NTID

FOCUS

Winter 1984

Opening Doors to Success

NTID
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Publication of the National Technical Institute for the Deaf
at Rochester Institute of Technology, Rochester, NY 14623

Winter 1984

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NTID Focus is published by the Public Information Office at the National Technical Institute for the Deaf and Communications at Rochester Institute of Technology, Rochester, New York.

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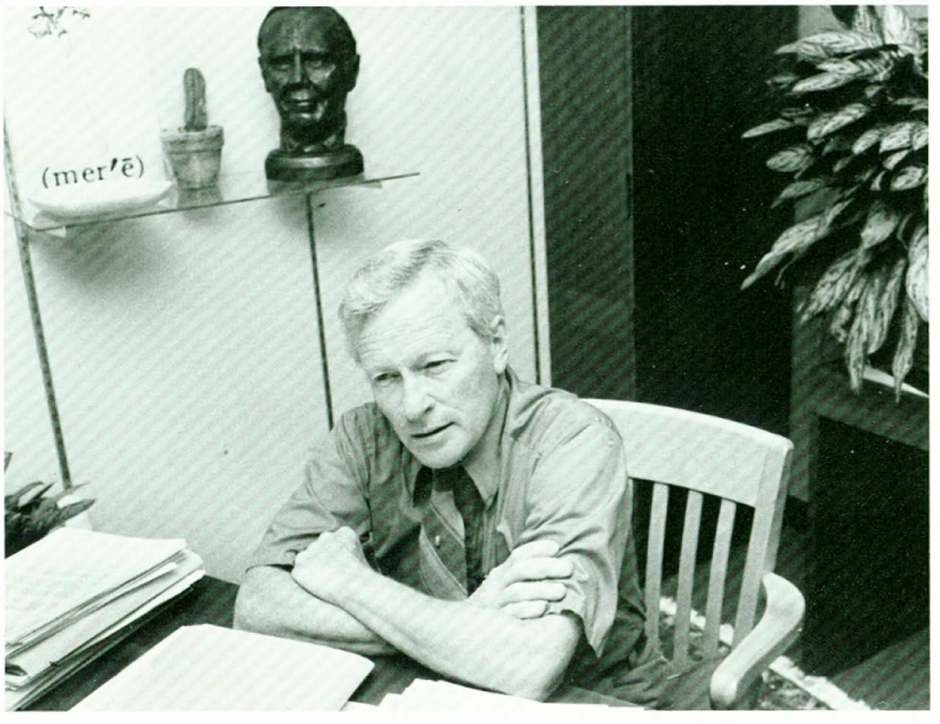
This material was produced through an agreement between Rochester Institute of Technology and the U.S. Department of Education.

It wouldn't be Rochester without it! When the snow comes down, life and classes go on, and photographer Rod Reilly goes out.

A Reason to Be Proud

From the Director's Desk



April 17, 1984 will mark the beginning of my seventeenth year at Rochester Institute of Technology (RIT) and, in particular, at the National Technical Institute for the Deaf (NTID). It has been gratifying to watch NTID grow, but even more gratifying to watch deaf students grow through their experiences at RIT and elsewhere. Our pride in their accomplishments includes, of course, what our students have achieved after leaving NTID; and perhaps the best illustration of this is seen in the lives of some of the first 70 students who entered NTID in 1968.

In December, I received an invitation from Patricia Vogel Mullins, who had just received her bachelor of fine arts degree from the State University of New York College at New Paltz. She invited me to her exhibit, "Presentation in Clay," at the College Art Gallery, and her personal note on the invitation said: "Remember me from the first NTID class? I finally made it! Patty." We knew her then as Patty Vogel; and remembering her struggles as an aspiring ceramicist in the School for American Craftsmen, we are glad to see that she has "finally made it," and we are proud to have nurtured her earliest aspirations.

In October 1983, the NTID Gallery was honored to exhibit the works of Charles Baird, another member of that first class. Charles received his bachelor of fine arts degree in painting from RIT's College of Fine and Applied Arts and has since gone on to become not only a recognized painter, but also an accomplished actor with the National Theater of the Deaf.

