accompany the words. Therefore, concepts may be distorted or not fully understood. For example, the concept of color will not be learned by seeing, but from the word itself and an explanation. Another example of this would be in teaching concepts of size. Obviously, there are many concepts where this method of learning will prove difficult.

Children who are blind or visually impaired may have difficulty with concept development because they hear and use vocabulary and descriptions, but often do not have concrete examples and experiences on which to pin them. Therefore, they may have difficulty understanding that which is abstract, or that which they haven't directly experienced before. Young children who are blind or visually impaired need to be exposed to language continually, and given concrete and tangible examples, where possible, to ensure that they have an understanding of what they are talking about. Talk to the child during activities such as dressing or lunch. Label items which they wear, eat, or use to eat. Do not take for granted that the child fully understands the meaning of all of the words they are using.

Children who are blind or visually impaired often experience difficulties with pragmatics of language. Since so much of pragmatics is dependent on a wide range of social experiences and on

understanding visual cues from others around us, children with visual impairments will often need direct instruction in pragmatics instead of relying on incidental learning. They may need direct instruction in areas of making introductions, topic maintenance, turn taking and other social skills. These children will often have difficulty talking about external events or objects because their language is largely centered around their own actions. Children who are blind or visually impaired also often have difficulty acquiring the use of pronouns, again, because this is an abstract concept. These pragmatic skills will need to be practiced regularly with children who are blind or visually impaired.

If you have a child who is blind/visually impaired in your class, consider the following:

- Auditory comprehension or verbal comprehension may be delayed in children who are blind or visually impaired. This is, again, due to concept development difficulties.
- The use of standardized tools for assessing language is often inappropriate for children who are blind or visually impaired because those tools rely on visual stimuli. Informal language sampling in the child's natural environment may prove more helpful in determining the child's communicative development.
- Blind and visually impaired students often have difficulty with pragmatics of language. See appendix E for suggestions.
- Direct instruction may be required in the areas of introductions, topic maintenance and turn taking in conversation.
- These pragmatic skills will need to be practiced regularly with the blind/visually impaired child.
- Young children who are blind/visually impaired need to be exposed to language continually. Talk to the child during activities such as dressing or lunch. Labeling items they are wearing or the things they are eating and using to eat.
- These children are more dependent on speech to develop language. From words they develop concepts as they may not be able to see. i.e. colors will not be learned by seeing but from the word itself and an explanation.

- They often have difficulty talking about external events or objects as their language is centered on their own actions.
- Auditory comprehension or verbal comprehension may be delayed in the blind/visually impaired child.
- A tactile or kinesthetic approach/ or braille may be needed for blind/visually impaired children to learn letters and then spelling.
- The acquisition of concepts will be difficult for blind/visually impaired children.
- Blind/ visually impaired children often have difficulty acquiring the use of pronouns.

Language of the Deaf and/or Hearing Impaired Child

Specific effects of hearing loss may include difficulty with: listening in noise, perception of speech in noise and quiet, retaining verbally presented material, vocabulary learning, learning of morphological endings (e.g., “s”, “-ed”, and “-ing”) and delayed or different speech/language development (Health and Welfare Canada, 1982; Newfoundland Department of Education, 1996d).

A child with a hearing loss may use a hearing aid or another amplification system and receive training in the use of residual hearing, speechreading, speech, language, communication, sign language and personal-social skills. The support services planning team may consist of a number of professionals, including an audiologist, an itinerant teacher for the hearing impaired, an SLP, and an educational psychologist (Health and Welfare Canada, 1982). Further information on the technologies available to help compensate for hearing loss is provided in Programming for individual needs: Using technology to enhance student’s abilities (Newfoundland Department of Education, 1996d).

The itinerant teacher for the hearing impaired plays a central role in programming for children who have hearing impairments. SLPs may collaborate with the itinerant teacher for the hearing impaired to evaluate the communication skills of the child. The SLP may provide programming using collaborative consultation, classroom-based, or direct service with children who have speech/language impairments concomitant to hearing impairments (Health and Welfare Canada, 1982).

If you have a child with a hearing loss in your class consider the following:

- The hard of hearing student should be seated near the front of the classroom, and with the window to his/her back as much as possible. Take care to avoid seating the hard of hearing student near any “noisy” areas such as heating ducts, portable walls, etc.
- Be aware that the hard of hearing student will rely heavily on visual cues. Try to stand still and face the hard of hearing student when giving important information.
- Walking while talking makes speechreading difficult for the hard of hearing student.
- Be sure that you have the attention of the hard of hearing student before speaking to him/her. Calling his/her name may not be sufficient, and you may need to touch his/her shoulder, or use some other small gesture.
- Try to write as much information as possible on the black board or on hand-outs. Where possible, give written outlines of courses, reminders of tests and assignments
- Introduce a new topic by writing the title on the black board, as well as new or difficult vocabulary. This alerts the hard of hearing student that change is forthcoming.
- Use brief instructions, or else the child with a hearing loss may be confused.
- Don’t assume that all information has been understood by the hard of hearing student, even if they nod often. Obtain feedback frequently by asking questions which requires them to demonstrate their knowledge. For example, do not ask “Do you understand?” but ask a question like “How do you know this is an octagon?”
- Control the pace of group discussions and presentations as much as possible. It is frequently difficult for the hard of hearing student to keep up with fast moving speechreading situations.
- If the hard of hearing student does not understand something which was said, try rephrasing instead of repeating. Many times, the misunderstanding may be due to a language usage rather than “not hearing”.
- The hard of hearing students may need longer amounts of time to complete tests or in-class work. They are usually working with a

language deficit, and time should be allowed for them to adequately work their way through the material.

- Many words look alike or very similar when speechreading. In situations where you are asking the hard of hearing student to identify one word (i.e., spelling tests), use the word in a sentence so that the student can use contextual clues to help him/her.
- Avoid exaggerated lip movement when speaking, and speak at a “normal” rate. Speaking excessively fast or slow will cause the hard of hearing student difficulty in speechreading.
- Avoid covering your mouth when speaking. An unobstructed view of your face is crucial to speechreading, as facial expressions and natural gestures give extra information.
- Talking while writing on the chalkboard should be avoided. The hard of hearing student will be unable to know what you are saying because they cannot see your face.
- Don’t stand in front of a window when speaking. Glare from the window behind puts your face in shadow, and makes speechreading difficult.
- It is not necessary to shout or speak more loudly to the hard of hearing student. This may, in fact, distort what you are saying. The student’s amplification devices will make your voice louder.
- Hard of hearing students frequently have difficulty hearing P.A. announcements. A buddy system may be useful for the student.
- Set up a buddy system through a classmate who is willing and able to pass along pertinent information and explanations when necessary.
- A student’s ability to hear may fluctuate. The strain of watching intently in order to understand through speechreading as well as the strain to listen may make the student tire quickly. It may be difficult to hold attention if she/he isn’t given periodic time to rest and take a break.
- If you wear an FM transmitter, do not wear jewelry which will come into contact with the microphone. This creates unnecessary, distracting noise.
- Oral tests and timed tests put the hard of hearing student at a disadvantage. They may be testing hearing ability and test-taking ability rather than the child’s knowledge of content.

- Wearing hearing aids does not “correct” the student’s hearing problem.
- Be aware that hearing aids amplify **everything**, not just specific sounds.
- Don’t make hard of hearing students feel inferior by automatically protecting them from speaking assignments. Some hard of hearing students are willing and eager to participate in these kinds of activities, despite the fact that they may have problems with their speech. Check with individual students to see how they feel about this issue.
- If situations arise where you are unsure what to do to accommodate the hard of hearing student, ask the itinerant teacher for advice. Often, asking the student will help you as well.

Traumatic Brain Injury

What is Traumatic Brain Injury?

The National Head Injury Foundation defines traumatic brain injury as “an insult to the brain, not of a degenerative or congenital nature, but caused by an external physical force that may produce a diminished or altered state of consciousness which results in impairment of cognitive abilities” (National Head Injury Foundation Task Force, 1988 p.2). These injuries may result from car accidents, falls, or abuse. Boys are 2 to 4 times more likely to sustain brain injuries than girls and incidence of brain injury increases drastically during the adolescent years.

Children with head trauma are different from children who are cognitively delayed or have learning disabilities in one important way. Their disabilities are acquired suddenly and result from neurological damage to specific areas of the brain. These children need to relearn how to learn. Often the difficulty lies in the ability to draw on their skills and memory deficits. Rapid gains are often made in the beginning of the recovery process and then things slow down. Because these children may change so quickly goals should be written for 4-6 weeks at a time.

Why do educators need to know about Traumatic Brain Injury?

- To prevent these accidents through education.
- To assist in undiagnosed cases of traumatic brain injury
- To develop effective programs for teaching children with traumatic brain injury.

- Create more accepting attitudes towards children with traumatic brain injury
- Provide emotional support for the child and family
- Schools are the largest provider of service to children with traumatic brain injury (Pieper, 1991)

**Common Problems
Associated with
Traumatic Brain Injury**

Children with traumatic brain injury are all unique.

- Memory deficits are common. Most have difficulty remembering events after the injury.
- Attention problems are common, inability to focus attention, to concentrate and to maintain vigilance for the task at hand.
- Confusion, disorientation and hesitancy in finding the right words may occur.
- Behavioural problems are not necessarily a part of traumatic brain injury. If they exist they may be a result of the physical injury or social or emotional problems in reaction to their disability.

Variables to Consider when Programming for a Child with Traumatic Brain Injury

Is the environmental noise or activity level distracting for the child?

Is the schedule appropriate for the child?

Length of the session

Time of the day

Variable versus fixed schedule

Do cuing systems work with the child?

Which ones work?

Which modifications have been made?

Larger print

Take home assignments

Longer time to complete a task

Does the child do better when things are presented verbally, visually, kinesthetically or a combination?

Does a calculator improve proficiency and accuracy?

Does a word processor help improve proficiency and accuracy in writing?

Is an alternative communication system needed?

Is the child motivated?

What reinforcement should be given and when?

What pathway supports are needed for the child's program?

Is there an ISSP for the child?

Is the family coping with their child's brain injury?

Has the ISSP team addressed the issue of personality changes in the brain injured child?

Teaching techniques to Try With the Brain Injured Child

- Develop active learning situations. Allow the child to learn by doing things.
- Allow extra time to complete tasks.
- Be sure that lessons address the appropriate deficit.
- Teach the process of an activity, i.e. learn to read a schedule not memorize one.
- Teach independence. Brain injured children tend to be unsure of themselves and what they know.
- Develop strategies that can be used in various situations.
- Be creative and flexible as children with traumatic brain injuries will change a lot over the first few months.

Major Cognitive Changes Associated with Moderate to Severe Brain Injury

- Memory deficits
- Difficulty with abstract concepts
- Slow in processing information
- Poor concentration
- Deficits in processing and sequencing information
- Slowed reaction time
- Dysarthria- speech which is disrupted due to physical weakness
- Anomia- difficulty recalling names of words for objects, people, or actions
- Impaired auditory comprehension- inability to understand and process a verbal message
- Decreased verbal fluency
- General intellectual deficits
- Planning and organizational problems
- Perseveration- continuation or repetition of something after the stimulus has been removed

Major Emotional and Behavioural Changes Commonly Observed after a Traumatic Brain Injury

- | | |
|------------------------------|---------------|
| Anxiety | Depression |
| Loss of interpersonal skills | Disinhibition |
| Aspontaniety | Aggressive |
| Single focus behaviour | Impulsivity |

Irritability

Lack of emotion

Child like dependence

Egocentricity

Impaired judgement

Lack of goal directed behaviour

Voice Strategies

SLPs programming for children with voice impairments involves counselling children and families in good voice use and the effects of voice abuse. Appropriate voice use may be facilitated through the teaching of one or more of the following techniques: gentle onset of the voice, breath control for voice projection: muscular relaxation, particularly of the head and neck region: and orally directed airflow for speech production.

Voice Disorders

In children you will commonly see harsh or hoarse vocal quality or different nasality, either nasal or denasal. These children need to be seen by a speech-language pathologist who will refer them to their family doctor to determine the cause of the voice disorder. If no speech-language pathologist is available the ISSP team should make a referral to the child's health care provider.

One cause of a harsh or hoarse sounding voice in children is vocal nodules. This is not life threatening and can even go away if the child practices good vocal hygiene. Vocal nodules can also be removed in surgery as a last resort, they will often grow back if the manner of speaking is not changed. Caring for the voice is still important.

Teachers are the number one referral to speech-language pathologists for voice problems. Most teachers talk for the five hour school day. They often have to project their voices in noisy environments or large rooms. The most common problem is hoarseness and sometimes losing the voice completely. Losing your voice regularly can be a frustrating and result in not being able to participate in everyday activities. The list on the following page is important for everyone to consider but especially for people who have voice problems as mentioned above.

How to care for your voice

If you have a voice problem, as indicated above, go to your family doctor to determine the cause of your problem. He/she will be able to advise you whether you need to see a speech-language pathologist and/or an ear nose and throat specialist.

- Drink plenty of water every day. Eight 8oz. glasses per day.

Even though the water does not go to the vocal cords it helps to hydrate the body.

- Avoid cigarette smoke, caffeine, and alcohol as they all dehydrate the body.
- Do not shout, scream, sing or talk for long periods of time.
- Do not clear your throat or cough unnecessarily.
- Do not imitate different sounding voices such as Donald Duck or Mickey Mouse. This is harmful to the voice.
- If you are hoarse give your voice a rest everyday. Take 30 minutes a day, or longer if you can to be silent. If you need to communicate write a note. When you are hoarse for a prolonged period of time you need to rest your voice for most of the day.

Some classroom strategies that teachers can use to support children who have voice impairments

- encourage good voice use in the classroom, in the gym, and on the playground
- allow the child to refrain from singing in music class
- allow frequent drinks of water
- provide a daily quiet time to enable voice rest
- prompt the child to use a good voice, following the specific recommendations of the SLP

Evaluation and Assessment

Evaluation refers to the systematic process of collecting, analyzing, and interpreting data. The term evaluation should not be confused with assessment which refers only to the act of collecting the data without any interpretation.

This chapter will focus only on the evaluation and assessment of communication impairments.

What is the Purpose of a Communication Evaluation?

The purpose of a communication evaluation is twofold: to evaluate a child's speech/language needs for programming purposes and to monitor progress or changes in a child's communication skills.

Components of the communication evaluation may be done by different members of the ISSP team. The special education teacher may do developmental checklists with the child, the classroom teacher may keep anecdotal notes on the child's performance in the classroom and the speech-language pathologist may administer standardized speech and/or language assessments.

Once the communication evaluation has been completed the ISSP team members develop strengths and needs based on the information they have gathered. Individuals who will work with the child then develop programming for the child.

What is a Comprehensive Communication Evaluation?

A comprehensive communication evaluation is an evaluation of a child's functional communication skills that are required for academic and social development, which is ongoing over time and conducted in as many contexts as possible (e.g., classroom, playground, and home). It involves collaboration between the SLP, teacher, parents, and other members of the ISSP team.

