
Speech and Language Disorders: The Forgotten Children

Why does Kimberly switch the sounds on her vocabulary words? Does she have dyslexia?"

"Should Johnny still lisp? He's six years old."

"Randy has good eyesight. Why does he have trouble following written directions?"

"Tony sometimes repeats his words. Is he a stutterer?"

"Abby is usually a good girl. Why won't she follow my instructions?"

These are only a few questions teachers ask about their students' communication skills. With speech, language, and hearing impairments being America's most prevalent handicapping condition,¹ it is vital that these questions be answered early, so that the child can receive help. Teachers play an important role in identifying children with speech and language impairments.

Most public school systems have professionals to identify and treat children with communication disorders. Such specialists are called speech/language pathologists, but are also referred to as "speech therapists," "speech clinicians," or "speech teachers." Adventist schools, along with many other private schools, are usually unable to provide these services within their own system. Therefore teachers and parents are expected to identify, refer, and possibly even remediate such difficulties.

My husband and I have both worked in elementary schools. He is principal/teacher in an Adventist school; I have worked in the public school system. In comparing notes, we have observed students with speech, language, and/or hearing

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problems in Adventist as well as public schools. If SDA schools can provide help with these problems, they can significantly improve such students' academic and social experience. Furthermore, Adventist parents will not have to face the dilemma of choosing between the benefits of Christian education and the special education available in public schools.

Many Adventist teachers already teach several grades, juggling more responsibilities than they have time for in any school day, and are overwhelmed by the prospect of meeting the needs of exceptional children. This article will provide information on identification of communication disorders and appropriate referral procedures.

Who Needs Speech or Language Therapy?

Tommy is an outgoing, friendly first grader. Whenever his teacher asks a question he is the first to raise his hand. Tommy's answers may be right, but his teacher doesn't know for sure. She can understand only a few scattered words that he says. She hesitates to call on Tommy anymore, and has noticed some of the other children mocking his speech. When discussing the problem in a parent-teacher conference, Tommy's mother indignantly tells the teacher that she can understand everything Tommy says.

Six-year-old Becky is also in the first grade. Her teacher has little trouble understanding her, but once in a while people comment on Becky's "baby talk." Becky says "yuv" for "love," and "wain" for "rain." Her family thinks Becky's speech is "cute."

Crystal is a popular academy sophomore. She sings in the choir, plays trumpet in the band, and cheers enthusiastically for her favorite teams in the gym. Lately, though, she has had trouble speaking and singing. The nurse has given her medicine for a sore throat, but her condition still persists.

BY LAURA PASCUAL DANCEK

Bryan has been struggling throughout his four years of elementary school. He works hard and gets special help from his parents and teacher, yet his grades are still below average. Bryan is a well-behaved, quiet, motivated boy who is very sensitive to failure, both in and out of the classroom. Evaluation indicates normal hearing and vision. Intelligence tests do reveal a specific learning disability, but Bryan's speech "sounds fine."

Patrick has withdrawn significantly throughout his schooling. The older he gets, the worse his stuttering becomes. He has some friends, but is the brunt of many jokes from children and adults alike. Patrick's parents feel guilty about his stuttering, since they so often hear that it stems from deep-seated emotional problems reflecting family discord. The teacher has not discussed Patrick's stuttering with his parents because she assumes that by this time someone would have done something to help. Patrick's parents have not men-

tioned it to the teacher either, since they think she would bring it up if it were important.

Which of these students would you refer to a speech/language pathologist?

- (A) Tommy and Crystal
- (B) Bryan and Becky
- (C) All of the students
- (D) All except Bryan
- (E) All except Becky

"E" is correct. However, if you chose "C" ("All of the students"), congratulations! It is better to refer for a professional evaluation than to overlook a student who might benefit from remediation. Most teachers would have referred only Tommy, or possibly Becky and Patrick.

What Is Normal?

An understanding of normal speech

my's speech disorder from affecting his social development, his attitudes about himself, and his ability to learn. If Tommy is unintelligible and unable to write yet, how can anyone evaluate his progress in school?

