

summary

- There is a wide range of communication abilities in children and adolescents with Down syndrome.
- Individuals with Down syndrome frequently understand much more than they can express.
- Vocabulary and social language are areas of strength.
- Grammar and sequencing are areas of difficulty.
- Intelligibility of speech is frequently a problem.
- Speech-language pathologists can partner with teachers and families to assist with language needs for school success.

For additional information and a resource list on speech and language skills for children and adolescents, visit our Web site at www.ndss.org or contact the NDSS information and referral center at 800-221-4602 or info@ndss.org.

NDSS thanks Dr. Libby Kumin for the preparation of this brochure.

about ndss

Our Mission:

The National Down Syndrome Society works through education, research and advocacy, to ensure that all people with Down syndrome have the opportunity to achieve their full potential.

Our Constituents:

Today, there are 350,000 people in the United States living with Down syndrome. Each of these individuals touches the lives of family members, educators, employers, health care professionals, peers and others. This network of people who are affected by Down syndrome numbers in the millions.

Our Programs:

Education. Through our model programs, Web site, Information and Referral Center and more, NDSS provides targeted, in-depth information that meets the diverse needs of our constituents. **Research.**

The Society hosts international research conferences and funds research both independently and through a partnership with the NIH. NDSS is the largest private funder of Down syndrome research in the U.S. **Advocacy.** In cooperation with our more than 135 affiliate groups, NDSS has influenced important local and federal legislation, established October as National Down Syndrome Awareness Month, organizes the Buddy Walk and much more.



666 Broadway, New York, NY 10012
Telephone: (800) 221-4602
Fax: (212) 979-2873
Web Site: www.ndss.org
E-Mail: info@ndss.org

Copyright 2002
National Down Syndrome Society
All Rights Reserved



NATIONAL DOWN SYNDROME SOCIETY

speech &
language
skills
in
children &
adolescents
with down syndrome

CLINICAL
INFORMATION SERIES

SPEECH & LANGUAGE SKILLS IN CHILDREN & ADOLESCENTS WITH DOWN SYNDROME

—by Libby Kumin, PhD, Professor and Director of
the Graduate Program in Speech-Language
Pathology/Audiology, Loyola College

Children with Down syndrome have strengths and challenges in speech and language development, including receptive (understanding) and expressive (speaking and composing sentences) language skills and reading. Speech-language pathologists have information and expertise to help address the speech and language problems faced by many children with Down syndrome. Parents play an important role in their child's speech and language development.

QUESTION: What are the language characteristics of children and adolescents with Down syndrome?

ANSWER: Research and clinical experience demonstrate that some areas of language are generally more difficult for children with Down syndrome while other areas are relatively easier. Children with Down syndrome have strengths in the area of vocabulary and pragmatics (social interactive language). They often develop a rich and varied vocabulary as they mature. They have good social interactive skills and use gestures and facial expressions to help them communicate. They generally have the desire to communicate and interact with people. Syntax and morphology (including grammar, verb tenses, word roots, suffixes and prefixes) are more difficult areas, possibly because of their complex and abstract nature. Children with Down syndrome frequently have difficulty with grammar, tenses and word endings and use shorter sentences to communicate.

Most children with Down syndrome are able to understand much more than they can express. As a result, test scores for receptive language are higher than for expressive language. This is known as the receptive-expressive gap.

Children with Down syndrome learn well through visual means, and often reading and the use of computer programs focusing on language skills can help them learn. Seeing words and images associated with sounds and being able to read words can help speech and language develop. For some children, the written word can provide helpful cues when using expressive language.

QUESTION: What are the speech characteristics of children and adolescents with Down syndrome?