ASSESSMENT

What Evaluation Methods are Used to Assess the Child's Communication?

An ISSP team considers the child's overall communication strengths and needs by using both curriculum-based and functional communication evaluations. The curriculum-based component of the evaluation considers the child's communication strengths and needs within the context of the language and communication demands of the curriculum and the educational environment. The functional communication component of the evaluation is concerned with the demands of the child's social and nonacademic environments.

To complete an evaluation, the ISSP team members may gather information. The parent and teacher reports may contain information specific to the child's performance in the area of

concern, about a related disorder with which the child has been diagnosed, or how the communication impairment is affecting the child academically and functionally.

Formal evaluation may take the form of standardized tests or developmental scales. A **standardized test** is a decontextualized test that allows specific comparisons to be made between children. These tests have clear administration and scoring criteria with known statistical measurements. **Developmental scales** use interview and/or observation and usually provide age- or grade-equivalent scores. Developmental scales do not provide standard comparison scores needed to make the judgement of a degree of need.

Informal evaluations are either non-standardized tests or behavioural observation. **Non-standardized tests** (e.g., criterion-referenced tests) compare the child's level of performance to a predetermined criterion. This form of assessment allows the examiner to "look at specific communicative behaviours in depth and to individualize the assessment for a particular" child (Paul, 1995). Three of the most common non-standardized tests used by an SLP to assess communication are a language sample, an oral peripheral examination, and diadochokinetic rates. A **language sample** refers to a recording of the child's language in conversation, storytelling, and/or reading. An **oral peripheral examination** refers to the evaluation of the child's mouth and face to determine if the structure and function are adequate for correct speech production.

Diadochokinetic rates which give the rate at which the child can alternate same or different speech sounds and still maintain the correct production of the sounds. **Behavioural observation** describes a child's performance by determining if the behaviour occurs, how often it occurs, and the context within which it occurs (Paul, 1995). This involves no comparison between children. Observation may occur in the classroom by a team member or by a videotape of the child in various contexts, such as at home or with peers outside of school hours, that may be viewed by the person doing the assessment at another time.

What are the Common Components of a Communication Evaluation?

Common components of a communication evaluation are outlined in Table 4-1.

What are the Assessment Tools Used to Assess Speech and/or Language?

Standardized and formal assessment tools that may be used to assess a child's communication skills are listed in Appendix D. Formal tests, which include standardized tests, have specific criteria regarding the administration and administrator's qualifications which are usually stated in the test manual.

When is the Child Re-evaluated?

Informal evaluation is ongoing while programming for the child. A formal communication re-evaluation is usually completed every 2 years at the discretion of the support services planning team. Speech evaluation may be done more frequently to determine target sounds or areas in speech that may need to be addressed and to document progress. Informal evaluation should be on-going by all individuals involved with the child. Re-evaluation, formal or otherwise, occurs within each year when the child's ISSP is being reviewed.

Table 4-1. Common components of a communication evaluation

	Formal or Standardized Test	Parental Report	Teacher Report	Observation e.g. classroom	Language Sample	Oral-Peripheral Examination	Diadochokinetic Rate	ENT Evaluation	Hearing Screening
Receptive Language	X	X	X	X					X
Expressive Language	X	X	X	X	X				X
Phonological Awareness	X	X	X	X					X
Pragmatics	X	X	X	X					X
Articulation	X	X	X	X	X	X	X		X
Fluency	X	X	X	X	X		X		X
Voice ¹	X	X	X	X	X	X		X	X
Augmentative/Alternative Communication	X	X	X	X					X
Swallowing ²	X	X	X	X		X		X	X
Hearing ³	X	X	X	X	X	X		X	X

*At the time of the evaluation, only the areas of concern for which the child was referred are evaluated unless there are indications, during contact with the child, that further assessment is warranted.

¹ An evaluation by an ear-nose-throat doctor is essential to complete the voice evaluation.

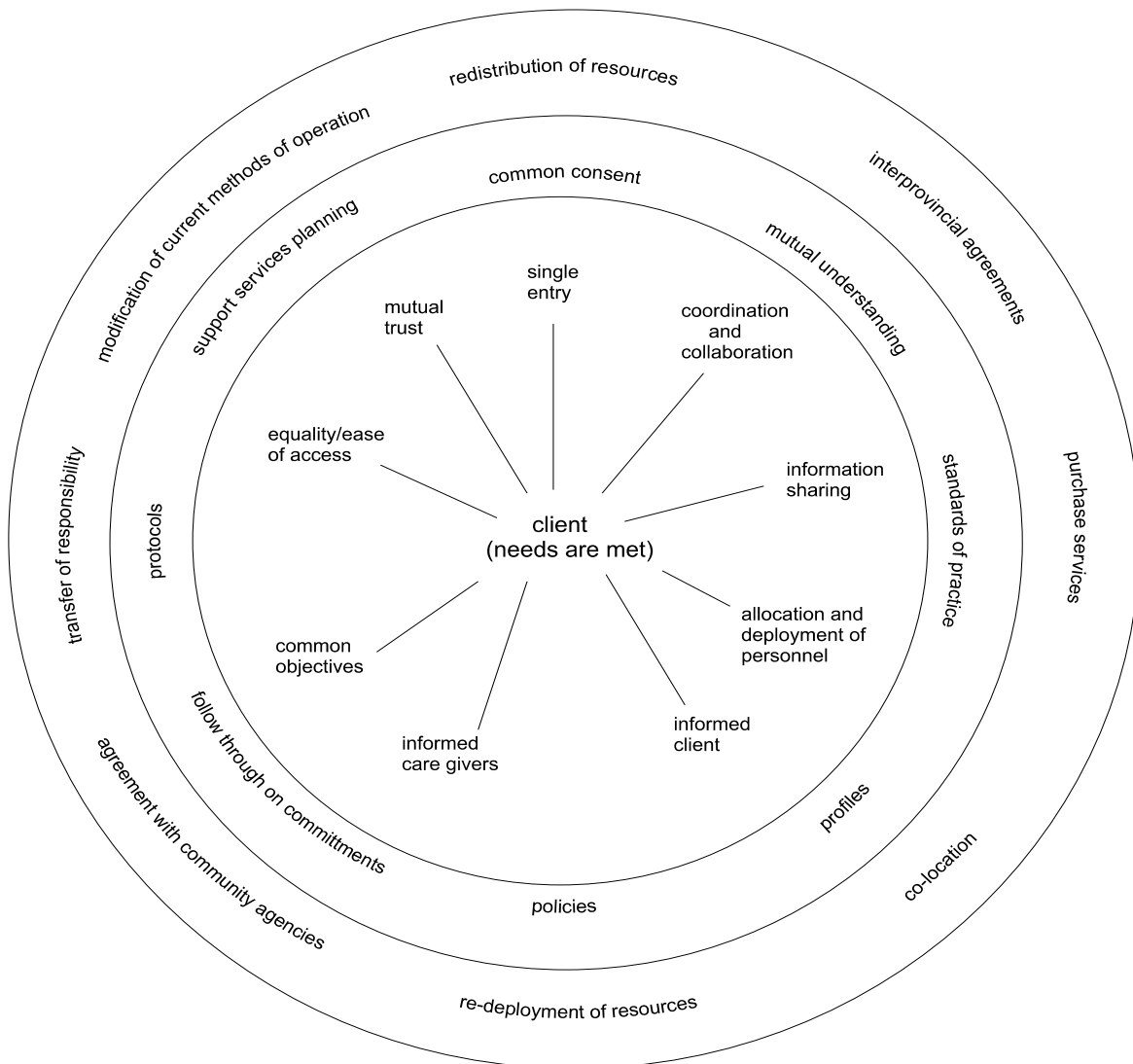
² Formal assessment (e.g., modified barium swallow- an X-ray of the swallowing process) takes place in a hospital where there is access to a radiologist and an ear-nose-throat doctor. This evaluation is only done in conjunction with health care professionals.

³ Detailed information from the audiologist regarding the degree and type of hearing loss is essential to the communication evaluation.

Model for the Coordination of Services to Children and Youth

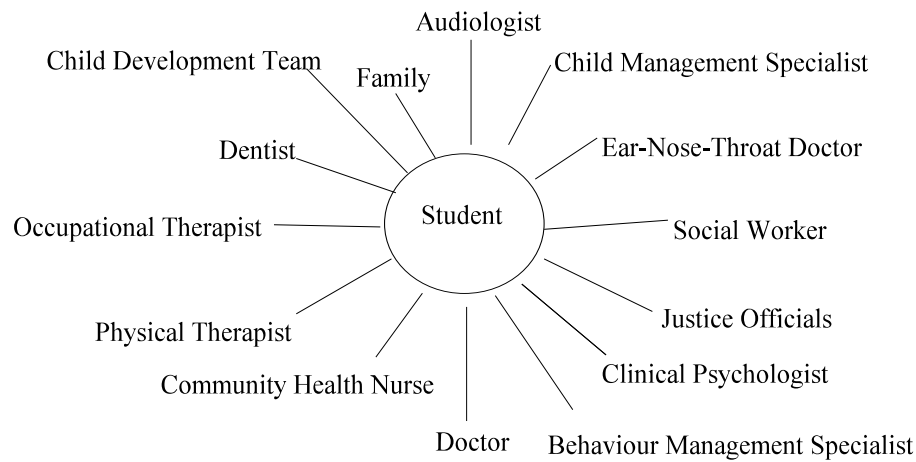
Under the Model for the Coordination of Services to Children and Youth, personnel from four government departments collaborate to provide services to children and youth through the Individual Support Services Planning Process (ISSP). Peoples' roles within the ISSP process should be outlined in the ISSP team meeting. The following diagram illustrates the components of the model.

Components for the Model for the Coordination of Services to Children and Youth
 Model for the Coordination of Services to Children and Youth with special needs in Newfoundland and Labrador (1995)

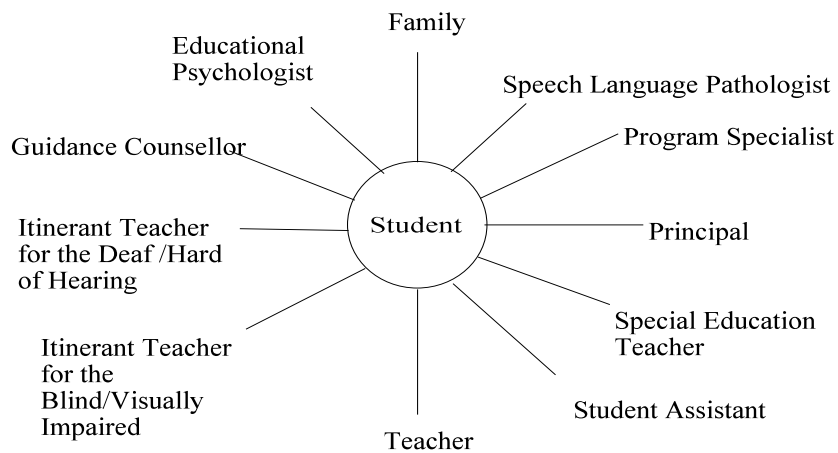


There can be numerous people that play a role in the delivery of services to children with communication impairments. The diagram below illustrates the coordination of service within the education system and outside the education system.

Coordination of Services Outside the Education System



Coordination of Services Within the Education System



There are many partners involved in programming to meet the child's needs. One must never lose sight that team building is crucial and the child is at the center of it all.

Profiling

Under the Model for the Coordination of Services to Children and Youth, children are profiled. Profiling refers to the process by which the special needs of children are documented to ensure the most effective planning and delivery of programs. Following the support service planning process, profiles are completed for all students requiring support services to identify student needs and overall needs of schools, school districts, and regions of the province. Profiles are developed following completion of an Individual Support Services Plan (ISSP) in which the strengths, needs, goals, and service requirements of a student are identified. The profile is intended to identify all students at risk in an effort to:

- identify the needs of each community in the region
- identify barriers to service delivery and problem solve around those issues
- accurately represent the needs of the region to the regional boards and provincial departments of government
- identify enhancers and facilitators of good professional practice
- evaluate with consumer input the effectiveness and efficiency of current policies and practice (Newfoundland, Departments of Education, Health, Human Resources & Employment and Justice, 1997).

For Whom is a Profile Completed?

In the document Profiling the Needs of Children and Youth (1997), the Departments of Education, Health and Community Services, Human Resources and Employment and Justice indicated that the students who would be profiled included those:

- identified at risk by a professional or parent/guardian
- receiving support services from an employee/agency of the Departments of Education, Health and Community Services, Human Resources and Employment or Justice.

Profiles are completed for students receiving programming as a result of a speech and/or language delay/disorder.

When are Profiles Completed?

Profiles are completed as soon as a child is identified as at risk and once yearly after that point until support services is completed. Profiles, submitted to the Regional Child Services Coordinator, identify needs of the child for one year.

Who Completes the Profile?

The Individual Support Services Manager (ISSM), completes the profile in consultation with the support services planning team providing services to the child. The team may involve only one special services provider along with the child, parent and teacher, or it may involve many professionals working with the child and parents. For more information on profiling see the document Profiling the Needs of Children and Youth (1997).

The Role of the Classroom Teacher

The classroom teacher plays an important role in programming and service delivery to the communicatively impaired child. The classroom teacher is often the first person to notice the child's difficulty in the area of communication. They are responsible for knowing the difference between normal and abnormal or delayed speech and language development in children. Teachers may also note difficulties students are experiencing in other areas of language arts. This should be recorded along with difficulties in speech and language development. Having noted these concerns, the classroom teacher should inform the parents or guardians and obtain a family history. Once areas of need have been identified, the classroom teacher should try different strategies to assist the communicatively impaired student in the classroom. Suggestions are provided in the pre-referral chapter (chapter 2). The teacher should be consulting with the SLP and/or the special education teacher once accommodations have been made in the classroom.

Making a Referral

The classroom teacher is often the person who refers the child to the SLP. If the child does not have an ISSP, the referral is completed by the classroom teacher after discussing it with the parent or guardian. If the child already has an ISSP, the teacher may be the one who fills out the referral form and discusses it with the ISSP team. Once the child has been seen by the SLP, the classroom teacher and ISSP team members will be informed of the findings and may be requested to do specific things with the child. The classroom teacher should be an active participant in the child's speech and language goals. He/she can plan group activities that accommodate the communicatively impaired child and evaluation procedures that are appropriate. The classroom teacher should also adapt their teaching or testing styles or format to accommodate the child with a communication impairment based on the recommendations of the SLP and the ISSP team. The classroom teacher should clearly understand the strengths and needs of communicatively impaired students in the classroom.

The Role of the Guidance Counselor and the Educational Psychologist

The guidance counselor and/or the educational psychologist may be a member of the ISSP team for the communicatively impaired child if there are concerns other than communication. In some cases, the guidance counselor or the educational psychologist may be referring the child to the SLP, based on needs established during sessions with a child who was not previously identified as having a communication impairment. If the guidance counselor or the educational psychologist is working with a child who has a communication impairment, he/she is responsible for understanding the student's communication impairment and the implications of this on assessment.