Tommy's writing may also be affected. It is not unusual to find a child with a severe articulation problem who also has auditory discrimination problems. This may or may not be related to hearing acuity, which should be routinely tested in every school. Tommy's speech and writing may reflect his discrimination disorder. He may perceive "rid" as being "what you pay to live in your home," or "bye" to be "what you ride that has two wheels and a handlebar."

If Tommy's teacher neglects referring Tommy for speech therapy, he will begin to withdraw from class participa-

Speech, language, and hearing impairments are America's most prevalent handicapping condition.

Did You Know??

- The rate of speech impairment is higher for males than females, for nonwhites than for whites, and about the same for four major regions of the U.S. (Northeast, North Central, South, and West).

- An estimated 22.6 million Americans, or about 10 percent of the population, suffer from speech, language, or hearing handicaps.

- Most people with communicative disorders can be helped. Rehabilitation for these impairments includes medical and surgical treatments, amplification, and speech and language therapy.

- Approximately three million people with speech and language problems are between the ages of 5 and 21.

- About three-fifths of all speech and language disorders are related to articulatory problems.

- Stuttering affects more than one million Americans, half of whom are children.

- Annual loss of earning power among the communicatively handicapped is estimated at \$1.75 billion.

- Speech and language impaired children account for 2.9 percent of total school enrollment.

and language development may help you make accurate referral decisions for your own students.

Four broad categories in the field of speech and language must be identified in discussing what is normal and abnormal. This fourfold classification includes *articulation*, *fluency*, *language*, and *voice*, each affecting communication.

Articulation

Articulation may be defined as the utterance of individual speech sounds.³ Children master the sounds of the English language gradually. Some sounds may not be fully mastered until the child is about eight years old. Other sounds should be developed before the child reaches school age.

Becky's misarticulations involve only developmental sounds. Since she is just six, she may still learn to master them without professional intervention. However, if the mispronunciations persist after she is seven or eight years old, therapy would be recommended.

An articulation problem like Tommy's is very obvious to others, even though his mother can understand him. Early referral may help prevent Tom-

tion since the teacher hesitates to call on him. He will learn not to talk in front of other children to avoid getting picked on. He may very well fail to learn much in school because he can't make sense of the language. Tommy's future depends on how well—and how soon—his teacher handles this problem.

Fluency Disorders

A *fluency disorder* is fairly easy for teachers and family to detect. However, many times, as in Patrick's case, it is so obvious that everyone takes for granted that someone else is taking care of it.

If you have a student who abnormally repeats or prolongs sounds, words, or phrases, and/or interjects pauses that call attention to his speech, he should be referred to a speech/language pathologist. No one else should try to diagnose the fluency problem.

Labeling the child can be harmful in the treatment process, as well as the development of the disorder. Differences of opinion exist in the speech/language field regarding causes and treatments for stuttering. Labeling someone as a stutterer elicits a variety of emotions from all involved, including the child. If you suspect that a child

has a fluency disorder, you should refer him or her for evaluation, without causing alarm in the family, perhaps suggesting that a speech/language pathologist can help rule out any speech problems at an early stage.

Language

The area of *language* encompasses the largest realm of associated problems and subcategories, and is usually the most neglected where referrals are concerned. Language may be broken down into the three dimensions of *content*, *form*, and *use*. *Content* refers to

the topics that are represented in particular messages. . . . *Form* in language is the means for connecting sounds or signs with meaning. . . . There are two major aspects of the *use* of language. The first has to do with the goals or functions of language, the reasons why people speak; the second has to do with the influence of linguistic and nonlinguistic context that determines how individuals understand and choose among alternative forms of language for reaching the same or different goals.⁴ (Italics added.)

Disordered language may involve one or more of these dimensions, or interactions between the dimensions.

As our experiences broaden, the content of our speech continues to develop. This is a never-ending process. However, research has made it possible to judge whether a child is below average in development of language *content*. Standardized tests can be administered to assess the child's level of receptive and expressive vocabulary, as well as

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verbal and written expression and comprehension.

