

Educational Audiologist

Making

A

DIFFERENCE in the **lives** of **students** with **special needs**

T Tracy, age seven months, lives in a small apartment with her parents and a pet beagle. The dog barks whenever anyone passes the door, but Tracy registers no response to the noise. Her parents wonder if she has a hearing loss. Terry, a third grader who has learning disabilities, spends most winter weekends riding in a snowmobile with his dad. He can no longer hear the wind chimes at his house. Could the intense noise of the snowmobile have damaged his hearing? Juan, a high school student, has worn a hearing aid for several years. He attends special education classes, and the teacher overheard Charlie tell a classmate that he's stopped using his hearing aid because he's tired of people asking him what those "things are in his ears." The teacher is concerned. What can she do?



C A R E E R S

in Special
Education
and Related **S**ervices



An **educational audiologist** can help each of these students. Audiologists in schools identify possible hearing losses and formulate a plan that will assist students to adjust to their school and home environments. Hearing losses do affect a sizable portion of the United States population—two out of every 100 school students, and more than one-third of Americans who are age 65 and older. Although some audiologists work in hospitals, clinics, hearing centers, or in private practice, there are many audiologist positions in public and private schools.

Audiology is a profession that developed out of military testing during World War II. When a child has any degree of hearing loss, the normal pattern of speech and language acquisition can be delayed. Hearing loss in students can affect school performance, friendships, family relationships, and ultimately, even job performance. Deaf, hard of hearing, and hearing professionals are available to assist individuals with a hearing loss to have a positive school and work experience. Because of the strong relationship between hearing and speech, audio-logists usually work closely with speech-language pathologists to provide a team effort.

Nature of Work

Audiologists

use a variety of instruments and methods to diagnose a student's hearing loss. To test a toddler's hearing, an audiologist might play with the child using very structured methods.



The child is taught to place a peg in a pegboard or follow some other similar instruction when he or she hears a sound. The older students might be instructed to raise their hands to indicate they heard a sound. The instrument that is most often used to test hearing in children and adults is called an audiometer, which is used by the audiologist to measure thresholds at various frequencies. A student tested under these conditions may wear a headset while the audiologist sends tones into the headset. Sounds that the student can hear are recorded on a graph. This testing is often done in a sound proof chamber. If a student is diagnosed with a hearing loss, the audiologist determines a course of treatment that he or she feels will be best for the student. If amplification devices (such as a hearing aid, FM system) will be beneficial, the audiologist explains this to the student (if age appropriate), the parents, the classroom teacher, and the speech-language pathologist.

The hearing test, called an audiogram, will show the type of hearing loss the student has and helps the audiologist find an appropriate hearing aid. If a hearing aid(s) is recommended, the audiologist may make an earmold impression and send it away to be made into a custom-made earmold. The audiologist will fit the custom-made earmold for comfort and check the condition of the hearing aid(s), for the student. If this is the student's first hearing aid(s) the student will be instructed in its use and care. The audiologist will carefully monitor the selected hearing aid to assure it meets the student's needs and hearing loss.

Whatever the hearing loss diagnosis, audiologists routinely counsel teachers as well as families about suggestions for communicating with the children. "Teachers sometimes think that when a child is fitted with a hearing aid, that's the end of the audiologist's job," commented an audiologist with Baltimore (Maryland) County Schools who makes 400 classroom visits every year. "It's not true. A six-year-old, for example, is not old enough to properly maintain a hearing aid. The teacher might have to help

and the parents definitely do. I visit classrooms to show teachers strategies to use in the classroom situation to maximize listening and communication needs." Strategies include lighting, seating arrangements, visual aids, notetakers, buddy systems, and interpreters.

As with other special education staff members, audiologists are required to keep careful written records of the students they treat and those they refer to other health professionals. They meet regularly with the school's evaluation and review teams to evaluate student progress. Audiologists strive to stay abreast of current professional literature in the field because technology changes rapidly and outbreaks of certain illnesses can result in temporary or permanent hearing losses. "We now live in a generation that damages its hearing not because of a job but in the name of having fun!" laments an audiologist who has treated many teens whose music listening habits and excessive noise result in damage to the cochlea. In some cases, an audiologist will refer the student to other health professionals such as general physicians or ear, nose and throat specialists for further evaluations of the child's complaints.

Schools that receive public funding are required by federal law to provide audiology services to qualifying students with disabilities as part of the Education for All Handicapped Children Act of 1975 and the more recent Individuals with Disabilities Education Act Amendments of 1997 (IDEA) as required by their Individual Education Program (IEP). Eligible students range in age from birth through 21.

While most public school systems provide office space for audiologists, a few have full-service audiology clinics. Students preparing for a career in this field should expect some travel time between schools, and many will work in conditions that are far removed from an ideal soundproof laboratory setting. The use of portable equipment is common. The enrollment of the school system and the number of audiologists employed help determine an audiologist's caseload. Some might treat only children under age five; others are assigned to elementary, middle, or high school students.



PRACTITIONER'S PROFILE



Tanya Green, CCC-A
Educational Audiologist
Baltimore, Maryland

Tanya Green is a full-time school audiologist with the Baltimore City Public Schools. Tanya has a bachelor's of science degree in speech-language pathology and audiology, and she has a master's degree in audiology. Both degrees are from Towson State University in Towson, Maryland. Of the 960 students (birth through age 21) who receive audiology services through the school system, Tanya's caseload is about 150. Some days she visits as many as eight schools.