The Role Of the Itinerant Teacher For the Blind and Visually Impaired

The itinerant teacher for the visually impaired may be involved with children who have communication impairments. A child may have a visual impairment or blindness along with a communication impairment. In these cases, the itinerant teacher for the visually impaired should be a member of the ISSP team.

The itinerant teacher may determine the size of print or symbols needed by a child with a visual impairment. In the case of a blind child who has a communication impairment, the itinerant teacher for the visually impaired may be the direct service provider and the SLP may monitor the child.

Example:

- ① An 8 year old blind student who has articulation errors consisting of a frontal lisp on s and z. The SLP would be responsible for identifying the specific articulation errors and in-servicing the members of the ISSP team on how to work on this. The SLP would monitor the student, re-checking the progress regularly. The itinerant teacher may be an active participant in working on the students speech.
- ② A fifteen year old student who has a visual impairment and wears glasses to compensate for low vision. This student also stutters and is receiving direct services from the SLP. In this case the itinerant teacher for the visually impaired would be a member of the ISSP team but act as a consultant. He or she may offer suggestions about the size of print for materials given to the student and low vision aides to access print material. The SLP may work directly with this student to improve fluency.

The Role of the Itinerant Teacher For the Deaf and Hard of Hearing

The itinerant teacher for the deaf and hard of hearing is involved with children who have communication impairments. All children receiving support from the teacher for the deaf or hard of hearing, have a communication impairment. The itinerant teacher may work with the SLP in programming for children. The SLP is a member of the ISSP team and consults on speech and language concerns. In some situations the speech-language pathologist may work directly with the child who is deaf or hard of hearing.

Example:

A student with a moderate/severe hearing loss who also stutters. The SLP would work directly with the student in the area of stuttering. The itinerant teacher would address other communication concerns related to the hearing impairment such as difficulties with complex sentences, articulation of “s” and the use of wh - questions.

The itinerant teacher for the deaf and hard of hearing also;

- helps all members of ISSP team to understand the child's/youth's hearing loss
- inform the team of the impact of the hearing loss on speech and language
- makes sure the child's amplification is working properly on the day of assessment
- shares knowledge of assessment tools appropriate for hearing impaired children's speech and language
- is a member of the ISSP team

The Role of the Parent of the Communicatively Impaired Child

The parent of the communicatively impaired child should be an active member of the ISSP team and may be the case manager. The parent will need to sign a consent for assessment form before their child can be evaluated by the SLP. The parent will also be asked to sign a common consent form granting permission for the sharing of information in the team meeting, release of information as in a report, and for permission to profile. It is the parent's responsibility to ask questions if they do not understand what the consent form means. The parent is responsible for providing the relevant family and medical history to the appropriate ISSP team members, as well provide their observations about strength and needs. This information is vital in providing appropriate programming for their child. It is also the responsibility of the parent to follow-up on suggestions provided by the ISSP team. Most speech and language activities will need practice at home to be successful.

Example:

The child is able to produce 14 sounds at the beginning of words in isolation. He/she forgets to use it in sentences. The SLP meets with the parent and describes the activity to practice at home. The task involves saying short phrases with initial /k/ words in them. The parent is to model the phrase and then let the child try one. If the child is unable to produce the /k/ sound, the parent asks the child to try the word in isolation and then try it in a phrase after the parent models it. The SLP continues to send home activities and meet with the parent regularly.

In this case, the parents play an obvious and important role in their child's speech and language development. There may be cases that are not as obvious, but the parent's role is still of great importance. The parents may have the role of reading to their child or playing language stimulating games. They may simply support the activities of their teenage child who stutters and is working on public speaking. The parent is always an important part of the ISSP team.

The Role of the Program Specialist

The program specialist for Student Support Services also has an important role in the service delivery of students who are communicatively impaired. He/she should ensure that:

- a continuum of support and services are available across the district
- there is access to professional development, materials and/or resources required to meet the needs of students with communication disorders/delays
- there is consistency of service and practice for students across the district
- every effort is being made to recruit speech and language pathologist required to meet the needs of students who are communicatively impaired.

The Role of the School Principal

The principal plays an important role in the service delivery to students who are communicatively impaired. He/she should ensure that;

- the referral and consent forms for speech and language services are available to school personnel
- school personnel are aware of the SLPs schedule
- all children with communication disorders are on file with the school for annual general return records
- there is adequate space for the SLP to work with children

- he/she understands the role of all school personnel in working with communicatively impaired students and,
- the SLP is notified of school activities that interfere with his/her duties

The Role of the Special Education Teacher

The special education teacher's role includes all of the classroom teacher's roles. The special education teacher may have more direct instruction with the communicatively impaired child than the classroom teacher. He/she may be working on specific areas of speech and/or language in consultation with the SLP.

Example

A child with a severe articulation impairment who is being seen by the SLP once a week. The special education teacher may work on

articulation with the child twice a week when the SLP is not in that school. The SLP would meet with the special education teacher and the classroom teacher discuss the items to be practiced and how to do them each week.

This is only one of the many possible situations in which the special education teacher, classroom teacher, and the SLP collaborate to help communicatively impaired students.

The special education teacher would also be involved with the modification of courses for students and the development of alternate courses and programs for students requiring Pathway 3, 4, or 5 supports. This may be done in consultation with the classroom teacher and the SLP. The special education teacher may be involved in the documentation of children for additional teacher support and the assessment of children who have or may have exceptionalities.

The special education teacher should work closely with the SLP and the classroom teacher as a member of the ISSP team in providing support for the communicatively impaired student.

The Role of the Speech-Language Pathologist

“Speech-Language Pathologists (SLPs) are specialists in human communication, its normal development, and its disorders and delays. They provide services aimed at preventing and lessening the impact of communication difficulties, including impairments of language, articulation, fluency, swallowing, and voice. Their services include standardized and non-standardized assessment in addition to intervention appropriate to the individuals needs, abilities and limitations” (Canadian Association of Speech Language Pathologists and Audiologists., n.d.a).

SLPs provide consultation, classroom based, and direct services to children with communication needs. Programming may include developing classroom activities to enhance skills of children with communication impairments, direct intervention, and home programming. The SLPs are involved in the development and implementation of the Individual Support Services Plan (ISSP), coordinate assistive technology support services, and provide inservice education for school personnel. SLPs have a Masters degree and a minimum of 350 hours of practical experience prior to obtaining certification from the Canadian or American Professional Association of Speech-Language Pathologists and Audiologists. They are also required to obtain continuing education hours.

**How does the SLP
Coordinate Services
Through the Support
Services Planning
Process?**

The SLP is a member of the support services planning team for any child who clearly shows any of the characteristics of a speech/language impairment as indicated in Chapter 1. The ISSP is a long-term planning tool which over time becomes a record of the child's accomplishments. It is one of the most important records kept on an individual child. The ISSP can be developed at the early identification stage (birth) during the pre-school years, or when the child enters school (Programming for individual needs: Individual support services plans, 1996).

The ISSP identifies a child's strengths and needs, with the needs representing possible target areas that may translate into goals. Through the support services planning team the SLP coordinates with a variety of people within the education system namely:

- children
- families
- special criteria teachers
- classroom teachers
- special education teachers
- principals
- program specialists
- itinerant teachers for the deaf and hard of hearing
- itinerant teachers for the visually impaired
- educational psychologist
- guidance counselors

The SLP may also coordinate with service providers from the other agencies under the model of coordination of services (Justice, Education, Health and Community Services, Human Resources and Employment).

The SLP may work with the child in any of the five pathways as described in Pathways to Programming and Graduation : (Newfoundland Department of Education, 1998)

Pathway I: Provincially prescribed programs

Pathway II: Provincially prescribed programs with support / accommodations.

Pathway III: Modified programs

Pathway IV: Alternate programs

Pathway V: Alternate curriculum

The SLP's Role During the Screening and Identification Stage

During the "Screening and Identification" stage, teachers are encouraged to liaise with educational support services personnel and other service providers. During this stage, the SLP's input is particularly helpful in discriminating developmentally appropriate and delayed speech and/or language.

The SLP's Role During the Assessment and Exploration Stage

The "Assessment and Exploration" stage is a time when the teacher focuses efforts on investigating the child's strengths and needs. During this stage, the teacher tries different strategies to meet the identified needs of the child. Support services personnel, such as the SLP, are involved in suggesting techniques or resources, reacting to ideas, or accessing information (Newfoundland Department of Education, 1977). The SLP suggests instructional strategies related to presentation, organization, resources, environment, motivation, evaluation, and the pacing of the curriculum. For further information, see programming strategies in Chapter 3.

The SLP's Role in Referral to the Individual Support Services Planning Team Stage

If a child's/youth's teacher and parents have been consulting with the SLP as part of the pre-referral process, the individual support services planning team has essentially been established. However, there may be a need for a formal evaluation of speech/language development and the support services planning team may need to include new members for additional input. An ISSP outlining strengths, needs and goals is developed.

In some cases, the SLP is not brought into the process until the "Referral to Support Services Planning Team" stage. A formal assessment is completed to further identify strengths and needs for presentation at the Support Services Planning Team meeting.

Referral

Referral to the speech-language pathologist (SLP) is one step in the communication evaluation. Referrals received by the SLP are accompanied by a consent form signed by the child or their parent or guardian. Coordination between the Department of Education upon school entry ensures that information on the child's preschool years is easily accessible. After school entry, background information is concerned with the child's academic history, family environment, related medical conditions, and other areas of need as identified during the individual support services planning process.

From Whom are Referrals for Speech/Language Services Received?

Referrals for speech/language services may be received from a variety of sources both within and outside the school system. Referrals are initiated for any child who is experiencing difficulty acquiring age-appropriate speech/language skills or who is experiencing difficulty with the language arts curriculum. The referral form identifies examples of inappropriate speech/language development which may

be seen in the classroom or in the home. Once the referral is received, the SLP may collaborate with the teacher, child, and parent to identify specific areas of strengths and needs and to determine programming strategies (prior to formal evaluation) as part of the pre-referral process (Programming for Individual Needs: Pre-referral Intervention, 2000).

When Should a Referral be Completed?

It is important that a referral be initiated as soon as a child exhibits communication differences or difficulties so that an informed decision can be made as to what is and what is not developmentally appropriate. Early identification is critical. Some children enter Kindergarten with speech/language needs already identified during the preschool years. These needs are recorded as part of the ISSP and forwarded to the school as part of the transition process. Children may be identified at any point during their school years as it becomes apparent that they are not able to meet the objectives of the language arts curriculum without support, or they exhibit communication difficulties that interfere with their social and/or emotional development.

The SLP's Role During the Ongoing Evaluation and Monitoring Stage

"Ongoing Evaluation and Monitoring" is a process whereby strategies are revised, child successes noted, and various solutions to problems tried as needed. An important part of this process is record keeping.

REPORTING

The final component of the evaluation process is reporting the findings, specifying and interpreting the results, identifying strengths and needs, and providing recommendations.

What Types of Reports Document Students' Speech/Language Needs?

There is one basic type of report which an SLP uses. An evaluation report is written when the child is evaluated. From this report strengths and needs are outlined for the ISSP team. A progress report may be written at the end of a programming period to outline the goals targeted, the programming methods used, and the progress made toward each of these goals. A progress report may include results of a re-evaluation (formal and/or informal). To keep in line with the ISSP process, goals are reviewed twice annually. The progress report may indicate program discontinuation. Blank sample report forms are included in Appendix C. Note that any sections of the report which are not applicable to the child may be omitted. The speech-language report will be filed according to school board policy.

How do the Speech/Language Evaluation Reports Coordinate With the ISSP?

In the summary, strengths and needs are outlined. These are required for the child's ISSP. At the ISSP team meeting, these strengths and needs are pooled together through consensus with other strengths and needs as determined by the support services planning team. The team then decides upon the goals to be implemented, the supports and services required to meet the child's needs, as well as, areas of responsibility for each team member. As part of the SLP's recommendations within a report, goals for speech/language programming are outlined. These are tentatively identified prior to the support services planning team meeting and are finalized during the meeting once they are identified as priorities. These goals are taken directly from the child's strengths and needs. The ISSP process ensures the coordination and continuation of services to meet the ongoing needs of the child by involving those professionals deemed necessary.

What is the Role of the SLP in the Language Arts Curriculum?

The Atlantic Canada English Language Arts Curriculum (K-3, 4-6, 7-9, 10-12) specify outcomes for the language arts program. When the SLP receives a referral because of concerns around receptive and/or expressive language development, he/she completes an evaluation, and helps to determine the level of support required for the child to meet the outcomes of the language arts program. The ISSP team then determines how these outcomes will be met and what supports are needed. The following components of spoken language relate to the development of reading and writing skills.

Semantics

Semantics refers to meanings of words and combinations of words. It is one of the most obvious links between written and spoken language. The knowledge children use to give meaning to spoken language is the same knowledge used to derive meaning from written language. This can be referred to as content.

Syntax

Syntax refers to combining words to make phrases, clauses or sentences. Children who are unable to combine words orally are likely to have difficulty when attempting to read or write sentence forms.

Morphology

Morphology refers to word endings such as: “s”, “ing”, and “ed”. Children who have difficulty using word endings in spoken language are likely to have the same difficulty when learning how to read and write. Syntax and morphology can be combined to be called language form. Language content and form are aspects of language arts that the speech-language pathologist can support for the child.

Phonological Awareness

Phonological awareness is an area of language arts in which the SLP can support the child. “Phonological awareness is the conscious awareness of the sounds of language. The development of phonological awareness appears to be related to both early literacy experiences and cognitive-linguistic development” (Catts and Vartiainen, 1993).

The Role of the Student Assistant in Supporting the Student With a Communication Impairment

The role of the student assistant is to reinforce goals that are established by the ISSP team. The student assistant is not responsible for teaching specific items. The classroom teacher, special education teacher, or the SLP will inform the student assistant of the child’s communication goals. It will then be decided which goals could be reinforced within the context of what the student assistant does.

Example

A 12 year old child with cerebral palsy who has been identified as having a language delay. The ISSP team has developed a plan for this child and the speech language pathologist has developed goals for the child.

One of the goals involves increasing the child’s receptive and oral vocabulary of things in the school environment. Categories have been identified, and they include.

1. Furniture
chair
table
filing cabinet
2. Meals
fork
knife

spoon
cup
plate
bowl
drink
eat
childs favourite foods

3. Clothing

hat
coat
mittens
boots
sweater
shoes
pants
scarf
socks
snowsuit

These vocabulary items are taught to the child by the special education teacher and the classroom teacher with the SLP acting as a consultant. The student assistant is required to reinforce the vocabulary words during activities that he/she assists the child with (e.g., if the child needs help feeding, the student assistant would discuss the words related to meals). The student assistant may request the child to name the items they have for lunch.

Models of Speech and Language Service Delivery

What are the Major Factors in Programming?