Steve Schultz, alumni specialist at NTID, was also among those first 70 students. He graduated from RIT's College of Business, went on to get a master's degree from the State University of New York College at Geneseo, and was a successful instructor at NTID and elsewhere before taking on his current assignment. He's come a long way since those early days when he was almost sued for libel by a school for the deaf because of an editorial he wrote as editor of NTID's first student newspaper.

Perry Connolly, NTID's chief 1968-69 student rebel, is now a fine teacher of printing at the New Mexico School for the Deaf.

Darlene (Carrus) Watson, whom many expected to be one of NTID's first 1968 dropouts, not only completed that program, but was one of the first deaf students to enter and graduate from RIT's bachelor's program in social work, where she frequently made the Dean's List. She has since earned a master's degree in social work and is a respected professional in her home town of Michigan. She is also a fine wife and mother.

Kevin Nolan in 1968 entered RIT's College of Business, although he lacked a true interest in the subject. Nevertheless, he obtained his bachelor's degree from that college and then went on to get a master's degree in the education of the deaf at Western Maryland College. He has since worked successfully in his chosen field. In addition, he is the proud father of three hearing-impaired children for whom both he and his wife Linda (who is also deaf) serve as model oral deaf adults.

Most of us who were with NTID at RIT in the fall of 1968 could summarize the stories of all the other deaf youngsters who came at that time—and those of us who have been here since then could tell the stories of hundreds more. Although for some of them, their years at NTID were less successful than they and we would have liked, most can now report achievements. We recognize also that the opportunity to fail may open doors to later growth.

We choose, however, to have both our institutional focus and our published *Focus* emphasize success. This particular edition looks at a few of our many successful people and programs. I trust you will enjoy it.

William E. Castle

GRADUATE PROGRAM SEEKS

THINKERS

The Right Stuff

By Kathleen Sullivan

When author Tom Wolfe talks about "The Right Stuff," he's describing those few individuals who readily forego tradition to take chances. Of such "stuff" are the students and graduates of an unusual program—the Educational Specialist Program.

Since 1981, the University of Rochester (U of R) and RIT through NTID have co-sponsored this two-year master's degree program that prepares people to teach both deaf and hearing students at the secondary level and to set up support programs for these students.

Twenty-two people have graduated from the program, with another 15 expected to finish this spring. They include students from the United States, Japan, England, and Australia. Their average age is 29, and one-third already have at least one master's degree. The placement rate for this group, which includes recent college graduates and established teachers, is an impressive 100 percent.

Dr. Ken Nash, coordinator of the program, crisply defines the type of student he wants to attract.

"This is a leadership program. Those involved will get a broader perspective on what's happening in the world. We don't prepare people to be 'cook book teachers.' We want *thinkers*, those who can influence deaf education, particularly at the secondary level."

Dr. Nash has found such a thinker in William Ring. In fact, Ring's teaching aspirations and thoughts on the program are anything *but* the cook book variety.

William Ring and Mark DeLaney

The 22-year-old native of Millville, New Jersey, received a degree in the history of religion from the U of R in 1983. He also is certified by New York State to teach secondary-level social studies.

But Ring felt that teaching history as a "typical teacher" wouldn't satisfy him as much as working with a group like the hearing impaired. He says, "I like to confront a sense of purpose every day."

Ring's undergraduate program allowed him to take a diversity of subjects, including history, economics, and mathematics. He started in a neuroscience program, but transferred into history of religion after one year. "It was tough to make the break from a technical field to one that was not really job oriented," he admits. "But I like people and I'm very interested in teaching."

Since enrolling in the program last fall, Ring has learned much about deafness and contemporary history. "I think it's important to understand the world's influences and how they affect who you are and who you are trying to become," he says.

His expectations of the teaching profession are high—so high that sometimes he is frustrated by his situation. He feels that some of his instructors are "more researchers than teachers," but firmly believes that his role as a student is to be critical.

"That's what education is all about," he says. "Students should exhaust their teachers with curiosity, almost to the point of annoying them with questions."