The linguistic system, or *form* of our language includes sentence types, grammatical parts of speech, and the ways these are connected. Children's ability to communicate may exceed their knowledge of the linguistic system for representing and communicating ideas.⁵

Often the language of such children is described in terms of what is lacking—what the child must learn in order to become a fluent speaker. Parents, teachers, and the clinicians and educators who are unsophisticated in linguistic analysis commonly use descriptions such as "the child confuses pronouns," "the child does not speak in complete sentences," and so on.⁶

Some children are born into homes where conditions are unfavorable to speech development. There are silent homes where the parents rarely talk to each other. . . . When two languages are spoken in a home, some children get too confused to talk. . . . Most of the research has clearly demonstrated that some children from the lower socioeconomic classes are delayed in language skills. . . . It should be made clear, however, that a gross injustice has been done to such

ethnic groups as the black American, the Spanish-speaking American, and American Indian minorities by stating that they are linguistically delayed merely because they do not follow the grammatical standards of upper- or middle-class American usage. These children usually possess a competence in their own variant of English which is quite as adequate as that of their other classmates, even though they may speak differently.⁷

Even more subtle is the disorder of *use*. "Examples of this disruption in language use are difficult to present because continual interaction with such children is usually needed before the nature of the disruption becomes apparent. . . . The repeated occurrence of such behavior causes these children to stand out from their peers."⁸ Their language may be more often intrapersonal than interpersonal. They may talk out of context and ramble repetitively without regard for the listener. Some may speak rarely even when questioned or probed. The frequency of these instances makes this problem a language disorder.

Language must be both comprehended and expressed. A breakdown can occur in either or both of these areas. When a child has difficulty with reading comprehension, he or she may suffer from a language disorder, instead of or in addition to, a visual or learning disability. Inability to process language may be revealed by the child's difficulty in following verbal or written directions. Auditory processing can

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11. Involve each child in the lesson. Make each one feel that he or she is an important member of the class!

Music provides aesthetic satisfaction, a time for socialization, an emotional release, a vehicle for refining skills and conveying knowledge, and an outlet for creativity. It can be used effectively to help educate special learners. In an atmosphere of acceptance, caring, and noncompetitiveness, coupled with realistic expectations and good teaching, each child may develop to his or her fullest potential. □

APPENDIX

Examples of Activities Children May Do While They Listen or After Listening to Music

1. Determine grouping of the beats.
2. Make diagrams to show the upward and downward movement of the melody.
3. Arrange colored cards in the correct sequence to identify the musical form, e.g., ABA.
4. Stand up or crouch to indicate the loudness and softness of the music.
5. Number pictures of instruments in the order that they hear them.
6. Choose from among several charts the one that correctly identifies the musical theme.
7. Draw a picture to show what the music says to them.
8. Choose one of three songs that best matches their mood.
9. Imitate the teacher's movement to music.
10. Bounce a ball or wave scarves to the rhythm of the music.
11. Act out the mood of a song after listening to it.
12. Do different types of art projects to the accompaniment of different kinds of music.
13. From a group of art works, have each child select the picture he or she thinks fits best with the music.
14. Select music to illustrate a poem or story they wrote.
15. Prepare a bulletin board to illustrate a particular musical composition.
16. Select a song that illustrates an abstract idea such as sadness, love, sharing.
17. Dramatize a particular selection.
18. Differentiate between gross sounds (timbre).
19. Determine whether a melody is conjunct or disjunct.
20. Circle pictures of the instruments as they hear them.
21. Play a rhythm instrument to the pulse of the music.

FOOTNOTES

¹ North American Division Office of Education, *Guidelines for Working With Exceptional Students in Seventh-day Adventist Schools* (Washington, D.C.: General Conference of Seventh-day Adventists, 1982), p. A-6.

² G. Phillip Cartwright, Carol A. Cartwright, and Marjorie E. Ward, *Educating Special Learners* (Belmont, Calif.: Wadsworth Publishing Co., 1984), p. 7.

³ Donald D. Hammill and Nettie R. Bartel, *Teaching Children With Learning and Behavior Problems* (Boston: Allyn and Bacon, Inc., 1978), p. 258.