The needs of the child, as determined through the support services planning process determine whether the child receives speech language programming and the type(s) of service delivery model to be used. General child variables to consider include the child's needs in the areas of language, articulation, fluency, voice, or other areas of communication, as described in Chapter 1. Specific consideration in determining need and type(s) of service delivery model are:

- the severity of the communication impairment
- the effect of the communication impairment on the child's classroom performance and social integration
- the presence of confounding difficulties such as learning disability or hearing impairment
- the age and stage of the child's communicative development (ASHA, 1984)
- current level of support available to the child

A number of factors related to setting, teachers, and speech-language pathologists affect the organization and management of speech/language services and the selection of a service delivery model(s) for programming (Cirrin & Penner, 1995). Examples are:

- opportunities for harmonizing intervention goals with curriculum goals
- the number of schools in a district
- the distance between schools, the number of SLPs in a district
- teacher, parent, and administrative support for speech/language services
- teachers' and SLP's collaborative and consultative skills, educational background, and professional experience.

The SLP is not the only person to address communication goals with a child in school. Some children will receive service from a low ratio special education teacher or the non-categorical special education teacher. The SLP may evaluate the child and assist in the development of goals and then support these above mentioned

school personnel as they work directly with the communicatively impaired child.

What are the Common Service Delivery Models?

The needs of the children with communication impairments can be programmed through the use of one or more service delivery model options. Choice of a service delivery model is dependent on the needs of the child and other factors listed above and may change according to the changing needs of the child. It is not necessary to adhere to only one service delivery model during programming.

Consultation

Collaborative consultation is a service delivery option in which teachers, SLPs, other professionals, parents, and child (as appropriate) collaborate to determine programming. This model can be used throughout all or some of a child's speech/language programming either alone or in conjunction with another model. It can be used to make pre-referral adaptations to instruction, to obtain pre-referral information, to monitor a child's needs prior to programming, as a transition to discontinuation of direct service, or after discontinuation of direct service (ASHA, 1993; Ontario Association of Speech-Language Pathologists and Audiologists [OSLA]. 1996c).

A major assumption of the collaborative consultation model is shared decision-making involving input from all ISSP team members on issues such as planning, implementing, evaluating, and pathways supports. See Pathways to Programming and Graduation (1998). Using a consultative model the SLP's role on the support services team includes but is not limited to:

- making recommendations to teaching and support staff regarding integration of communication enhancement strategies throughout the curriculum
- demonstrating the teaching of alternative instructional approaches
- assisting the classroom teacher in providing the appropriate pathway supports that relate to communication in the areas specified by the ISSP team
- recommending and providing supplemental material to reinforce speech language goals within course content
- collecting data within the classroom on children who have communication impairments.
- facilitating functional communication skills
- facilitating socialization goals within the classroom

- designing home programming strategies and activities for use by parents and/or caregivers.

It should be noted that the use of consultation increases the range of programming activities for children who have communication impairments. Although routine program delivery may be done by someone other than the SLP, consultation does not decrease the SLP's involvement with these children. The collaborators need to have a regularly scheduled meeting time throughout the duration of programming. The SLP as part of the support services planning team meets at least twice annually with other team members to review the support services plan with brief informal meetings scheduled as necessary (Newfoundland Department of Education, 1996c; OSLA, 1996c; OSLA, 1996c). For example, the SLP and the parent may meet to discuss the child's progress in communication skills, or the SLP, the special education teacher, and the classroom teacher may meet to jointly plan the sections of the ISSP pertaining to communication skills or the language arts program. The SLP may be unable to attend all ISSP meetings due to large caseloads and the itinerant nature of the work. In cases where they can not attend, provisions are made to forward information. This is outlined in the Individual Support Services Plan (1997) document.

Consultation Case Study

Jesse is a Grade 4 child who has cerebral palsy. The SLP meets with Jesse's special education teacher once a month throughout the school year. Discussions are held regarding Jesse's vocabulary inserts on his voice output communication aid and his progress in subject areas. Jesse practices breath control that helps him use some verbalization to express himself. He is now able to say several words. Jesse's teacher uses the classroom strategies for communicating with children who use an augmentative or alternative communication (AAC) device as suggested by the SLP. The SLP and Jesse's mother as members of the ISSP team communicate regularly to exchange information on his programming needs and to share communication strategies for use at home.

Consultation Case Study 2

David is a Grade 1 student whose social behaviours and oral language impairments are characteristic of Pervasive Developmental Disorder. He continues to make gains in all areas. His receptive and expressive language skills although increasing, remain severely delayed. David frequently exhibits echolalia (repetition of others' sentences) and perseveration (continuing to

talk about a previous topic long after the topic of conversation has changed) in his language.

David has received the services of a low ratio teacher since he entered school. This year, he receives two periods of direct instruction from the low ratio teacher daily. During the remainder of the day David receives programming in the regular Grade 1 class with periodic support of the special education teacher and a student assistant.

David's oral language skills are evaluated annually through a classroom-based and individualized assessment which David's teacher attends. Monitoring of David's progress by the SLP and the teacher occur regularly throughout the school year and by the support services planning team semi-annually. Oral language and communication goals which form a large part of David's program are developed collaboratively by the SLP and the special education teacher at the beginning of each school year and shared with other members of David's support services planning team. Classroom strategies and materials to achieve these goals are regularly provided by the SLP. The use of classroom-based communication programming delivered by the low ratio teacher in consultation with the SLP allows for continuous reinforcement of goals.

Classroom-based Service Delivery

Classroom-based service delivery also referred to as integrated services, curriculum-based, transdisciplinary, or interdisciplinary programming involves programming directly within the classroom environment or other naturalistic settings. It has many features in common with consultation but the emphasis is on providing direct SLP services to meet student's communication needs within the classroom setting. These needs can be met, for example, through team teaching oral and/or written language with the regular or special education teacher (Dohan,1997). "Classroom-based services may allow the SLP to better address the language skills the child needs for understanding and responding to instructional content and for participating in teacher-student and student-student interactions that support learning" (OSLA, 1996c. Pg.56).

Classroom-based delivery of speech/language services involves meeting students' needs through consideration of curriculum content, particularly as described in Atlantic Canada English Language Arts Curriculum. SLPs, classroom and special education teachers work together as part of the ISSP team to determine

students' needs, to devise objectives, to design programs, and to monitor progress toward outcomes that integrate curriculum and speech/language goals. There is an exchange of knowledge and skills between SLPs and teachers. Programming for students with communication impairments is a responsibility shared among all involved with the students as specified in the ISSP (Dohan, 1997; Holzhauser-Peters, L & Husemann, D.S., 1988: Programming for individual needs: Pre-referral intervention, 2000).

Classroom-based programming may involve grouping students based on common desired goals, curriculum contexts, or grade levels. It may also involve teaching a strategy or skill outside the classroom and reinforcing it in the classroom once learned either through team teaching with the teacher or through direct service provision by the SLP within the classroom. A classroom-based model is particularly effective when there are several students with similar speech/language needs in the same classroom. It is also appropriate for students who have difficulty generalizing new skills to old environments (ASHA, 1993; Dohan, 1997). Programming involves services on a continuing basis until SLP service is no longer indicated, as determined by the support services planning team (Programming for individual needs: Pre-referral intervention, 2000).

Classroom-Based Service Case Study

Adam, Ashley, and Trevor

Adam, Ashley, and Trevor are three Grade 1 students who have similar needs in oral language development. Their ability to follow their teacher's instructions and respond to questions is affected by delays in following directions and comprehending question words (e.g., where, when). The students' needs in the area of expressive language affect their ability to describe ideas, experiences, and feelings in class. They have difficulty formulating oral sentences (for example, using pronouns, verb tenses, and complete sentences) and understanding and using oral vocabulary. Because major components of the Grade 1 Language Arts program are listening and speaking, all three students are experiencing moderate difficulty with the program. Their needs in oral language and phonological awareness also place them at risk for reading and writing disabilities.

Adam, Ashley, and Trevor receive oral language programming from the SLP in a small group session. They also receive the services of the special education teacher for two periods daily in a small group. The special education program focuses on the

development of early literacy skills with an emphasis on building sight vocabulary and phonological awareness skills. The SLP has provided the special education teacher with supplemental phonological awareness development since the beginning of the school year.

At support services planning meetings, the SLP, the special education teacher, the classroom teacher, and the parents of the three students determined that an area of need to be addressed by SLP and special education programming was vocabulary development. It was decided that the SLP and the special education teacher in consultation with the classroom teacher would jointly plan and deliver lessons to build vocabulary and concept knowledge thus maximizing the opportunity to harmonize oral and written language activities. These weekly classroom lessons are comprised of activities based on curriculum texts and materials. Examples of activities are identifying and using antonyms and synonyms, using concept words to describe pictures, talking about word meanings, and classifying similar objects. During the week, the special education teacher reinforces the words introduced and reteaches them from a written language perspective using the same curriculum texts and materials. All three students have shown improvements in receptive and expressive vocabulary knowledge.

**Classroom-Based Service
Case Study 2**

Jessica and Stewart

Jessica and Stewart are junior high level students who have a cognitive delay. They are integrated with their age peers for homeroom, silent reading period, gym and music. They share communication needs in the areas of auditory comprehension, vocabulary, and concept development, and sentence formulation and articulation. Jessica and Stewart receive direct programming with the SLP once weekly.

A more general area of need for Jessica and Stewart is pragmatics, or communication in social and situational contexts. All five students served by the low ratio teacher have pragmatic needs as detailed in the communication and social domain areas of their ISSPs. Because social and functional communication are most meaningfully learned, practiced, and reinforced in a group context, programming for the development of pragmatic skills takes place in the challenging needs classroom. Lessons are collaboratively developed and taught by the SLP and challenging needs teacher.

Lessons include such conversational rules as communicating from an appropriate distance facing the speaker or listener, using appropriate eye contact, taking turns, maintaining the topic and changing the topic. Specific skills taught include, for speakers; using manners and sharing relevant information and, for listeners; paying attention, making eye contact and not interrupting. Recent roleplaying activities in class were for each student to introduce themselves to someone and to introduce two people who did not know each other.

The teacher posts guidelines for the use of these pragmatic skills. He regularly reminds students to practice the rules of conversation in the classroom as well as encouraging the use of pragmatic skills through classroom strategies suggested by the SLP. Parents receive copies of the lessons so that they know which skills are being taught. Parents who encourage daily use of conversation skills have noted an increase in students social interaction with extended family members and in the community.

Direct Service Outside the Classroom

Direct service delivery involves small-group or individual programming by SLPs for children whose needs range from mild to severe. Decisions regarding grouping, the number and duration of programming sessions, and the length of programming vary according to the needs of the child and are decided during the support services planning process. The direct service program incorporates the Language Arts curriculum content to meet the goals specified in the ISSP. As a member of the support services planning team the SLP is primarily responsible for planning, implementing, and monitoring the child's communication program. The SLP also consults and collaborates with parents, teachers, and other professionals on communication issues (ASHA, 1993; Newfoundland Department of Education, 1996c; OSLA, 1996).

The direct service model is also appropriate when a child needs to master a new skill in the context of intensive instruction and practice. For example, a child who needs to learn how to accurately produce a speech sound or a child who needs to develop fluency skills (e.g., reduce stuttering) benefits from individual or small group sessions outside the classroom. Use of this model is indicated when classroom opportunities for a child to practice a new skill are limited. The direct service model of service delivery need not be used exclusively during the course of programming.

Following a period of intensive programming, a collaborative consultation or classroom-based model may be used, either instead of or in combination with the direct service model as indicated by the child's needs and determined by the support services planning team (ASHA, 1993; Nelson, 1990; Newfoundland Department of Education, 1996c).

Direct Service Case Study

April is a Grade 6 student who excels academically and has an outgoing personality. She is involved in many activities, one of which is basketball. Following a weekend tournament at her school when she cheered loudly, April's voice was hoarse. April's mother was concerned because April had a hoarse voice on several occasions and the duration of hoarseness was increasing with each episode. April visited the SLP, who referred her to the ear-nose-throat doctor. The doctor diagnosed April with vocal fold nodules.

As decided at a recent support services planning meeting the SLP is providing programming for April to teach her good voice use and to encourage her to monitor vocal abuses, such as talking excessively and cheering. April's teachers reinforce good voice use at school, as do her parents at home. At the SLP's request, the music teacher allows April to remain silent during music class until the nodules disappear. The classroom teacher finds that some of the SLP's suggested strategies for the children's good voice use are helpful in using her own voice wisely while teaching.

Direct Service Case Study 2

John is a Level I student who has a long-standing but mild dysfluency (i.e., stutter). John was not referred for a speech evaluation as a primary or elementary child because his parents and teachers believed that he would outgrow his stutter. John is currently taking courses that require him to do public speaking. A referral to the SLP was made after John spoke with a teacher about his difficulty speaking in front of the class and his anxiety over his fluency impairment.

Direct programming aimed at increasing John's fluency of oral presentations was begun by the SLP following a support services planning meeting that John attended. Discussion at the meeting revealed that John is interested in pursuing a career in business.

John's degree of motivation to learn and use fluency-facilitating skills is high. As well as beginning to master these skills in sessions with the SLP, John is now in the initial stages of transferring use

of his skills to the classroom. John reports that he is developing a positive attitude toward speaking experiences.

Summary

In summary, collaborative consultation, classroom-based service, and direct service programming are options that are chosen in collaboration with all members of the support services planning team. These models can be used exclusively or in combination, depending on the needs of the child. Speech/language needs and other factors that affect programming listed at the beginning of this chapter may change over time. Therefore, the SLP's use of a given model or a given combination of models with any one child is subject to change. The SLP is a member of the support services planning team for children with communication needs, involved directly or indirectly at all stages of the support services planning process.

References

- Alabama Department of Education. (1993). Speech/ language impaired resource manual. Alabama State Department of Education: Division of Special Education Services (Bulletin 1993, No. 56).
- Alberta Health. (1993). Speech language pathology information for teachers [Brochure]. Calgary, AB: Author.
- American Psychiatric Association. (1994). Diagnostic and statistical manual of mental disorders (4th edition). Washington, DC: Author.
- American Speech- Language- Hearing Association Committee on Language, Speech, and Hearing in the Schools. (1984). Guidelines for caseload size for speech-language services in the schools. Asha, 26, 53-58.
- American Speech-Language-Hearing Association (1993). Guidelines for caseload size and speech-language service delivery in the schools. Asha, 35 (Suppl.), 33-39.
- Atlantic Provinces Education Foundation Arts Committee. (1997). Atlantic Canada English language arts curriculum. St. John's, NF: Author.
- Batten's Disease Support and Research Association. Batten's disease neuronal ceroid lipofucinoses. [Brochure] : Author.
- Bishop, V. E., (1971). Teaching the visually limited child. Springfield, IL: Charles C. Thomas Publisher.
- Bloom, L. (1988). What is language?. In M. Lahey (Ed.), Language disorders and language development (pp.1-19). New York: Macmillan Publishing Company.
- Boberg, E. & Kully, D. (1985). Comprehensive stuttering program. San Diego, CA: College- Hill.
- Catts, H.W. (1991) Facilitating phonological awareness: Role of speech-language pathologists. Language, Speech, and Hearing Services in Schools, 22, 196-203.
- Cirran, F.M., & Penner, S.G. (1995). Classroom-based and consultative service delivery models for language intervention. In M.E. Fey, J. Windsor, & S.F. Warren.(Eds.), Language intervention preschool through elementary years. (pp. 333-362). Toronto: Paul H. Brookes.
- Catts, H. W., & Vartiainen, T. (1993). Sounds abound. East Moline, IL: LinguiSystems.