Aside from his academic interests, Ring is a triathlete, and recently completed the Lake Placid, New York, Triathlon. Swimming a mile and a half, bicycling 48, and running 12 is his way of working off the pressures of non-stop studying. He also frequently bikes the 10

John Stanton

miles between the U of R and RIT for classes, and many mornings he swims.

A frequent partner for those early morning laps is Mark DeLaney, another U of R graduate, who is a year ahead of Ring in the program and somewhat wiser about the rigors of academia.

"It takes about a semester to realize that you can't possibly do all of the reading that you're expected to do," he jokes. "You start to figure out where you can 'skim' and where you really have to apply yourself. You also start to feel closer to your classmates. We're like a union. If you deal with one of us, you deal with all of us. I think that's a strong point of the program."

DeLaney, from Hamburg, New York, graduated in 1982. Like Ring, he changed programs during his undergraduate stay, from electrical engineering to math and general science. After DeLaney took an education course at the U of R, Dr. Nash urged him to consider the Educational Specialist Program.

As DeLaney recalls, Dr. Nash called him the night before graduation and asked him for a decision. "He was holding a spot for me. I called my parents, we talked about it, and I accepted that night. The program found me; I didn't find it."

Ironically, DeLaney's father, who is on the central administration staff of the State University of New York, started his teaching career with deaf students. DeLaney's sister teaches in Saratoga.

DeLaney does not share Ring's sentiments about the faculty. "Sure, many of our teachers are experts in their research fields, but they're not teaching us how to teach. You've got to be able to teach yourself and not be spoonfed. A lot of our readings are recent studies. I like the fact that we can draw our own conclusions to information."

As part of his graduate assistantship, DeLaney is setting up a career resource center for hearing-impaired students at NTID. He also does some informal counseling.

"I think that I'm a good listener," he says, "and that's a very important part of teaching and counseling. I ask questions so that people can look at their concerns from new perspectives."

DeLaney compares his counseling skills to a similar field that he admits is his first love—coaching.

Twice an all-American swimmer at the U of R and now assistant swim coach there, DeLaney enjoys the rapport he shares with his swimmers and empathizes with their willingness to "be 100 percent committed" during the sport's long season (September—March).

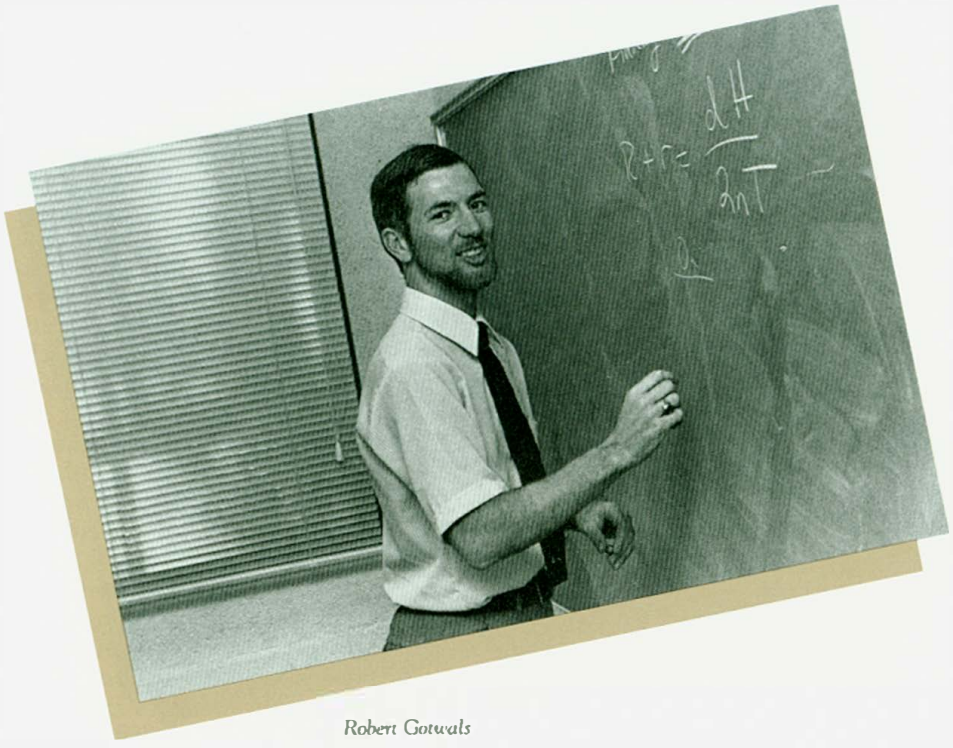
"When I first began coaching, some of my graduate program administrators worried that my involvement might detract from my study time. To me, however, the sacrifice was worth it."