⁴ Earnest Siegel and Ruth F. Gold, *Educating the Learning Disabled* (New York: Macmillan Publishing Co., 1982), p. 292.

⁵ Bryant J. Cratty, *Motor Education and the Education of Retardees* (Philadelphia: Lea and Febiger, 1969), pp. 152-156.

⁶ Bessie R. Swanson, *Music in the Education of Children* (Belmont, Calif.: Wadsworth Publishing Co., 1981), pp. 37, 38.

⁷ *Adapted Physical Education for Handicapped Children and Youth* by Bryant J. Cratty (Denver: Love Publishing Co., 1980), offers suggestions for activities involving music, though some of the activities are geared to the requirements of children who are too severely handicapped to be mainstreamed.

⁸ Bernice Wells Carlson and David R. Ginglend, *Play Activities for the Retarded Child: How to Help Him Grow and Learn Through Music, Handicraft, and Other Play Activities* (New York: Abingdon Press, 1961), p. 160.

⁹ Siegel and Gold, p. 291.

¹⁰ Hammill and Bartel, pp. 258, 259.

¹¹ Carlson and Ginglend, p. 161.

¹² For information about choosing musical instruments for disabled children, consult *The Guide to the Selection of Musical Instruments With Respect to Physical Ability and Disability*, available from Magna Music Baton, Inc., 10370 Page Industrial Blvd., St. Louis, MO 63132.

¹³ Alice-Ann Darrow, "Music for the Deaf," *Music Educators Journal* (February 1985), p. 34.

¹⁴ John A. Smith, "Four Music Activities to Sharpen Language Skills," *Music Educators Journal* (November 1984), p. 53.

¹⁵ Songs teaching mathematics have been written by Esther Mendelsohn and published by Houghton Mifflin Company textbooks.

¹⁶ Ray Charles, *Fifty Nifty United States* (Delaware Water Gap, Pa.: Shawnee Press, Inc., 1969).

¹⁷ John Mealing as told to John Sherrill, "The Caller," *Guideposts* (March 1986), pp. 14-17.

¹⁸ Patricia Coates, "Make Mainstreaming Work," *Music Educators Journal* (November 1985), p. 32.

¹⁹ Siegel and Gold, p. 293.

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affect language development and thus learning. Problems of verbal and written expression may mirror each other, or may occur separately. Frequently children with these problems are considered "slow learners," "unintelligent," or even "uncooperative." Many learning disabilities go hand in hand with language disabilities. Children fitting any of these descriptions should be referred for a full battery of speech and language tests.

Learning-disabled children like Bryan would most likely benefit significantly from speech/language therapy, but it would not occur to many teachers to refer them, since their speech or articulation sounds fine.

A language disorder should be diagnosed early. Reevaluation should occur regularly since early problems may not be well enough defined to meet the criterion for enrollment in therapy. As time goes on, the gap may widen between the child's language skills and those of his peers.

Voice Production

The last category, *voice disorders*, is more prevalent than one would suppose. "Baynes surveyed 1,012 children in the first, third, and sixth grades and found that 7.1% had chronic hoarseness."⁹ Another study indicated "general incidence of hoarseness in school children over a one-year period to be as high as 13%."¹⁰

Many such children remain unrecognized in the schools.

Classroom teacher accuracy in identifying voice disorders may be as low as 10%. . . . Comparing teacher referrals with actual voice evaluations, Diehl and Stinnett . . . found that classroom teachers were able to identify disorders with only 36.9% accuracy. Teachers and parents often overlook voice problems regarding them merely as a typical part of the maturation process.¹¹

A large variety of voice disorder types exists. However, those occurring most frequently in school-age children include vocal nodules, inflammation or thickening of the vocal chords, hoarseness, nasality, and puberty-related pitch problems in males. These may be organic or functional in origin. Voice disorders may be related to medical problems or vocal pathology. Early identification and treatment can prevent further difficulties. A child with a suspected voice problem could be referred to a speech/language pathologist, an otolaryngologist, or even the family physician.

Hearing Problems

Hearing impairments frequently influence speech and language development, although they must be considered a separate disorder. An estimated 3 of every 100 school children have hearing impairments.