Cook, A.M., & Hussey, S.M. (in press). Assistive technologies: Principles and practices. St. Louis: Mosby Yearbook.

Day, C. (1985). Educating exceptional children (4th edition). Scarborough, ON: Nelson Canada.

Davis, H., Silverman S.R., (1978). Hearing and deafness. New York: Holt, Rinehart and Winston.

Dodge, E.P. (1994). Communication lab profile: Assessing your students' classroom communication. East Moline, IL: LinguiSystems.

Dohan, M. (1997). The speech-language pathologist's changing role: collaboration within the classroom (Unpublished master's thesis). Memorial University of Newfoundland, NF.

Dorland, X. (1989). Dorland's Pocket Medical Dictionary (24th edition). Philadelphia: W.B. Saunders Company.

Durham Board of Education. (1994). Strategies, techniques education plans, programming in the mainstream. A support document for regular grade teachers of students with intellectual disabilities.

Edwards, C. (1990). Otitis media and the forgotten hearing impaired child, (Unpublished manuscript).

Federal Register. (1977) (65082-65085). Washington, DC.

Finucane, B. (1988). Fragile X Syndrome: A handbook for families and educators. Elwyn: Author.

Florida Department of Education. (1995). Collaborative language and speech services: Alternative classroom treatment. Tallahassee, FL: Author.

Hagan, J.S., McDannold, S.B., & Meyer, J. (1990). The speech and language classroom intervention manual: Goals, objectives, and intervention strategies for speech and language problems. Columbia, MO: Hawthorne Educational Services Inc.

Hammill, D.D. (1990). On defining learning disabilities: An emerging consensus, Journal of Learning Disabilities, 23, 74-84.

Harris, K. N. (1994). What is a Speech-Language Pathologist? Paper presented at an in service for Instructional Resource Teachers, Spaniards Bay, NF: Avalon North School District.

Health and Welfare Canada. (1982). Guidelines for the practice of language- speech pathology and audiology. Ottawa, ON: Author.

Holzhauser-Peters, L. & Husemann, D.A. (1988). Alternative service delivery models for more efficient and effective treatment programs. Clinical Connection, Fall, 16-19.

House, Alvin E. (1999). DSM-IV Diagnosis in the Schools. New York, NY: The Guilford Press

Kahmi, A.G. (1995). Parent articles 2. Tucson, AZ: Communication Skill Builders.

Kahmi, A., & Catts, H. (1989). Reading disabilities: A developmental language perspective. Austin, TX: Pro-Ed.

Kekelis, L. S., (1996). Blind and sighted children with their mothers: the development of discourse skills. Journal of Visual Impairment and Blindness, Sept-Oct, 423-436.

Krysiak, P.D., & Strader, W.H. (1996). The role of the speech-language pathologist in early childhood settings. Early Child Development and Care, 121 , 9-23.

Lahey, Margaret.(1988). Language Disorders and Language Development. New York, New York: Macmillan Publishing Company.

Love, R.J., & Webb, W.G. (1992). Neurology for the speech-language pathologist. Stoneham: Butterworth- Heineman.

McCarney, S.B., Wunderlich, K.C., & Bauer, A.M. (1993). The pre-referral intervention manual (2 ed.). Columbia, MO: Hawthorne Educational Services Inc.

McWilliams, B.J., Morris, H.L., & Shelton, R.L. (1990). Cleft palate speech (2nd edition), Philadelphia: B.C. Decker, Inc.

Miller, B.F., & Keane, C.B.(1972). Encyclopaedia and dictionary of medicine and nursing. Philadelphia: W.B. Saunders Company.

National Organization for Rare Disorders, Inc. (1990).

Nelson, N.W. (1990). Only relevant practices can be best. In W. Secord, & E. Wiig (Eds.), Best practices in speech-language pathology (pp. 15-27). San Antonio, TX: The Psychological Corporation.

Nelson, N.W. (1996, October). Changing Language Systems and Changing Lives: Contextually- Based Language Assessment and Intervention. Paper presented at the meeting of the Newfoundland Association of Speech-Language Pathologists and Audiologists, Corner Brook, NF.

Nelson, Nickola Wolf. (1988). Planning individualized speech and language intervention programs. Tucson, Az: Communication Skill Builders.

Nelson, Wolf N. (1998). Childhood Language Disorders in Context: Infancy through adolescence (2nd edition). Allyn and Boston, Ma: Bacon.

New Brunswick Department of Health and Community Services. (1994). Preferred practices: Speech-language pathology services: Support services to education and community-based services for children with special needs. Fredericton, NB: Author.

Newfoundland Department of Education. (1998). Programming for individual needs: Pathways to programming and graduation. St. John's, NF: Author.

Newfoundland Department of Education. (1997). Standards of practice. St. John's, NF: Author.

Newfoundland Department of Education. (1996a). Programming for individual needs: Individual support service plans. St. John's, NF: Author.

Newfoundland Department of Education. (1996b). Programming for individual needs: Physical disabilities. St. John's, NF: Author.

Newfoundland Department of Education. (2000). Programming for individual needs: Pre-referral intervention. St. John's, NF: Author.

Newfoundland Department of Education. (1996d). Programming for individual needs: Using technology to enhance students' differing abilities. St. John's, NF: Author.

Newfoundland Department of Education. (1996e). Programming for individual needs: Alternate courses. St. John's, NF: Author.

Newfoundland Department of Education. (1995). Model for the Coordination of Services to Children and Youth with Special Needs in Newfoundland and Labrador. St. John's, NF: Author.

Newfoundland Department of Education . (1992). Using our strengths: Programming for individual needs: A resource book for educators. St. John's, NF: Author.

Newfoundland Departments of Education, Health, Human Resources & Employment, and Justice. (1997). Coordination of services to children and youth in

Newfoundland and Labrador: Profiling the needs of children/youth. St. John's, NF: Author.

Nicolosi, L. Harryman, E. & Kresheck, J. (1989). Terminology of communication disorders speech-language-hearing (3rd ed.). Baltimore: Williams & Wilkins.

Ontario Association of Speech-Language Pathologists and Audiologists. (1996). Speech-language pathology services in Ontario schools. Toronto, ON: Author.

- Ontario Ministry of Education. (1994). Speech and language. Toronto, ON: Author.
- Paul, Rhea. (1995). Language disorders from infancy to adolescence: Assessment and intervention. Toronto: Mosby.
- Rosner, J. (1993). Helping children overcome learning difficulties. Walter & Company: New York.
- Rowley-Kelly, Fern, L. and Reigel, Donald (1993). Teaching the student with spina bifida. Baltimore, Maryland: Paul H. Brookes Publishing Company.
- Secord, W.A. (Ed.). (1990). Best practices in school speech-language pathology: Collaborative programs in the schools: Concepts, models, and procedures. San Antonio, TX: The Psychological Corporation.
- Stuttering Therapy: A Workshop for Specialists. (July, 1994). Northwestern University: Evanston, Illinois.
- Thompson, M. (1987). Language assessment of hearing impaired school age children. Seattle, WA: University of Washington Press.
- Travis, L.E. (1971). Handbook of speech pathology and audiology. New York: Meredith Corporation.
- Trefler, E. (1992). Positioning, access, and mobility module: Technology in the classroom. Rockville, MD: ASHA.
- Trief, E. (Ed.). (1992). Working with visually impaired young students: A curriculum guide for birth - 3 year olds. Springfield, IL: Charles C. Thomas Publisher.
- Van Riper, Charles, & Erickson, Robert L. (1996) Speech Correction: An Introduction to Speech Pathology and Audiology (9th edition). Boston, MA: Allyn and Bacon.
- Walsh, S. (1996). Phonological awareness: A resource for kindergarten and primary teachers. Unpublished manuscript.
- Weiner, W.J., & Goetz, C.G. (1989). Neurology for the non-neurologist. Philadelphia: Lippincott Company.

RELATED CONDITIONS

Anoxia: Absence or deficiency of oxygen in body tissues below physiologic levels. The condition is accompanied by deep respirations, cyanosis, increased pulse rate and impairment of coordination. Predisposing factors for anoxia include laborious labors, heavy maternal sedation, obstruction of respiratory passages with mucus, incomplete development of lungs, and congenital circulatory and cardiac defects (Miller & Keane, 1972; Travis, 1971).

Apert Syndrome: Characterized by microcephaly, i.e., small head, bony sutures closed so head appears flat, webbed hands and feet, frequent mental retardation (Newfoundland Department of Education, 1992).

Aphasia: Disturbance or loss of ability to comprehend, elaborate or express speech concepts (Love & Webb, 1992). Related conditions include:

Acquired Aphasia: Present in an individual who has begun to develop normally and then sustains a language disturbance as the result of cerebral insult, i.e., infarct, tumor, abscess, infection or trauma.

Childhood Aphasia with Abnormal EEG Findings or Landau-Kleffner Syndrome: Subgroup of acquired aphasia composed of children whose language disturbance is associated with convulsive seizure and abnormal electroencephalographic (EEG) findings.

Developmental Language Disability or Childhood Aphasia: Those children who have never developed language appropriately. The gross language impairment typically has been associated with a peripheral hearing loss, a generalized deficit of cognitive function or childhood autism.

Apraxia of Speech: An impaired ability to execute voluntarily the appropriate movements for articulation of speech in the absence of paralysis, weakness or incoordination of the speech musculature (Love & Webb, 1992).

Asperger's Disorder: Characterized by severe sustained impairment in social interaction and the development of restricted, repetitive patterns of behaviour, interests, and activities. It must cause clinically significant impairments in social, occupational, or other important areas of function. In contrast, there are no clinically significant delays in language or cognitive development or in the development of age appropriate self-help skills, adaptive behaviour, and curiosity about the environment in childhood. The diagnosis is not given if the criteria are met for any other specific Pervasive Developmental Disorder or for Schizophrenia (American Psychiatric Association, 1994).

Attention Deficit Hyperactivity Disorder: Disturbance of at least 6 months duration during which at least 8 of the following are present (American Psychiatric Association, 1994):

- a) fidgets with hands and feet or squirms in seat
- b) difficulty remaining seated when required to do so

- c) easily distracted by extraneous stimuli
- d) difficulty awaiting turn in games or group situation
- e) blurts out answers to questions before they have been completed
- f) difficulty following through on instructions from others
- g) difficulty sustaining attention in tasks or play activities
- h) shifts from one uncompleted activity to another
- i) difficulty in playing quietly
- j) talks excessively
- k) interrupts and intrudes on others
- l) does not seem to listen to what is being said
- m) loses things necessary for tasks or activities
- n) engages in dangerous physical activities without considering possible consequences.

Autism: Abnormality in interpersonal relationships exhibited in early childhood and characterized by morbid self-absorption to the detriment of influence by external reality characterized by (Nicolosi, Harryman and Kresheck, 1989):

- a) onset before 30 months of age
- b) pervasive lack of responsiveness to others
- c) gross deficits in language development
- d) if speech present, peculiar speech patterns such as immediate and delayed echolalia and pronominal reversal
- e) bizarre responses to various aspects of the environment
- f) absence of delusions, hallucinations loosening of associations and incoherence as in schizophrenia

Bardet Biedl Syndrome, also called Lawrence-Moon-Biedl Syndrome: Characterized by abnormalities of the retina, often leading to blindness, mental retardation, delayed or absent sexual maturation, obesity and the presence of extra fingers and toes. Additional anomalies, especially that of the kidney may accompany these features. It is a hereditary condition, more common in boys (National Organization of Rare Disorders, Inc., 1990).

Batten's Disease (Ceroid Lipofuscinosis): A progressive nervous system disease of the gray matter whereby child develops normally until 6 months to 2 years of age and then starts to lose skills. Eventually, seizures, mental retardation and blindness occur with fatal outcome (Newfoundland Department of Education, 1992).

Bell's Palsy: Inflammation or lesion of the facial nerve, resulting in paralysis of the muscles of the face, usually of one side. It is often a temporary condition lasting a few days or weeks. Occasionally, the paralysis results from a tumor pressing on the nerve or from physical trauma to the nerve. In this event, recovery will depend upon the success in treating the tumor or injury. Most often, the cause is unknown (Miller & Keane, 1972; Love & Webb, 1992).

Cerebral Palsy: A neurological condition caused by injury to the immature brain characterized by a nonprogressive disturbance of the motor system. Associated problems may include mental retardation, hearing and/or visual impairments and perceptual problems produced by infantile cerebral injury. The

largest majority of cerebral palsy cases are of three forms (Love & Webb, 1992);

- 1) spastic type in which there are exaggerated stretch reflexes, muscle spasm and increased deep tendon reflexes
- 2) athetoid with purposeless, uncontrollable movements and muscle tension
- 3) ataxic, in which the child has poor balance, poor coordination and a staggering gait.

Childhood Disintegrative Disorder: One of the disorders under Pervasive Developmental Disorder with a marked regression in at least two of the following areas of functioning following a period of at least two years of apparently normal development:

- 1) expressive or receptive development
- 2) social skills or adaptive behaviour
- 3) bowel or bladder control
- 4) play
- 5) motor skills

In addition, there are abnormalities of functioning in at least two of the following areas:

- 1) qualitative impairment of social interaction
- 2) qualitative impairment in communication
- 3) restricted, repetitive and stereotyped patterns of behaviour, interests, and activities, including motor stereotypes and mannerisms (DSMIV, 1994).

Cleft Lip and Palate: A congenital split of the lip or of the roof of the mouth with an incidence occurring in about one birth per thousand, sometimes associated with other anatomic defects. Clefts are unrelated to mental retardation. Cleft lip and palate result from failure of the two sides of the face to unite properly at an early stage of prenatal development (McWilliams, Morris & Shelton, 1990).

Crouzon Disease: Much like Apert Syndrome but less severe and no involvement of hands and feet. upper lip is short, lower lip tends to droop and the nose is sometimes beak-like. Hypertelorism is very common. Approximately 80% of cases have optic nerve defects and other eye anomalies (McWilliams, Morris, and Shelton, 1990).

Cri du Chat Syndrome: Characterized by small-for-dates, growth retardation, cat-like cry in infancy, mental retardation, congenital heart defects and microcephaly. It is caused by partial deletion of the short arm of chromosome #5 (Newfoundland Department of Education, 1992).

Down Syndrome: A congenital condition characterized by physical malformations and some degree of mental retardation. This disorder is concerned with a defect in the twenty-first chromosome. The term trisomy refers to the presence of three representative chromosomes in a cell instead of the usual pair (Miller & Keane, 1972).