When he graduates in May, DeLaney hopes to find a job in the Saratoga area. Like most of his peers in the program, he has been contacted by more than 35 school districts around the country since the U of R distributed his credentials.

John Stanton doesn't need to worry about getting *his* credentials out. He has been a biology teacher at Rochester's Monroe Community College (MCC) for 17 years, and after receiving his educational specialist degree last fall, he returned.

Stanton, 45, has two graduate degrees, but says that "this was the most grueling program I've ever taken. I read so much that at times I felt that I was really working to my full potential.

"We all brought our own sets of limitations to the program," he continues, "and we were all severely challenged at one time or another. As individuals, we



Robert Gotwals

were scrutinized not only in terms of our teaching skills, but also in terms of our communication abilities. That definitely is not common for most graduate programs."

Stanton enrolled in the program to help MCC's hearing-impaired population, which averages about 15 students per year. They include NTID graduates, people who recently lost their hearing, those whose residual hearing prevents them from qualifying for NTID, and those who "use MCC as a bridge to another institution."

Since graduating, Stanton has co-written a proposal for a grant to provide tutors and notetakers for MCC's deaf students (interpreters already are provided), and he divides his time between teaching biology and working in the counseling center. In both positions, he says that "what I learned in the program has greatly influenced what I do.

"My audiology courses help me to teach biology—the students are really interested in the workings of the brain—and my language and speech classes help me to work in mainstreamed settings with my hearing colleagues. I'm doing exactly what I was trained to do."

To sensitize his colleagues to deafness, Stanton arranged for several MCC faculty members to attend an NTID workshop on language assessment. "We can't train all faculty members," he says, "but we do want to create a group that will know how to use the support services that we hope to have in place soon."

Although MCC does not have a program for hearing-impaired students, Stanton says that the college is developing support services for its regular curriculum.

"We would like to make our school accessible to hearing-impaired students," he says. "We don't want to compete with other institutions for these students. Instead, we are attempting to address a community need.

"To me, success is measured by the quality of what I do. I would like to see MCC as a model for support services for hearing-impaired students at community colleges around the country."

Robert Gotwals, a member of the first graduating class of the Educational Specialist Program, is a physics teacher at the School of Preparatory Studies at Gallaudet College in Washington, D.C.

Gotwals began his route to a teaching career at East Carolina University, while on active duty as an anesthesia technician in the United States Navy. Following his discharge, he continued his studies both in the classroom and out, working as an emergency medical technician, an educational interpreter for the deaf, and a braille transcriber/instructor for the blind.

He received a bachelor of science degree in chemistry in 1982, and worked as a free-lance interpreter in North Carolina until he came to Rochester for an interpreter training program.

He changed his mind when he heard about the Educational Specialist Program.

"I had a degree in chemistry and was interested in teaching, so it seemed right for me," he says. "The program gave me the educational background I needed, plus the deaf awareness."

Gotwals would like to see the program modified to include required coursework in one's undergraduate area. His reasoning? "Since I had a degree in chemistry, I didn't *have* to take science courses, but I did. Science is an area that changes so fast—I think that such courses keep you 'current' in the field and help your credibility as a teacher."

Martha Welch

Fellow classmate Martha Welch stayed closer to home when she graduated from the Educational Specialist Program in 1982. Unlike Gotwals and Stanton, Welch does not teach, but works directly in a support services capacity with the Monroe #2-Orleans County BOCES program in suburban Spencerport, New York.