Early identification and treatment or compensation is the key to preventing academic, social, speech, and language problems. Early in each school term every child should have a routine hearing screening administered by a qualified professional, such as an audiologist, speech/language pathologist, or nurse, with a recently calibrated portable audiometer.

First-year elementary students should have a speech and language screening from a speech/language pathologist to help identify problems early.

The results of speech and hearing tests should be included in each stu-

dent's permanent record. Children who fail the tests should be referred to the appropriate specialists for additional evaluation.

Where to Turn for Help

Several options should be considered when a child needs referral for a speech/language/hearing evaluation. In the U.S., children classified as handicapped or in need of special education are eligible for specific services. Speech/language/hearing disorders are frequently classified as special education, but may be included as related services. Depending on the state, many public schools will extend services to children in private schools. You may be able to get speech therapy for your students in this way. If you are unsure of your state's interpretation of the law (P.L. 94-142) contact the state education department or the local school district.

The obvious advantage of this option is cost. Disadvantages may include transportation to therapy location, or irregular scheduling if the therapist must travel to your school. Group therapy is often the only choice available in the schools due to large caseloads.

If you choose to work out these services with your local public school, the classroom teacher should help with the responsibility of maintaining a regular schedule for therapy and being flexible in adjusting the student's program.

You might also investigate the private clinical services available in your area. Check the telephone book under "Speech Pathologists." Your county health department may be able to refer you to someone. Be sure to check the therapist's qualifications and licensing.

At times, depending on the diagnosis and situation, the costs of therapy may be partially covered by different agencies, funds, or grants. Otherwise, the families will have to pay the bill. This may be difficult or impossible for people with limited means.

Advantages of private therapy include one-on-one sessions, more regular scheduling, and enhanced contact between the therapist, family, and teacher. Disadvantages include cost and the need to travel to the therapy location.¹²

How to Make Services Available

The first step in improving and expanding services in Adventist schools is

to realize the need for them. After reading this article, you will probably be able to identify a greater number of students who should receive therapy.

Consult your educational superintendent about the specific needs of your students. Encourage him or her to provide you with practical information on handling speech/language disorders through in-service meetings, handouts included in mailings, and articles in the conference newsletter. Speak to your church board about providing some funding for students needing these services.

All Adventist children, whether they are normal, above average, or handicapped in some way, should be able to enjoy the benefits of Christian education to help them achieve their potential. By working together, teachers, administrators, and therapists can attain this goal. □

A future article will offer suggestions to help teachers in remediating communication disorders.

FOOTNOTES

¹ From a fact sheet released by The American Speech-Language-Hearing Association, Rockville, Maryland.

² Information based on a data page produced by *American Speech and Hearing Journal*; a fact sheet released by the American Speech-Language Hearing Association; and *American Speech and Hearing Journal*, 27:8 (August 1985), p. 37.

³ Charles Van Riper, *Speech Correction* (Englewood Cliffs, N.J.: Prentice-Hall, 1978), p. 452.

⁴ Lois Bloom and Margaret Lahey, *Language Development and Language Disorders* (New York: John Wiley and Sons, 1978), pp. 13-19.

⁵ *Ibid.*, p. 292.

⁶ *Ibid.*, p. 319.

⁷ Van Riper, p. 133.

⁸ Bloom and Lahey, p. 297.

⁹ Nicholas DeGregorio and Nancy Gross Polow, "Effect of Teacher Training Sessions on Listener Perception of Voice Disorders," *Language, Speech, and Hearing Services in Schools* (January 1985) 16:1, p. 25.

¹⁰ *Ibid.*

¹¹ *Ibid.*

¹² You might also contact sources outside your local area. The National Association for Hearing and Speech Action, 10801 Rockville Pike, Rockville, MD 20852 (1-800-638-8255) offers information about speech, language, and hearing disorders, and referral about the certified professional nearest to your area. You are also welcome to contact the author for more specific suggestions about helping specific students when other resources are not available: AllSpeech, 3067 Tamiami Trail, Suite #10, Port Charlotte, FL 33952 (813-625-8800).

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