"Audiology was not my first career choice," remembers Tanya, who began preparing for an economics or accounting job, "but my mother always believed that someday I would return to audiology. She was right, and I'm very glad I chose this career." Tanya became interested in audiology because when she was an infant, her mother acquired a profound hearing loss. Throughout Tanya's childhood, she learned several methods of communicating information to her mother. For Tanya, school audiology is a very satisfying and rewarding career; she even knows of audiologists with hearing losses. "If you're able to hear with amplification, you can be successful in this field," she said.

Tanya works in a large city with a high student population. She provides an exceptional number of audiology services within the city school system. This school system maintains two full-service audiology clinics and employs eight audiologists. Tanya tests students in the clinics as well as in schools. "It is very important for me to be well-organized," she commented, "because I travel between schools to see the students. I'm frequently borrowing office space and using portable equipment."

Daily Schedule: No two days are exactly alike for Tanya, but a typical week includes three days of audiological testing. Children are referred to her by the school's special education team, who determine if a child needs an audiological evaluation. If the audiological evaluation demonstrates

"Seeing progress in students is always very satisfying."

that the student has a hearing loss, Tanya will notify the team and then meet with the child's parents and teachers to discuss the diagnosis. At this time Tanya will make her recommendations for the student's school program needs.

"Let's say a child can be helped with a hearing aid. I don't prescribe hearing aids, but I can recommend to parents where to purchase them," explained Tanya. "When the hearing aid is/are delivered, I show the child how to use them and how to clean them. I also work with the teachers and help them understand how to help the child in the classroom. If the hearing aid isn't working properly, the students know they can rely on me to repair it or to send it out for repair."

One day a week Tanya provides rehabilitative services through play techniques with a two-year-old girl who wears two hearing aids. Tanya uses sign language to communicate with the toddler and engages in a variety of activities to ensure that the hearing aids are functioning properly.

The most creative portion of the week occurs when Tanya visits a high school class of students with severe to profound hearing losses. In this class, there is a teacher who is deaf along with a sign language interpreter to interpret for them when needed. It is helpful to know some sign language and to understand the communication needs of the teacher and students. In some of the classes Tanya visits, she teaches them how to clean their hearing aids, check the batteries, and troubleshoot if the hearing aid is not working properly. "I also teach them skills that will be helpful when they graduate from high school, such as how to interview for a job, requesting and using an interpreter if needed. Another lesson may include discussing being a patient in a hospital—what their rights are as deaf and hard of hearing people," said Tanya.

Challenges: "I'd like to spend more individual time with students, but with such a large caseload in several schools, my schedule doesn't allow it."

Satisfaction: "Seeing progress in students is always very satisfying. This year, in particular, several of my high school students decided to start using their hearing aids again. They'd refused to wear them for awhile, believing hearing aids weren't cool. When a deaf or hard of hearing student is attending a class with hearing students, not being able to hear the teacher is obviously a real problem. I'm very pleased that these teenagers understand the benefits of using hearing aids."

Education Required

Of the 47 states that regulate the licensing of audiologists, all currently require a master's degree or the equivalent, 300-375 hours of supervised clinical experience, a passing score on a national examination, and nine months of postgraduate professional clinical experience. For licensure renewal, 34 states have continuing education requirements. Many audiologists further their training to receive the Certificate of Clinical Competence (CCC) which is awarded by the American Speech-Language-Hearing Association (ASHA). A doctorate degree may be required for job advancement or to seek employment in audiology administrative positions.

More than 230 colleges and universities offer graduate degree programs in audiology. Standard courses include anatomy and physiology of the body as it relates to hearing, speech, and language; communication disorders; acoustics; and psychological aspects of communication.

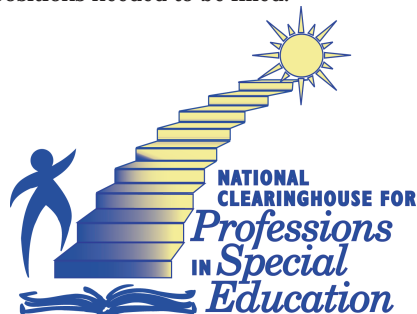
For a list of accredited graduate programs contact the American Speech-Language-Hearing Association or the National Clearinghouse for Professions in Special Education.

Personal Qualities

Audiologists are patient, sensitive, caring, and tactful. They have exceptional skills in observation, concentration, and recordkeeping. Audiologists should be able to effectively communicate diagnostic test results and propose treatment in a manner easily understood by their students, parents, and school staff. Although audiologists are productive independent workers, they collaborate on an on going basis with other health professionals and school staff members to help the deaf and hard of hearing students experience successful school careers.

Job Outlook and Advancement

Employment of audiologists is expected to increase much faster than average for all occupations through the year 2005. The number of job openings will be greatest in this health services industry because baby boomers are approaching retirement age. Employment for school audiologists will increase as school enrollments grow and as pre-schoolers are identified as eligible to receive special education services under IDEA. During the 1996-97 school year, there were 1,010 school audiologists employed in the United States with about 24 vacant positions needed to be filled.



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How to Prepare for a Career

If you are interested in pursuing a career in audiology in an educational setting, you may wish to contact an audiologist who works for a school system and ask if you can observe him or her for a day or volunteer on a regular basis. Learn different modes of communication and language, for example, American Sign Language (ASL), Cued Speech. In high school, take classes in science, speech, psychology, English, and communication.

RESOURCES

American Speech-Language-Hearing Association (ASHA)
10801 Rockville Pike
Rockville, Maryland 20852-3279
800-498-2071
301-897- 5700 TTY
301-571-0457 Fax
www.asha.org

Educational Audiology Association (EAA)
4319 Ehrlich Road
Tampa, FL 33624
800- 460-7322
813- 968-3597 Fax
www.edaud.org



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