Welch brought to her job a wealth of experience, including nine years of teaching high school English, two years of teaching music, and 10 years of teaching at the community college level. She has a bachelor's degree in English from the University of Rochester and a masters in the same subject from the University of Chicago.

Welch was hired to "build a program of support services for hearing-impaired students from birth through age 21." Last year, she concentrated on 20 mainstreamed students in the program; this year, she is coordinating more support efforts for pre-school and special education children.

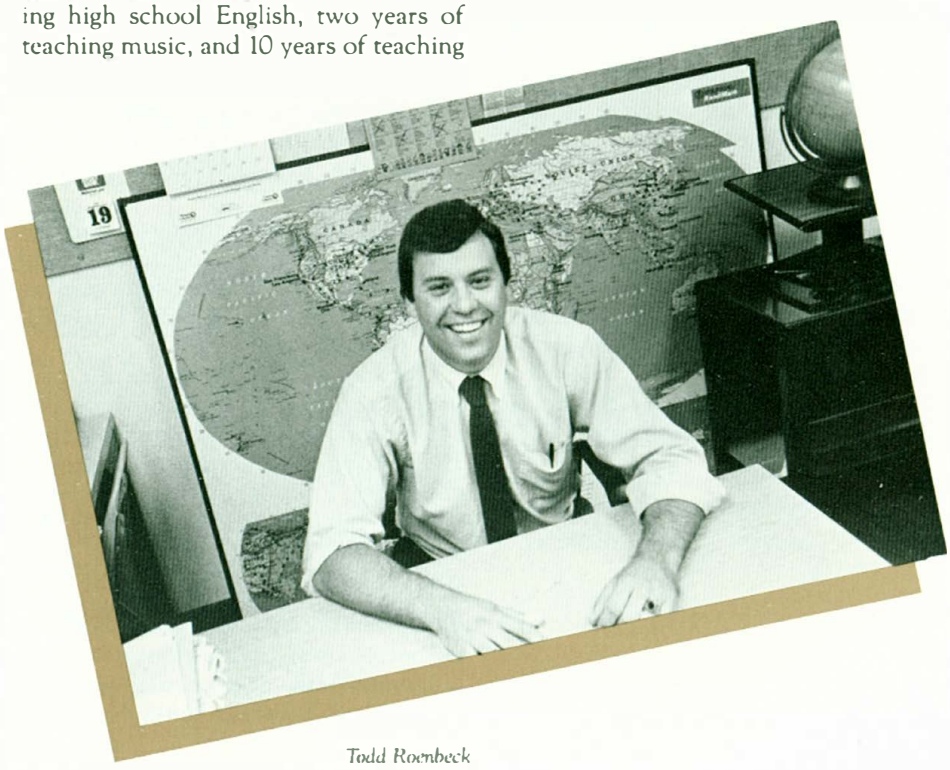
"I can't begin to describe how constantly I use the training and materials I gathered in the program," she says. "My job includes ordering auditory trainers, monitoring their use, troubleshooting when they malfunction, and training teachers, students, and parents to use them wisely.

"In addition, I consult regularly with speech teachers, classroom teachers, staff, administrators, pupil personnel directors, and members of the Committees on the Handicapped who determine placement and support services necessary for these students."

Welch is excited about a new series of career workshops planned for hearing-impaired high school students.

"We will explore what is involved in choosing a career, preparing for it, and getting—and keeping—a job," she says. "Students will have a chance to interview hearing-impaired adults who already are pursuing their chosen careers. Some of these are recent graduates from school districts served by the BOCES program."

Although Welch has taught English, math, science, and social studies to hearing-impaired junior high school students in the BOCES program, she admits that "I've had to phase myself out of teaching this year because of other demands on my time."



Todd Roenbeck

Her duties often require common sense that is impossible to learn in any program. "Sometimes I have to check out what 'legal clout' I can use to persuade reluctant school districts to provide support for hearing-impaired children," she says. "I also have to just *listen* to the parents and siblings of children whose hearing impairment has just been discovered.

"I love my work," she concludes. "It's the most demanding, exhausting, challenging, and satisfying career I've had yet. The program and the good people in it continue to be excellent resources—I'm so glad to be working nearby!"