Dysphagia: Difficulty with swallowing (Love & Webb, 1992). Difficulties may occur at any point in the swallowing action.

Edward's Syndrome (Trisomy 18): Characterized by being small for dates, mental retardation, low set ears, clenched hands with overriding fingers, and congenital heart defects. There is limited survival and 90% die by age one. Incidence is 1 in 1000 births (Newfoundland Department of Education, 1992).

Fetal Alcohol Syndrome: Characterized by small-for-dates, mild-moderate mental retardation, congenital heart defects, droopy eyelids, microcephaly and joint abnormalities. It is caused by excessive alcohol intake during pregnancy (Newfoundland Department of Education, 1992).

Fragile X Syndrome: The name given to the combination of mental retardation or learning disabilities, behaviours, and physical features seen in some people who have the fragile X gene (Finucane, 1988).

Gilles de la Tourette Syndrome: Facial and vocal tics beginning in early childhood usually in boys, and progressing to generalized jerking of other parts of the body. Initially, there are articulate expiratory laryngeal noises progressing to loud exclamations and coprolalia, echolalia, and pallila may also develop (Nicolosi, Harryman, and Kresheck (1989).

Hydrocephalus: A condition characterized by enlargement of the cranium caused by abnormal accumulation of fluid; also called "water on the brain". It is usually associated with a congenital defect in infants. When the regular flow of absorption of the cerebrospinal fluid is impaired by a congenital malformation of the internal skull, the fluid accumulates in the brain and enlarges the ventricles (Miller & Keane, 1972).

Learning Disabilities: General term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning or mathematical abilities. These disorders are intrinsic to the individual, presumed to be due to central nervous system dysfunction and may continue across the lifespan (Hammill, 1990).

Muscular Dystrophy: A group of related muscle diseases that are progressively crippling because muscles are gradually weakened and eventually atrophy. The cause is not known and at present there is no specific cure. The disease can sometimes be arrested temporally; not all forms of it are totally disabling. Speech muscles lose strength and show disturbances of muscle bulk. Related conditions include Duchenne type progressive muscular dystrophy or pseudohypertrophic muscular dystrophy (Miller & Keane, 1972; Love & Webb, 1992).

Otitis Media: Fluid in the middle ear caused by an ear infection. Fluctuating hearing loss during this time also interferes with learning speech and language skills because children may not be able to hear a full range of sounds and voices.

For a child with Otitis Media, hearing is similar to what is experienced when you put ear plugs in your ears. As a result, the child experiences difficulty with final consonants, past tenses and word endings. When children with Otitis Media do not hear these sounds when others talk, they do not learn how to say them properly.

Common symptoms of Otitis Media are: earaches or draining of the ears, fever, partial loss of hearing, different response to speech and everyday sounds, changes in sleeping or eating habits, irritability,

rubbing or pulling at the ears, having difficulty keeping balance, running, or jumping, turning the television or radio up much louder than usual, frequent need to have directions and information repeated, talking less than usual, unclear speech, using gestures rather than talking, and delayed speech and language development.

Pierre Robin Syndrome: A syndrome characterized by micrognathia, i.e., small jaw, occurring in association with cleft palate, glossoptosis and absent gag reflex (Dorland, 1989).

Prader - Willi Syndrome: Characterized by severe obesity, small testes and penis, mental retardation, and floppiness in infancy. In half the cases, it is caused by partial deletion of chromosome #15 (Newfoundland Department of Education, 1992).

Rhett's Disease: One of the disorders under Pervasive Developmental Disorder. It is a disorder affecting females. The onset of symptoms begin as early as five months of age. There is characteristic head growth deceleration, loss of previously acquired hand skills with subsequent development of stereotyped hand movements (hand-writing/washing), and the appearance of poorly coordinated gait or trunk movements. In addition, there is a loss of social engagement early in development. Expressive and receptive language skills are severely impaired as are psychomotor skills (DSMIV, p. 72, 1994).

Specific Learning Disability: A disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written which may present as imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations. It includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia and developmental aphasia. The term does not apply to children whose learning problems primarily result from visual, hearing and motor handicaps, mental retardation, emotional disturbance, or environmental, cultural or economic disadvantage (Federal Registrar, December 29, 1977, p. 65083).

Spina Bifida: A defect of the vertebral column due to imperfect union of the paired vertebral arches at the midline. It may be so extensive as to allow herniation of the spinal cord and meninges, or it may be covered by intact skin and evident only on radiologic examination (Miller & Keane, 1972).

Swallowing Impairment: Most often seen in students with physical disabilities, paralysis, or weakness of the mouth and digestive canal. The following characteristics may indicate that a student has difficulties with swallowing. The student:

- may have a particular diagnosis involving neurological impairment
- drools often
- gags or is otherwise having difficulty with eating or drinking
- has been placed on a special diet for reasons related to an inability to digest certain foods
- has a feeding tube

Tourette's Syndrome, refer to Gilles de la Tourette Syndrome.

Traumatic Brain Injury or Closed Head Injury: Any injury to the head region resulting from external forces. Individuals usually display a serious and pervasive language deficit termed a cognitive-communicative disorder (Love & Webb, 1992).

Treacher Collins Syndrome: Characterized by unusual facial appearance with malformed ears and conductive hearing loss, absence of lower eyelashes, cleft palate. Intelligence is usually normal (Newfoundland Department of Education, 1992).

Turner's Syndrome: A form of gonadal dysgenesis affecting females marked by short stature, undifferentiated gonads and variable abnormal webbing of the neck, low posterior hairline, increased carrying angle of the elbow, and cardiac defects (Dorland, p. 579, 1989).

GLOSSARY OF TERMS

Additions: Articulatory errors in which a sound is added, e.g., “puh-lane” for plane (Peel Memorial Hospital, pamphlet).

Affricate: Sound produced when a sound begins as a “stop” but is “finished” as a fricative, e.g., “t” + “sh” becomes “ch” as in chew (Peel Memorial Hospital, pamphlet).

Apraxia: Inability to voluntarily execute muscle movements in the absence of sensory or motor deficits, though involuntary movements remain intact (Peel Memorial Hospital, pamphlet).

Articulation: The process of producing speech sounds by appropriate movements of the oral musculature.

Articulation Disorders: Results when incorrect productions of speech sounds and/or the application of inappropriate phonological processes are evident. Speech sound errors are categorized under the four headings of additions, substitutions, omissions, and distortions (Peel Memorial Hospital, pamphlet).

Auditory Comprehension: Understanding of the spoken language of others.

Automatic Speech: Over-practiced familiar speech such as the alphabet, days of the week, common greetings (Peel Memorial Hospital, pamphlet).

Blend (consonant cluster): Two or more consonant sounds produced without vowel separating them, e.g., fry, string.

Block: An abrupt stop in the smooth flow of speech associated with difficulty moving forward. The mouth may be held in one position without sound coming out (Peel Memorial Hospital, pamphlet).

Collaboration: The process by which people of different areas of expertise are brought together to meet the needs of an individual in the most effective manner (Peel Memorial Hospital, pamphlet).

Communication: The process of exchanging information, ideas, and feeling. It is usually an active process that requires the sender who formulates the message and a receiver who understands the message. Communication is essentially a social act, the primary function of which is interaction with another living being (Peel Memorial Hospital, pamphlet).

Concomitant/Secondary Behaviours: Accessory behaviors which may include such non-speech behaviours as alteration of posture, eye-blinking, and facial movements. (Peel Memorial Hospital, pamphlet)

Context: The characteristics of the environment in which a situation occurs.

Diadochokinetic Rate: The speed of execution of rapid repetitive movements of the articulators. It is usually measured with a single sound. e.g., puh, puh, puh, or alternating sounds, e.g., puh, tuh, kuh (Peel Memorial Hospital, pamphlet)

Direct Intervention: Intervention administered to the student directly by the speech-language pathologist. (Alberta Health, 1993)

Discourse: Communication in the form of conversation, narration (story telling), exposition (explaining information).

Distortion: A speech sound which is identifiable as an attempt at a sound, but is not accurate enough to be considered correct. Articulatory errors in which the standard phoneme is modified so that it is approximated, although incorrect and not acceptable. e.g., lateral lisp (Peel Memorial Hospital, pamphlet)

Dysarthria: A group of speech disorders which are the result of difficulties with muscle control, caused by impairment to the central or peripheral nervous systems. It is characterized by altered muscle tone, incoordination, slowness, and weakness. Both involuntary and voluntary movements are affected. (Peel Memorial Hospital, pamphlet)

Dysphagia: Difficulty with swallowing.

Dysphonia: Partial loss of phonation.

Easy Onset: A therapy technique used to avoid hard articulatory contacts and blocking of the airstream. Speech is then produced without tension in the oral musculature.

Fluent Aphasia: Verbal output may be characterized as flowing, with a variety of grammatical forms present. Articulation is generally good. Associated with posterior damage to the temporal, occipital or parietal lobes. It includes Wernicke's aphasia. (Peel Memorial Hospital, pamphlet)

Fluency: The process whereby syllables, words, and phrases are joined together orally with appropriate smoothness and rate.

Fluency/Stuttering Disorder: Results when a student exhibits frequent and/or noticeable disruptions in the smooth flow of speech as a result of behaviors such as hesitations, repetitions, prolongations, interjections, revisions, pauses, and incomplete phrases. Avoidance of words or speaking situations and secondary characteristics suggested of speech related struggle/tension may also be evidence of a fluency disorder.

Functional: A level of performance in any particular area which is sufficient to convey the meaning of the message even when the form of the message is reduced in precision and/or quality. (Alberta Health, 1993)

Glide: A sound produced during the movement of an articulator (in contrast to those produced when the articulators are in a static position). e.g., /w/, /l/, and /r/ (Peel Memorial Hospital, pamphlet)

Glottal Attack/Hard Onset of Voice: A build-up of air pressure beneath closed vocal folds which is suddenly released to produce phonation.

Imitation/Modelling: Reproduction of an exhibited behaviour, either immediately or in a deferred manner.

Language: The process of communicating ideas through an arbitrary code of symbols and the rules governing the combination of those symbols. Language includes rules that govern the following sub-systems: syntax, semantics, morphology, phonology, and pragmatics. (Peel Memorial Hospital, pamphlet)

Language Disorder: Significant impairment in a student's expressive and/or receptive language skills.

Monitoring: A method of periodic observation to evaluate the needs of an individual for speech-language service. (Alberta Health, 1993)

Morphology: The rule system that governs the structure of words. e.g., plurals '-s', and past tense '-ed'

Narrative: Written or verbal account of an event.

Nasal: A sound produced with the mouth closed and a free movement of air through the nose. e.g., /m/, /n/, and /ng/

Normal Dysfluency: Typically a young child will hesitate, repeat words, and pause when producing speech. It is usually observed in a child between three and five years of age, and there is no accompanying physical and emotional tension. (Peel Memorial Hospital, pamphlet)

Omission: Articulatory errors in which a sound is not produced at a place where one should occur, e.g., cat becomes 'at'. (Peel Memorial Hospital, pamphlet)

Oral Motor Examination: Assessment of the oral structures to determine the structural and functional adequacy for speech production.

Phoneme: The smallest unit of sound which can be heard to be distinct from other sounds of that given language.

Phonology: The sound system of a language which can be defined as the study of sounds that comprise the language and the rules for using them.

Pragmatics: The use of language in social context (meaning and context are interdependent).

Semantics: The content or meaning of words and utterances.

COMMUNICATION DISORDERS

Speech/Language Impairment: A communication disorder in one or more of the following areas: articulation, voice, language or fluency, which adversely affect a student's performance.

Stimulability: The degree to which an error sound can be produced "correctly" under ideal circumstances.

Stop: Sound produced when the vocal tract is closed completely then opened suddenly to release the sound. e.g., /p/, /d/, or /g/

Substitution: Replacement of one sound by another. e.g., "dod" for dog

Syntax: The structure of language, including word order, and the relationship between elements in a sentence.

Target Vocabulary: The predetermined set of words in student instruction.

Velo-Pharyngeal Incompetence: Inability to separate the nose from the mouth via normal velar and pharyngeal action. This leads to a nasal sound in the voice and is often associated with cleft palate. (Peel Memorial Hospital, pamphlet)

Vocal Hygiene: Guidelines for voice use to protect a healthy voice or aid a misused voice. (Peel Memorial Hospital, pamphlet)

Voice: The process of producing sound through the vibration of the vocal folds. The elements of voice include pitch, loudness, quality, inflection, and resonance. (Peel Memorial Hospital, pamphlet)

Voice Disorders: Results from the habitual use of pitch, loudness, quality, inflection, and/or resonance that is inappropriate for the student's age, sex, size, or the speaking situation. It may be the result of a functional or an organic condition and may draw on favorable attention adversely affecting the listener or the speaker. (Peel Memorial Hospital, pamphlet)

Voiced: A sound produced using vocal fold vibration. e.g., /b/, /d/, or /g/

Voiceless: A sound produced without vocal fold vibration. e.g., /p/, /t/, or /k/

LANGUAGE:	ASSET	Assessing Semantic Skills Through Everyday Language
	BLT-2	Bankson Language Test-2
	BBCS	Bracken Basic Concept Scale
	BTBC-R	Boehm Test of Basic Concepts-Revised
	CELF-3	Clinical Evaluation of Language Fundamentals-Third Edition
	CREVT	Comprehensive Receptive and Expressive Vocabulary Test
	EOWPVT-R	Expressive One Word Vocabulary Test-Revised
	LPT-R	Language Processing Test-Revised
	PLS-3	Preschool Language Scale-3
	PPVT-R	Peabody Picture Vocabulary Test-Revised
	RDLS	Reynell Developmental Language Scales
	ROWPVT	Receptive One Word Picture Vocabulary Test
	SPELT-II	Structured Photographic Expressive Language Test-II
	TACL-R	Test for Auditory Comprehension of Language-Revised
	TEEM	Test for Examining Expressive Morphology
	TELD-2	Test of Early Language Development-2
	TLC-Exp.	Test of Language Competence-Expanded Edition
	TOAL-3	Test of Adolescent and Adult Language-Third Edition
	Token	Token Test for Children
	TOLD-P:2	Test of Language Development-Primary: Second Edition
	TOLD-I:2	Test of Language Development-Intermediate:Second Edition
	TOPS	Test of Problem Solving-Elementary or Adolescent
	TOWK	Test of Word Knowledge
TWF	Test of Word Finding	
	The Woodcock Language Proficiency Battery-Revised	
Word	The Word Test	
PHONOLOGICAL AWARENESS:	LAC	Lindamood Auditory Conceptualization Test
	TAAS	Test of Auditory Analysis Skills
	TALS	Test of Awareness of Language Segments
	TOPA	Test of Phonological Awareness
PRAGMATICS:	Let's Talk Inventory for Adolescents (9-young adulthood); administrators should have experience with administering	

COMMUNICATION DISORDERS

educational, clinical, or psychological tests and be familiar with the manual, inventory items, and administration and scoring procedures.

