The Debate Over Deaf Education

Technological changes are shaking up the teaching of the hearing-impaired

By BURTON BOLLAG

Daniel S. Koo was born deaf. When he was 4 he started attending a public school where he spent part of each week getting intensive training in speaking and listening with the help of hearing aids.

He remembers those early years as increasingly frustrating because, try as he might, he could not understand what his teachers were saying. By fourth grade he was falling behind academically, and his parents transferred him to another public school, which practiced a little-used method, called cued speech. As teachers spoke, they would make rapid hand movements near their mouths to visually represent the sounds they were producing.

"The light bulb just went on," recalls Mr. Koo, and a world of learning opened to him. He attended the University of Maryland at College Park — attending classes with the help of an interpreter — and went on to graduate studies at Gallaudet University, in Washington, where all his classes were taught in American Sign Language. Today he is a postdoctoral fellow in neurolinguistics at Georgetown University Medical Center.

Mr. Koo's academic success is all the more remarkable when compared with the academic performance of most deaf students. According to the latest nationwide survey, the average deaf 18-year-old reads below the fourth-grade level. Despite decades of efforts, the scores have remained largely unchanged.

"Historically we have taught deaf students material way below their conceptual level since we taught them through English," says Gabriel A. Martin, chair of the communication-disorders and deaf-education department at Lamar University.

The solution, he says, is teaching deaf children through American Sign Language — their one "native" tongue. But the issue is highly controversial. Opponents say that concentrating on signing can undermine young children's acquisition of English, and largely relegates them to being able to communicate only with other deaf people.

For more than two centuries, educators of the deaf — and the college departments that train them — have debated the best way to teach deaf children. At one end of the spectrum are those who favor the "oral" method, training teachers to concentrate on developing speech and hearing skills. At the other end are those who advocate a "bilingual" approach, teaching primarily in American Sign Language and promoting English as a second language.

Scientific studies have been inconclusive in demonstrating an inherent superiority of one method over the other. But earlier detection of deafness in infants — some 45 states now require screening at birth — and recent advances in medical technology are resulting in greater hearing in a larger portion of deaf children. The development is shifting the debate in favor of the oral approach.
That is beginning to have profound effects on the work of the country's 74 academic departments of deaf education. "I know in talking to my colleagues there is a growing recognition that the kids have changed," says Harold A. Johnson, director of Kent State University's deaf-education teacher-preparation program.

**Hearing More**

One of the most pervasive new influences on deaf children has been the introduction of cochlear implants. The devices, first approved in 1984, bring sounds from an external hearing aid directly to the auditory nerve. The size of a needle, the devices are surgically inserted under the skin at the base of the skull, just behind the ear, where they take over the function of a damaged inner ear — the most common cause of deafness.

However, the sounds the implants produce are different, and less complete, than what is heard by people with normal hearing. People who get cochlear implants must be trained to decipher the new sounds. In addition, for the first months they must have their implants regularly "mapped" — or fine-tuned — to improve clarity and adjust volume levels.

According to the Food and Drug Administration, approximately 13,000 adults and 10,000 children had received implants by 2002, the latest year for which data are available. But the technology continues to improve, and the number of people receiving implants is increasing rapidly.

The trend is a source of anxiety to some deaf people, who feel that it may lead to an erosion of the gains they have won in recent decades in antidiscrimination legislation, and undercut their hard-won dignity. Benjamin J. Bahan, a professor of deaf studies at Gallaudet University who has been deaf since he was 4, worries that as more deaf children are given an oral education, the teaching of American Sign Language may be abandoned.

"Let those kids be bilingual," he said in an e-mail message. "After all with their implants off they are DEAF."

Yet the implants are already affecting the work of Gallaudet. With 1,900 students, it is the world's only university devoted to the deaf. Part of its mission is the development of teaching methods and materials for the more than 71,000 severely deaf children in the United States. The university runs a model elementary school and secondary school on its large campus in Washington.

Up until now, Gallaudet's goal has been to make all 370 schoolchildren it enrolls fully fluent in both English, or at least written English, and American Sign Language. But educators say they are seeing a growing number of children with implants whose improved hearing would allow them to benefit from a more oral-based education.

"Teachers come here trained in a more visual approach," says Debra B. Nussbaum, coordinator of the model schools' Cochlear Implant Education Center. But, she adds, "we've been talking about how to change our strategies."

Supporters of the oral approach say far too few teachers are being trained in that orientation. "In the last 10 to 15 years there has been a dramatic increase in demand" for oral education, says Susan T. Lenihan, director of the deaf-education program at Fontbonne University, in St. Louis. Deaf-education departments "should recognize this shift in the population," she says, and train more teachers equipped to work with deaf people with cochlear implants.

Yet like many institutions, Gallaudet is moving cautiously and, so far, appears committed to maintaining a strong sign-language component in its model schools. "I do a lot of workshops across the country," says Ms. Nussbaum. "I'm hearing about kids with cochlear implants who didn't do as well as the doctors thought they would." Some children have found so little benefit from the devices that they have stopped using them,
educators say.