ANSWER: There are a wide range of abilities that children with Down syndrome demonstrate when using speech. Many children have difficulty with the

strength, timing and coordination of muscle movements for speech. Speech involves coordinating breathing (respiration), voice (phonation) and how speech sounds are produced (articulation). Parents report that more than 95 percent of children sometimes have difficulty in being understood by people outside the immediate family or circle of friends. Factors that can contribute to speech intelligibility problems include: articulation problems with specific sounds, low oral-facial muscle tone, difficulty with sensory integration and oral tactile feedback, use of phonological processes (e.g. leaving off final sounds in words) and difficulties in motor planning for speech.

QUESTION: What does a speech-language pathologist do?

ANSWER: A speech-language pathologist (SLP) can provide evaluation and treatment for the speech and language difficulties experienced by children and adolescents with Down syndrome. It is important to develop a comprehensive treatment plan to address all of the areas in which the child may be experiencing difficulty, including receptive and expressive language, semantics (vocabulary), syntax (grammar), pragmatics (uses of language, social and conversational skills), classroom language skills, speech, oral motor planning and oral motor strengthening. SLPs can work with families and teachers to design and implement an effective, school, home and community program to help children develop effective communication skills.

QUESTION: What language skills are needed for school?

ANSWER: Parents can help by working as a team with their school personnel to develop an individualized treatment program. In school settings in the United States, the plan will be part of the IEP (Individualized Education Program). Speech and language IEPs may include diagnosis and evaluation, individual therapy sessions, group therapy sessions, classroom-based

therapy sessions and/or outcome goals. The IEP may also include provisions for information, consultation and guidance to parents and classroom teachers.

When children are in inclusive settings, the speech-language pathologist may consult with the teacher to provide information about a child's speech and language needs, and may suggest modifications, such as providing the student with written rather than verbal instructions or including fewer items on a class worksheet. Accommodations such as preferential seating to help problems in hearing and listening may be used. Skills for learning in the classroom include subject knowledge, following directions and learning classroom routines.

Behavior problems are sometimes related to frustration in not being understood and the relationship between communication and behavior should be explored. Skills in talking with other children, teachers and school personnel such as the school bus driver are important for a positive educational experience.

QUESTION: What can parents do to help their child's speech?

ANSWER: Parents can provide practice in various speech and language skills. Varied and inclusive home and community experiences help the child and adolescent with Down syndrome continue to acquire and use new communication skills. The speech-language pathologist can provide information and can design a home activities program to help the child practice the communication skills being addressed in therapy. It is important to stay in regular contact with the speech-language pathologist so that a child can practice speech and language skills. Regular phone or e-mail contact, a journal or audiotapes can provide that continuous contact. Parents can also seek additional services as needed.

When the child has more opportunities to communicate, his/her skills will expand. Books, workshops, conferences and newsletters can provide state-of-the-art information.

QUESTION: How can I get help for my child?

ANSWER: Parents are often frustrated because they feel that their child needs more speech and language therapy than is being provided by the school. School systems are the major provider of speech-language services but they have guidelines that determine whether your child is eligible for services through an additional agency. Sometimes eligibility depends on whether your child's test scores are below those for his age; other criteria include the relationship between cognitive and language levels. Make yourself aware of the eligibility criteria, as well as the federal, state or local legislation and policies that apply to service delivery in speech and language.

Although most children receive speech and language services through the local educational system, speech-language pathology services are also available in hospitals, rehabilitation centers, university clinics and private practice. Seek additional help for your child when needed.

QUESTION: How can I find a qualified speech-language pathologist?

ANSWER: Qualified SLPs are certified by the American Speech-Language-Hearing Association and licensed by the state. When a professional is certified, they can use CCC-SLP (Certificate of Clinical Competence in Speech-Language Pathology) following their name. This means they have completed a master's degree in an accredited program, have completed required hours of clinical practice internship and passed a national certification examination. If you are receiving services through Child Find (a federal program that identifies the needs of children with disabilities), the health department or local school system, they will have professionals working with them or they can refer you to local professionals. Members of Down syndrome support groups can often refer you to local speech-language pathologists who have experience working with children with Down syndrome.