TOPL Test of Pragmatic Language
 Test of Pragmatic Skills-Revised

ARTICULATION: The assessment should be done by a speech-language pathologist.

APP-R Assessment of Phonological Processes-Revised
 Deep Test of Articulation
F-LTOAC Fisher-Logemann Test of Articulation
 Competence
G-FTA Goldman-Fristoe Test of Articulation
IPAT Iowa Pressure Articulation Test
KLPA Khan-Lewis Phonological Analysis
PAT-3 Photo Articulation Test-Third Edition
T-MAC Test of Minimal Articulation Competence
WCAT Weiss Comprehensive Articulation Test

FLUENCY:

CASS Assessment of Fluency in School-Age Children
 Cooper Assessment for Stuttering Syndromes
SPI Stuttering Prediction Instrument for Young
 Children
SSI-3 Stuttering Severity Instrument for Children and
 Adults-Third Edition

VOICE: These assessments should be done by a speech-language pathologist.

 Boone Voice Program for Children
 Easy Does It for Voice
VAP Voice Assessment Protocol for Children and
 Adults

**AUGMENTATIVE/ALTER
NATIVE
COMMUNICATION:**
(formal and informal)

 Assessment for Non-Oral Communication
 Comprehensive Screening Tool for Determining
 Optimal Communication Mode
 The Non-Oral Communication Assessment
 The Non-speech Test

SWALLOWING: Oral-Motor/Feeding Scale

HEARING: Tests specifically designed for students with a hearing impairment
(Thompson,1987)

CID	Scales of Early Communication Skills for Hearing Impaired Children
CPVT	Carolina Picture Vocabulary Test
GAEL	Grammatical Analysis of Elicited Language
MSEI	Maryland Syntax Evaluation Instrument
PCPEP	Patterson-Cole Phonologic Evaluation Procedure
RITLS	Rhode Island Test of Language Structure
SKI-HI RLT	SKI-HI Receptive Language Test
SKI-HI LDS	SKI-HI Language Development Scale
TAGS	Teacher Assessment of Grammatical Structures
TEXLA	Test of Expressive Language Ability
TERLA	Test of Receptive Language Ability
TCRVT	Total Communication Receptive Vocabulary Test
TSA	Test of Syntactic Abilities

*** information taken from catalogues, Language Disorders from Infancy Through Adolescence, test manuals.

SOCIAL LANGUAGE SKILLS

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Skill 1: Introducing

To introduce yourself to someone, you:

- use a pleasant face and voice
- look at the person
- tell the person your name
- ask for the person's name

To introduce two people who don't know each other, you:

- use a pleasant face and voice
- look at each person
- tell each person the other's name

Skill 2: Following Directions

To follow directions, you:

- use a pleasant face and voice
- look at the person giving directions
- say "OK"
- start to do what was asked right away
- do it satisfactorily

Skill 3: Giving and Receiving Positive Feedback

To give positive feedback, you:

- use a pleasant face and voice
- look at the person
- tell exactly what you like about what the person did

To receive positive feedback, you:

- use a pleasant face and voice
- look at the person
- acknowledge the feedback by saying, "thanks" or "you're welcome".

Skill 4: Sending an "I'm interested" Message

To send an "I'm interested" message, you:

- use a pleasant face
- look at the person
- keep your hands and body still

Skill 5: Sending an Ignoring Message

To send an ignoring message, you:

- keep a pleasant face
- look away or walk away from the person
- do not respond
- pretend you're not listening

Skill 6: Interrupting a Conversation

To interrupt the right way, you:

- use a pleasant face and voice
- wait for a pause in the conversation
- say "Excuse me"
- look directly at the person
- then talk

Skill 7: Joining a Conversation

To join a conversation, you:

- use a pleasant face and voice
- look at the person
- wait for a pause
- say something on the topic

Skill 8: Starting a Conversation and Keeping It Going

To start a conversation and keep it going, you:

- use a pleasant face and voice
- look at the person
- ask questions about the other person
- tell about yourself

Skill 9: Sharing

To share, you:

- use a pleasant face and voice
- divide up something there's not much of, so others can also have some (if appropriate)
- take turns (if appropriate)

Skill 10: Offering to Help

To offer to help, you:

- use a pleasant face and voice
- notice something that you can do for someone
- ask if you can help
- if that person says "yes", then you do it

Skill 11: Compromising

To compromise, you:

- use a pleasant face and voice
- think of a way both people can get something that they want
- suggest it

Skill 12: Asking for Clear Directions

To ask for clear directions, you:

- use a pleasant face and voice
- look at the person
- ask for more information
- repeat the directions to the person

Skill 13: Problem Solving

To solve a problem, you:

- take a deep breath to get a calm body and good attitude
- think of at least three different things you can do
- pick the best one for you
- try that one first

Skill 14: Using Positive Consequences

To reward someone, you:

- use a pleasant face and voice
- do something nice for the person. For example, you could do the person a favour, thank the person, give the person a hug, or share something

Skill 15: Giving and Receiving a Suggestion for Improvement

To give a suggestion for improvement, you:

- use a pleasant face and voice
- say something nice on the topic
- make the suggestion
- thank the person for listening

To receive a suggestion for improvement, you:

- use a pleasant face and voice
- listen to the suggestion
- make no excuses
- thank the person for the suggestion

Skill 16: Handling Name-Calling and Teasing

To handle name-calling and teasing, you:

- keep a pleasant face
- take a deep breath to get calm
- look away, or walk away if you can
- use positive self-talk (say to self, "I am calm", etc.)

Skill 17: Saying "No" to Stay Out of Trouble

To say "no", you:

- use a pleasant face and voice
- take a deep breath to get calm
- look at the person
- keep saying "no"
- suggest something else to do

If suggesting something else doesn't work, you:

- ignore the person and walk away

SPEECH AND LANGUAGE DEVELOPMENT

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Introduction

The following pages outline normal speech and language development. They provide a comprehensive outline to assist teachers in understanding the developmental process of speech and language. It is important to remember the developmental stage of the student with special needs. Due to the highly variable nature of syntactic and morphological development, as well as the lack of research in the area, the following statements should be considered as approximate age levels at which certain forms and constructions may appear.

0 - 3 Months

Phonology

- Birth cry - undifferentiated
- Reflexive soundmaking: produces k, l, g, h glottal catch, front vowels, ah, eh, uh
- Some variety in non-crying sounds
- Sucks well with inner mouth parts and lips
- Differentiated cry (true vocal communication begins)
- Coos and gurgles
- Produces single syllables
- Begins blowing bubbles

Semantics

- Makes eye contact briefly
- Stops movement or quiets in response to sound (responds more readily to speech than to non-speech sounds)
- Startle response to loud sound
- Visually tracks
- Moves eyes toward source of sound
- Attends to voice - turns head toward voice
- Reflexive smile
- Fixes gaze on spoon or bottle
- Quiets when picked up
- (ATTENDING PHASE 0 - 9 MONTHS) prerequisite of semantic development

Play

- Long spells of staring vacantly at large masses (windows, walls)
- Hands predominantly closed > no reaching to grasp objects
- If hand is touched, either clenches or opens
- Reacts to paper or cloth on face
- Raises head when prone

- Grasps object when placed in hand
- Reaches for object but misses (3 months)

4 - 6 Months

Phonology

- Babbling begins
 - Double Syllables
 - Puts lips together - says “m”
 - uses nasal tone
- Vocalizes pleasure and displeasure

Semantics

- Actively seeks sound source - turns head toward sound without aid of visual stimulation
- Smiles in response to speech and feelings of pleasure
- Fixes gaze on face
- Anticipates feeding upon sight of bottle
- Discriminates strangers
- Looks in response to own name
- Watches or closely attends to movement patterns
- Smiles on sight of face
- Recognizes spoon or bottle
- Indicates displeasure on withdrawal of objects
- (ATTENDING PHASE 0 - 9 MONTHS) prerequisite of semantic development

Play

- Raises head and chest when prone
- Puts object in mouth
- Watches hands
- Plays actively when propped in play area - 10-15 minutes
- Looks intently at and shakes rattle
- On visual cue, free hand comes toward but does not grasp rattle
- Pays attention to cube on table
- May detect a tiny pellet
- Generally inspects surroundings
- Smiles, fingers mirror image
- Increases activity at sight of toy
- Works for toy out of reach
- Exploitative in string play
- Head control established in midline
- Bangs with object held in hand
- Transfers object from one hand to another
- Rolls over - both ways

7 - 9 Months

Phonology

- Uses m, n, t, d, b, p, z, in babbling multiple syllables
- Babbles tunefully - singing tones
- Uses wide variety of sound combinations including non-English sounds
- Inflected vocal play - intonation patterns heard
- Interjectional vocalizations
- Imitates intonation and speech sounds of others (9 months)

Semantics

- Responds to facial expressions
- Attempts to imitate gross gestures
- Comprehends parental gestures
- Recognizes others
- Looks at some common objects when names are spoken
- Looks at family members when named
- Comprehends “no” - inhibits on command
- Interest in pictures maintained for full minute while they are named
- Shy, clings to adult in presence of stranger
- (ATTENDING PHASE 0 - 9 MONTHS) prerequisite of semantic development
- Frequently cries when parent leaves the room
- Shouts to attract attention, listens, then shouts again
- May say “da-da” or equivalent
- Some gesture language: plays pat-a-cake, peek-a-boo, bye-bye, shakes head for no
- Sight of object or person produces gross gesture (emerging nomination)
- Imitates ringing of bell

Play

- Uncovers hidden toy (beginning of object permanence)
- Grasps dangling object
- Explores toy with fingers and mouth
- Hitching present
- Bounces when supported in standing position
- Sits without support
- Uses pincer grasp to pick up small object
- Drinks from cup
- Eyes and hands function in close interaction
- Imitates arm movements
- Bangs spoon on table
- Rings bell and smiles at sound

- Pulls self to standing position
- Crawls on belly
- Holds down bottle, feeds self cracker

10 - 12 Months

Phonology

- Vocalizes during play
- Vocalizes to mirror
- Jabbers loudly - wide variety of sounds and intonations
- Uses all sounds (consonants and vowels) in vocal play
- Closes mouth without drooling
- Jargon begins as babbling stops
- May acquire first true word (10 - 18 months)

Semantics

- Begins to relate symbol and object - first true word
- Gives block, toy, or object on request
- Understands and follows simple commands regarding body action
- Responds with searching movements to simple questions
- Looks in correct place for toys out of sight
- Turns head immediately to own name
- Understands the meaning of “hot”
- In presence of more than one object, shows awareness of more than one
- Names or looks for object out of sight - first true word
- Gestures and/or vocalizes to indicate wants and needs (emerging state, recurrence, nomination)
- Begins to vary behaviour according to emotional reactions of others - repeats performances which are laughed at
- Recognizes inverted object - emerging awareness of top/bottom, front/back

Play

- Squeezes doll to make it squeak
- Regards and pokes clapper of bell (beginning cause/effect)
- Deliberately drops toys and watches them fall
- Plays ball with another person
- Still brings objects to mouth - uses tongue more
- Puts objects in and takes them out of large container (beginning awareness of in/out)
- Places one block after another on table (prerequisite to counting)
- Responds to music
- Holds crayon - imitates scribble
- Takes a few steps with help

- Brings one object momentarily above another (emerging awareness of spatial concepts precedes block stacking)
- Stacks rings on a peg

1.1 - 1.6 Years (13 - 18 Months)

Phonology

- Uses sentence-like intonations (jargon)
- Some Echolalia
- Uses all vowels and consonants in jargon
- Omits final consonants and some initial consonants
- Basically unintelligible with exception of a few words

Semantics

- Follows simple one-step commands
- Points to objects he/she recognizes (emerging nomination)
- Points to objects he/she wants (emerging state)
- Begins to claim certain objects as his/her own (emerging possession)
- Points to one to three body parts in command
- Identifies two or more objects or pictures from a group
- Perceives emotion of others
- Uses 3 to 20 words
- Vocalizes with gestures
- Says, "All gone" (emerging negation)
- Answers question, "What's this?"
- Asks for "more" (emerging recurrence)

Play

- Solitary or onlooker play - self play
- Continual walking activities
- Begins running - stiff and awkward
- Scribbles spontaneously with crayon
- Removes mittens, socks, hat - unzips zipper
- Throws, picks up object, and throws again
- Puts objects in and out of containers
- Figures out ways of overcoming some obstacles (opening doors, reaching high places)
- Imitates many things (sweeping, combing hair - self use)
- Pulls toys - carries or hugs doll, teddy bear
- Very rapid shifts in attention - especially expressed by gross motor shifts

Syntax - Morphology

- 50% of all utterances are nouns
- Mean length of response - 1.2 words

1.7 - 2.0 Years (19 - 24 Months)

Phonology

- More words than jargon - jargon almost gone by 2 years
- Asks questions with rising intonation at end of phrase
- Improvement in intelligibility - approximately 65% intelligible by 2 years

Semantics

- Comprehends approximately 300 words
- Listens as pictures are named
- Listens to simple stories - especially likes ones heard before
- Points to 5 body parts on self or doll
- Responds approximately to yes/no questions (head nod or shake)
- Object permanence fully acquired
- Discriminates food from other objects (e.g., unwraps candy before eating)
- Initiates activities/actions which are present to his/her senses, not those from past experiences
- Uses approximately 50 recognizable words
- Uses names of most familiar objects
- Produces animal sound or uses its name
- Verbalizes toilet needs (closer to 2 years) - may verbalize need before, during or after act
- Identifies and names 5 or more pictures by 2 years
- Says own name on request - refers to self with full name
- Verbalizes immediate experiences
- Combines 2 words into phrase; may use 3 to 4 word responses (2 years)
- Begins to use some verbs and adjectives

Play

- Parallel play - plays near others but not with them
- Talks to self as he/she plays
- Little social give and take - little interest in what others say or do but hugs, pushes, pulls, snatches, grabs, defends rights by kicking and pulling hair
- Does not ask for help
- Procrastinates
- Strings Beads
- Transports blocks in a wagon rather than just building
- Relates actions to object or another person - washes, feeds, combs doll in addition to self
- Likes to play with flexible materials such as clay
- Less rapid shifts in attention

- Syntax - Morphology**
- Follows directions using one or two spatial concepts - in/on
 - Negation used in form of “no” - (“no bed”)
 - Possessive emerging (“daddy car”)
 - Refers to self with pronoun and name (“me Tommy”)
 - 33% of utterances are nouns
 - Combines 2 words into phrase (approximate 2 years) in noun+verb, or noun+adjective format
 - Mean length of response - 1.8 words

2.1 - 2.6 (25 - 30 Months)

- Phonology**
- Much substitution and omission of final consonants
 - Approximately 70% intelligible

- Semantics**
- Comprehends approximately 500 words
 - Listens to 5 to 10 minute story
 - Carries out series of 2 related commands
 - Identifies action in pictures
 - Has concept of “one” and “all”
 - Uses 200 intelligible words
 - Names 6 objects by use
 - Repeats two numbers correctly
 - Answers “Where” questions
 - Answers “What...doing” questions
 - Answers “What do you hear with?”

