

# Ear to the Ground - Signing on at the National Technical Institute for the Deaf



November, 2000

By Hillary Johnson

When Paul Taylor, who is deaf, graduated from the Georgia Institute of Technology with a degree in chemical engineering, he wrote to 35 companies. Most of them members of the Fortune 500 seeking work. Every firm turned him down. That was 38 years ago.

"They were very honest with me," Taylor says today. "About half said I couldn't use the telephone, which they said was an important piece of my work. The other half said, 'If you can't hear, you might get hurt.' At the time, I found it hard to answer that." Eventually, Monsanto hired Taylor, but not until he had won national recognition for setting up a Teletype phone relay system for deaf people in St. Louis.

Today, Taylor is a professor of applied computer technology at the National Technical Institute for the Deaf (NTID). Nearly 1,200 students from the United States and around the world are enrolled at NTID, which is located on the campus of the Rochester Institute of Technology (RIT) in Rochester, New York. In a program that is the first and only one of its kind, students at NTID are learning cutting-edge, high-tech skills: computer-aided drafting, applied art and computer technologies, digital imaging, and other publishing-related skills that are very much in demand.

There was nothing like NTID when Taylor graduated from high school. There was, of course, Gallaudet College (now University) in Washington, D.C. But Gallaudet is strictly a liberal arts school for deaf and hard-of-hearing students, whereas NTID stresses training in technology. What is more, NTID is right in the middle of a campus of 12,000 hearing students at RIT, so the students' integration with the hearing world is as integral to the NTID experience as the technical education.

"We open the door for deaf students to enter the hearing workplace," says Robert Davila, RIT vice president for NTID, "and once that door is open, there is no stopping them."

Indeed. Nearly all 95 percent of NTID's grads are employed, 70 percent of them in business or industry. It helps that the students at NTID seem to share Taylor's self-starter quality. "Deaf people know they have to make the first move," says Taylor. "They don't expect others to accomplish it for them."

NTID was established in 1968 as the first college dedicated to educating deaf people in technological fields. Back then, only 15 percent of deaf high school students had an education that exceeded the eighth-grade level, and 70 percent of deaf employees held blue-collar jobs, frequently in extremely noisy government printing offices. NTID opened up opportunities for challenging, satisfying, high-paying jobs in a whole new range of employment sectors.

It's students, past and present, are living proof that NTID is achieving its goals:

Andrew Brenneman, 36, handles (along with two deaf colleagues) a \$110 million sales account from Sprint. Before that, he worked at J.P. Morgan & Company on Wall Street as a business support analyst.

Julie Bourne, 21, is majoring in professional technical communications. "With technology exploding, this is the perfect place for me," she says. "I can socialize with other deaf kids and get the education I need."

Chris Kosin, 24, received a three-year associate's degree from NTID in industrial drafting technology, and is now working toward a bachelor's degree in information technology at RIT.

Taylor's new course in fiber optics is a good example of NTID's aggressive approach. He took note of the cable industry's forecasts that optic fiber will eventually replace copper in personal computer and telephone connections. Taylor subsequently became certified by a leading trade group. Now, he not only teaches the fundamentals of optics, splicing glass fibers together and fiber-optic standards, but demands that his students achieve industry certification as well.

One school goal is to enable NTID grads to make a seamless transition from school to real-world jobs by obviating on-the-job-training. A tour through the classrooms and training areas of NTID provides physical evidence of the seriousness of the undertaking. There is an impressive digital imaging and publishing area, for instance, filled with the latest generation of computer-aided printing equipment.

Not surprisingly, the link between NTID and industry is a close one. IBM, Sprint, Lucent, Bausch & Lomb, Xerox, Kodak, and a number of other major corporations have ties to the school that range from philanthropic activity to hiring NTID students for "co-ops," 10-week jobs that are part and parcel of the NTID curriculum. During these trial-by-fire work experiences, students get a taste of what will be required of them in an environment where almost everyone else can hear.

Of course, federal laws like the 1990 Americans With Disabilities Act have helped deaf workers enormously since Paul Taylor was looking for his first job in industry. Most employers are required to provide interpreters and other communication aids from employees who need them.

The explosion of computer technology has benefited deaf people, too. Students at NTID use vibrating pagers, videophones, videoconferencing, TTY telephone systems and fax machines. And they use e-mail.

"E-mail is a savior for deaf people," says Shane Feldman, a 22-year-old NTID student. "It equalizes communication between the deaf and the hearing. There is no third party involved."

Like Feldman, Bourne, and Kosin, 43 percent of NTID's students go on to obtain baccalaureate and advanced degrees from RIT. Regardless of whether his students take that next step, NTID's Davila insists they are "The cream of the crop" among deaf students nationally. Certainly, these young men and women have surmounted enormous academic and social challenges by the time they get to Rochester, including learning English despite the fact that few of them have ever heard it spoken.

Audiologist Catherine Clark works one-on-one with NTID students who have hearing aids and cochlear implants (electronic devices that pick up sound). "Freshmen tend to be more interested in learning about new technologies," she says, "while seniors then to be more interested in workplace communication skills."

"We don't have a separate economy for deaf people anymore," Davila says. Proving his point, he recounts his meeting with a recent NTID grad who reported that IBM had offered him a job carrying a salary of \$73,000. "He told me he wasn't going to take the job," Davila says, mirth spreading across his face as he signs. "He said, 'I think I can do better.' That's a kid who knows business."

Veteran journalist Hillary Johnson has contributed to magazines such as Rolling Stone and Life. Her newest book, *My Mother Ruth* (St. Martin's Press), will be released next month.