Gallaudet wants to make sure none of the youngster in its model schools end up like countless children in exclusively oral programs over the years: without any language — barely knowing English, but never having learned sign language. Not only are such children deprived of a developed means of communication, but with no language in the early years — the critical time for learning languages — their cognitive development may be permanently stunted, scholars say.

Communication was on the minds of many Gallaudet students when they demonstrated last week against a new president chosen by the institution's board of trustees. Protesting students accuse the new president, Jane K. Fernandes, a deaf person who only learned sign language as an adult, of having a haughty and aloof style.

While educators struggle to get the balance right between oral and visual forms of communication, perhaps the strongest trend in academic departments in recent years has been a growing openness to try whatever works with individual children. "Our students are prepared to use a wide range of teaching approaches," says T. Alan Hurwitz, vice president of the Rochester Institute of Technology and dean of its National Technical Institute for the Deaf, which enrolls approximately 60 students in a graduate education program. More important than the method used, says Mr. Hurwitz, who was born deaf and spoke through a signing interpreter, is "detecting deafness very early, getting parents involved early, and having good teachers."

Checkered History

While the popularity of different approaches has gone up and down, the root of the debate over the proper way to teach the deaf goes back more than 200 years.

In 1771 the abbé Charles-Michel de l'Epée, a young priest, founded the first public school for the deaf, in Paris. He based the language of instruction on a system of hand signs he had observed deaf French people using to communicate with one another.

During the 19th century, deaf children in America were taught mainly in sign language. But there was a competing approach, championed by, among others, Alexander Graham Bell, the inventor of the telephone, who was married to a deaf woman. The backers of this oral approach argued that sign language was a form of savagery that kept its users isolated from the rest of humanity. The oral approach won out when the International Congress of Educators of the Deaf, meeting in Milan in 1880, decreed that deaf people should be taught spoken language, not sign language.

For much of the 20th century, deaf children in America received a predominantly oral education. Sign language continued being passed down surreptitiously in the dormitories of the residential schools where most deaf children were then sent. Those caught signing were sometimes forced to sit on their hands.

The 1960s brought another shake-up, inspired by the civil-rights movement and buttressed by the work of William C. Stokoe Jr., a Chaucer scholar at Gallaudet. Mr. Stokoe published several influential works demonstrating that American Sign Language was not just a collection of gestures, but a true language with its own rules and grammatical structures. Indeed scholars, and deaf people fluent in both languages, say American Sign Language is as rich a medium as English for conveying even complex, intellectual ideas.

The development was liberating for deaf-education departments. Several new communications systems involving hand signs were developed, including cued speech, which proved so helpful to Mr. Koo.

The majority of departments moved toward an approach often referred to as "total communication," whose professed aim is to work with a variety of methods to find what works best for each child. In reality, many departments settled into a reliance on "signed English," which is not a real language like ASL, but a practice
of translating spoken English, word for word. Critics say signed English is a sloppy compromise, allowing a person to speak and sign at the same time, but conveying considerably less information to a deaf listener than does ASL.

To the disappointment of many scholars, this flourishing of new methods brought virtually no improvement in the test scores of deaf schoolchildren. Some scholars have reacted, ironically, by pulling to one extreme or the other: either a bilingual approach that relies chiefly on American Sign Language, or an exclusively oral approach that excludes signing altogether.

While the bilingual approach is intellectually appealing to many academics (most agree that American Sign Language is the easiest "tongue" for deaf children to master), scholars readily acknowledge its one major drawback. About 97 percent of deaf children are born to hearing parents, and, educators say, those parents are typically unwilling or unable to master sign language. That means that children whose education is based on American Sign Language will communicate better with teachers and other deaf people than with their own parents.

"It challenges the whole notion of what it means to be a parent," says Carol J. Erting, chair of Gallaudet's education department. "Emotionally, it's just really, really hard."

More recently, the continued improvements in medical technology — digital hearing aids that work better than the traditional analog ones, and continually improving cochlear implants — have made the oral approach increasingly attractive.

While cochlear implants are bringing new hope, they are also heating up old controversies. K. Todd Houston, executive director of the Alexander Graham Bell Association for the Deaf and Hard of Hearing, the leading group promoting oral education for deaf children, asserts that "there is a window of opportunity to stimulate auditory pathways," which may be missed if a child is exposed at an early age to a signing environment. Many scholars do not agree. With bilingualism and even multilingualism common in many parts of the world, they ask, why shouldn't a deaf child be fluent in English and sign language?

Mr. Koo, the neurolinguist, says that if he and his wife have any deaf children, he will raise them bilingually, in American Sign Language and cued English, the method that involves speaking and making hand signs around the mouth to represent the sounds.

"ASL exposes children to the world's knowledge," he says, "and it incorporates self-esteem and aspects of deaf culture." Mastering English "gives them access to the richness of the English world, like Shakespeare and idioms.

"I cherish them both," he says.