- Play**
- Parallel play predominates
 - Arranges doll furniture into meaningful groups and uses doll figures to act out simple themes from own experience
 - aligns 3 or more cubes to make train - pushes train
 - Builds tower of 6 to 7 blocks
 - Imitates drawing of vertical line

- Syntax - Morphology**
- Articles “a” and “the” appear in sentences
 - Uses present progressive “ing” on verbs
 - Regular plural forms emerging (cat-cats)
 - Uses in/on correctly
 - Irregular past tense emerging
 - Uses some contractions in memorized form (don’t, can’t, it’s, that’s)

- 25% of utterances are nouns, 25% verbs
- Combines 3 to 4 words in subject and verb and object format
- Mean length of response - 3.1 words

2.7 - 3.0 Years (31 - 36 Months)

Phonology

- P, b, m, w, h, n tend to be used with high degree of accuracy by most children
- Still some substitution and distortion of consonants
- Continuing to improve intelligibility - now approximately 80% intelligible

Semantics

- Comprehends approximately 900 words
- Points to pictures of 10 objects described by their use
- Listens to 20-minute story
- Knows own sex and difference
- Knows in/on/under
- Knows big/little
- Matches colours
- Completes 3 piece form board - matches shapes
- Is cautious of common dangers, such as stairways, animals
- Has complicated, sequenced routines for daily activities (e.g., bedtime, meals) - objects to change (beginning of time/sequence awareness)
- Uses 500 intelligible words
- Answers 6 to 7 agent/action questions "What runs?"
- Answers simple "Who, Why, Where, How many" questions (3 years)
- Answers one of three questions: "What do you do when you're hungry, sleepy, cold?"
- Asks simple questions - "What's that?"
- Yes/no questions emerging - "Is he sleeping?"
- Repeats sentence of 6 to 7 syllables accurately

Play

- Dramatization and imagination begin to enter into play (make believe and pretend)
- Symbolic play
- Beginning interest in cooperative play - plays with others in small groups
- Interest in combining playthings
- Is willing to wait his/her turn
- Puts toys away with some supervision

- Watches cartoons on T.V.
 - Names own drawing
 - Builds tower of 9 blocks
 - Puts together four-part nesting toy
 - Stacks 5 or more rings on a peg in order of size
 - Imitates drawing a circle and horizontal lines
- Syntax - Morphology**
- Auxiliary “is/am” + “ing” (boy is running)
 - Uses “is” + adjective (ball is red)
 - Regular past tense verbs appear - walk/walked
 - Uses “s” for possession (daddy’s car)
 - Uses pronouns - I, me, you, mine (he, she and it emerging)
 - Negative “not” emerging
 - Uses contracted form of “is” (he’s running)
 - Adverbs of location emerging (here, there)
 - Begins to use do, can and will (emerging future tense)
 - Uses imperatives (commands: “go get it”, “don’t”, etc.)
 - 20% nouns, 25% verbs
 - Infinitive compliment (“I want to play”) emerging
 - Mean length of response - 3.4 words
- Phonology**
- P, b, m, w, h mastered
 - K, g, t, d, ng, s, r, y are being used consistently although may not be completely mastered
- Semantics**
- Comprehends 1200 words
 - Knows “in front of” and “behind” when objects with logical front and back is used
 - Identifies hard/soft, rough/smooth
 - Identifies circle and square
 - Responds to commands involving 2 actions
 - Responds to commands involving 2 objects
 - Able to match sets (42 months)
 - Uses 800 words
 - Responds appropriately to simple “How...” question
 - Answers 2 of 3 questions: “What do you do when you’re hungry/sleepy/cold?”
 - Beginning of question-asking stage - asks mainly “What” and “Who” questions
 - Names 8 to 10 pictures
 - States action
 - Supplies last word of line (“The apple is on the ...”)
 - Counts 3 objects, pointing to each

- Play**
- Builds bridge from model
 - Begins associative group play
 - Organizes doll furniture accurately and begins using it genuinely imaginative ways
 - Draws two or more strokes for a cross on imitation
- Syntax - Morphology**
- Beginning to use “is” at beginning of questions
 - Third person singular present tense(s) emerging (“he runs”)
 - Contracted forms of modals - (won’t, can’t)
 - Regular plural forms are consistent
 - Irregular plural forms emerging (child/children)
 - Uses “are” with plural nouns (“boys are running”)
 - Uses “and” as conjunction to form compound sentences
 - Uses “is”, “are”, “am” in sentences
 - Combines 4 to 5 words in sentences
 - Mean length of response - 4.3 words

3.7 - 4.0 Years (43 - 48 Months)

- Phonology**
- L, sh, j are frequently used correctly
 - Becoming very intelligible in connected speech
 - Continued refinement of articulatory skills taking place
- Semantics**
- Comprehends 1500 to 2000 words
 - Knows front and back of clothes
 - Responds to commands involving three actions
 - Recognizes one colour
 - Uses 1000 to 1500 words
 - Answers 13 agent + action questions
 - Does simple verbal analogies (Daddy is a man”, “Mommy is a woman”...)
 - Answers (responds appropriately) to “how much” and “how long” (length of time) questions - not necessarily correctly
 - Tells two events in order of sequence
 - Tells story mixing real and unreal
 - Long, detailed conversations
 - Repeats 12 to 13 syllable sentences - one of three trials
 - Answers 3 of 3 questions: “What do you do when you’re hungry/sleepy/cold?”
 - Appropriately answers “What if” questions (“What would you do if you fell down?”)

- Asks how, why, when questions/asks for detailed explanations
- Play**
- Increase in dramatization of play
 - Complicated ideas but unable to carry out in detail - no carryover from day to day
 - Prefers to play in group of 2 to 3 children; chooses companion of own sex
 - Suggests turns, but often bossy in directing others
 - Often silly in play, and may do things wrong purposely
 - Puts toys away himself/herself
 - Likes to dress up
 - Draws a man with 2 parts - adds 3 parts to incomplete man
 - Builds and names buildings with blocks
 - Gains information from children's T.V. programs
- Syntax - Morphology**
- Possessive marker "s" consistent
 - Uses regular third person singular (s) consistent
 - Uses simple past tense (t, d) consistent - (walk/walked)
 - Present progressive "is + ing" consistent
 - Contractions used consistently
 - Uses negative "not" consistently
 - Pronouns: he, she, I, you, me, mine consistent
 - "Are, they, their" used inconsistently
 - Reflexive pronoun "myself" emerging
 - More adverbs of time and manner are being used
 - Conjunction "because" emerging
 - Uses "got" ("I got it")
 - "What was..." and "What were..." questions emerging
 - "Was..." and "Were..." (yes/no questions) emerging ("was he there")
 - Combines 4 to 5 words in sentences
 - Complex sentences used frequently
 - Imperatives and emphatics used consistently
 - Parts of speech now in stable relationship
 - Mean length of response - 4.4 words

4.1 - 4.6 Years (49 - 54 Months)

- Phonology**
- T, d, k, g, n, ng, y mastered
 - Uses ch, z and f frequently and accurately

- Should be very few omissions and substitutions of consonants
 - Very intelligible in connected speech
- Semantics**
- Understands concept number of 3 (“Give me just 3”)
 - Knows between, above, top, bottom
 - Names one colour (54 months)
 - Recognizes 2 to 3 primary colours (54 months)
 - Answers 14 agent + action questions
 - Responds appropriately - not necessarily correctly, to “How far” questions
 - Defines 4 words in terms of use
 - Counts 4 objects
 - Rote counts to 10
 - Repeats 4 digits in 1 of 3 trials
 - Uses “What do....?”, “Does...?” and “Did...?” questions
- Play**
- Makes cube gate from model
 - Identifies parts missing in 2 pictures
 - Shows off dramatically
 - Copies square
 - Much self-praise
- Syntax - Morphology**
- “If” and “so” appear in sentences
 - Irregular plurals used fairly consistently (child/children)
 - “Our, they, and their” used consistently
 - Uses “could” and “would” in sentences
 - Errors of noun/verb and adjective/noun agreement are frequent
 - Combines 4 to 7 words in sentences
 - Passive voice emerging in some children - “The dog was kicked by the boy”
 - Mean length of response - 4.6 words

4.7 - 5.0 Years (55 - 60 Months)

- Phonology**
- Th, v, zh used frequently
 - Most consonant sounds used consistently and accurately, though may not be mastered in all contexts
 - More errors present in difficult consonant blends
- Semantics**
- Comprehends 2500 to 2800 words
 - Answers 2 complex comprehension questions

- Executes 3 commissions
- Points to red, yellow, green and blue on request (60 months)
- Knows heavy/light, loud/soft, like/unlike - discriminates long/short
- Classifies according to form, colour or use
- Uses 1500 - 2000 words
- Repeats two nonsense syllables
- Answers simple "When" questions ("When do you sleep")
- Answers 15 agent/action questions
- Responds appropriately to "How often, How long" questions
- Asks meaning words
- Tells long story accurately
- Counts 10 objects
- Names first/middle/last
- Identifies missing object from group of 3
- Repeats days of week in sequence

Play

- Likes cutting out and pasting
- Likes working on projects - may carry over from day to day
- Definite interest in finishing what he/she starts
- Plays in group of 2 to 5 - friendships becoming stronger
- Spurred on by rivalry in activity - competition
- Interested in going on excursions
- Draws unmistakable man with body, arms, legs, feet, nose and eyes
- Adds 7 parts to incomplete man
- Copies a triangle
- Watches life situation programs on T.V. - gains information from verbal content (60 months)

Syntax - Morphology

- Possessive pronouns - "his, her" emerge
- Uses "will" to form future tense
- Fewer errors in agreement between adjective/noun
- Reflexive pronouns becoming more consistent
- Comparative (er) emerging - ("bigger")
- Combines 5 to 8 words in sentences
- Mean length of response - 5.7 words

5.1 - 6.0 Years (61 - 72 Months)

- Phonology**
- F mastered
- Semantics**
- Comprehends 13, 000 words (by age 6)
 - Answers “What happens if ...” questions
 - Understands “opposite of” (“The opposite of hot is...”)
 - Differentiates A.M. and P.M.
 - Understands yesterday/tomorrow, more/less, some/many, several/few, most/least, before/after, now/later, across, a pair
 - Has a number concepts to 10 (“Give me ... blocks”)
 - Points to penny, nickel, quarter, dime
 - Points to half and whole
 - Knows right from left (by age 6)
 - Points to named numerals - 1 to 25
 - Shifts classifications - classifies according to shape, then colour
 - Counts 12 objects correctly
 - Recites (rote counts) numbers up to 30
 - Repeats 4 digits correctly
 - Names basic colours
 - Names 5 letters of alphabet (by age 6)
 - States similarities and differences of objects
 - Describes location or movement: through, away, from, toward, over
 - Names position of objects: first, second, third
 - Names days of week in order
- Play**
- Copies drawing of rectangle with diagonals in middle
 - Copies drawing of diamond
 - Draws man with neck, fingers, clothes, and 2 dimensional legs
 - Adds 9 parts to incomplete man
 - May start collections
 - Able to play games by rules
 - Build elaborate things with blocks
- Syntax - Morphology**
- All pronouns used consistently
 - Superlative “est” used (“biggest”)
 - Adverbial word endings emerging (slowly, faster, etc.)
 - Syntax near normal
 - Mean length of response - 6.6 words

6.1 - 7.0 Years (73 - 84 Months)

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|------------------|---|
| Phonology | <ul style="list-style-type: none"> • V, th, l, zh, sh mastered (by age 6½) • Z, s, th, r, hw mastered (by age 7½) • Speech is mastered |
| Semantics | <ul style="list-style-type: none"> • Comprehends 20,000 to 26,000 words • Understands roughly the difference in time intervals • Understands seasons of the year, what you do in each • Prints phone number and own full name with no model • Puts numerals 1 - 10 in proper sequential order • Form letters left to right - reversals and inversions common • Prints alphabet and numerals from previously printed model • Writes one syllable words related to sight vocabulary • Grasps the basic idea of addition and subtraction • States preceding and following numbers and days of week • Is aware of mistakes in other people's speech • Apt to use slang and mild profanity • Tells address, both street and number • Second emergence of question stage - "why" • Recites the alphabet sequentially - names capital letters, names, lower case by 7, matches upper to lower case • Sight reads 10 printed words • Rote counts to 100 • Names numerals 1 -10 • Tells time related to a specific daily schedule |
| Play | <ul style="list-style-type: none"> • Obsessive play interest - mania for guns, funny books • Spends hours at one activity • Plays alone better than at 6 years • Group play similar to 6 year old with less ability to pretend and more need to provide necessary paraphernalia • Demands more realism • Does not branch out on many novel adventures • Better at planning what he/she does • Beginning of inventing and designing • Strong return to cutting out and colouring • Fond of table games • Dramatization of experiences and stories is predominant • Likes stunts: gymnastics, tumbling, etc. |

Syntax - Morphology

- Fairly consistent use of most morphological makers
- “If” and “so” developed by most children
- Reflexive pronouns developed by most children
- Irregular comparatives used more correctly (good, better, best)
- Perfect tense “have” and “had” emerging
- Nominalization occurring: noun forms are developed from verb forms
- Continued improvement on irregular plurals
- Iteration emerging (“You have to clean clothes to make them clean.”)
- Participial compliments emerging
- Passive voice fully developed in most children
- Continued refinement of syntax
- Mean length of response - 7.3 words

COMMON REASONS FOR DELAYED SPEECH DEVELOPMENT

There are a variety of causes for delayed speech development. Each child’s speech development is influenced by a variety of factors which include:

- the ability to hear
- the physical development of the mouth and throat
- inherited abilities

Learning to Talk Involves:

- producing speech sounds
- understanding the meaning and use of words
- combining words into phrases and sentences
- combining sounds to say words and sentences

Common Causes of Delayed Speech

Hearing Loss

- mild/temporary loss may be due to ear infections and allergies
- children learn to speak by hearing others speak
- if a child does not hear speech correctly, it will affect his/her ability to speak correctly
- an appointment with an audiologist, a specialist in testing hearing, should be made if there is concern

Mouth Deformities

- physical defects
- structural problems

Motor Control of Mouth Movements

- difficulty with motor control involving movement of lips, tongue and jaw

Metalinguistic Ability

- the knowledge that: (1) language is arbitrary
(2) language is a code
(3) language is a system of elements and rules for how they go together
- the ability to reflect on language as something that can be talked about just as, for example, a chair or a cat can be talked about
- the ability to manipulate the various elements of oral language for social and/or stylistic purposes

Stages of Metalinguistic Development

Stage One (Ages 1½ - 2):

- distinguish print from non-print
- knows how to interact with books: right side up, page-turning from right to left
- recognizes some printed symbols, e.g., TV characters' names, brand names, signs