Todd Roenbeck's interest in the Educational Specialist Program began in Michigan. After a day as a substitute teacher in a gym class for deaf students, he decided to enroll in the Educational Specialist Program. He graduated in 1983 and now teaches history at the Phoenix Day School for the Deaf, a divisional affiliate of the Arizona State School for the Deaf and Blind.

Roenbeck says that the educational specialist program was "a lot of work but well worth it." Nonetheless, he wishes that there had been "more emphasis on practical experience and less on language." Besides history, he also teaches English and communication skills to the 65 Mexican, Indian, black, and white students who come to his school from a 30-mile radius. He also coaches football and basketball.

"I really enjoy coaching," he says. "During one season, I can see enormous improvements in the players' attitudes and skills.

"Coaching here has allowed me to travel to many places, including Utah, Oregon, and San Francisco. I wouldn't trade my experiences for anything. Sports have allowed me to get closer to my students, so that I can—I hope!—influence them positively for the future."

Meeting the Need

Ken Nash seldom has time anymore to unpack his suitcase.

His role as a fellowship winner and director of the Educational Specialist Program co-sponsored by the University of Rochester and NTID through RIT takes him places. Most recently, it's been the Netherlands and Washington, D.C.

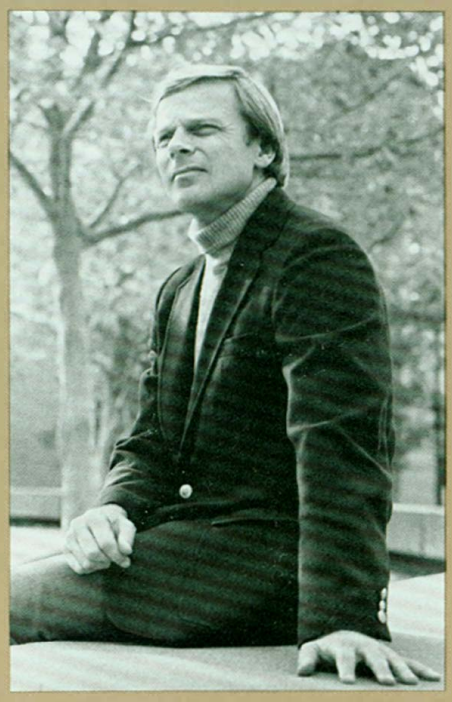
Last summer, Dr. Nash spent six weeks in the Netherlands studying that country's national policies for handicapped people through a fellowship from the World Rehabilitation Fund's International Exchange of Experts. He studied the Dutch system, identifying policies and procedures that could be useful to the United States in implementing its own policies. According to Dr. Nash, there are more than 6.5 million handicapped children in this country.

"I found that Dutch roles and responsibilities are often opposite from Americans'," says Dr. Nash. "Almost the entire Dutch system of agencies and schools is private, and about 50 percent is sectarian. The government provides advice and money but has little direct authority. For a social welfare state, this is unusual."

The results of Dr. Nash's study will appear soon in several journals, and he hopes also to share his findings with students enrolled in the Educational Specialist program.

Since it began in 1981, the program has turned out approximately 15 graduates a year. "We can't hope to meet the national need for secondary education instructors that way," Dr. Nash says. "That's why our people must be special—they must be leaders, able to manage support services, and be aware of systems for such services in other countries."

Before Dr. Nash had time to catch his breath from his Dutch trip, he learned that he had received another fellowship, this one from the Kellogg National Leadership Program. For the next three years, he and 47 other scholars will be involved in issues of national policy—looking at land and water use, high technology, medical services, international relations, and other major national issues.



"The purpose of the Kellogg Leadership Program is to broaden our perspective so that we can better understand the overall problems and issues facing the United States," he says. "Such a perspective is necessary for effective leadership in any field, including special education and rehabilitation. I will share much of what I learn with my students, which will help to broaden their views also."

As part of the Kellogg Program, Dr. Nash will work for six months as a Congressional Intern with the Senate in Washington, D.C. His job will be to look at selected fiscal and policy issues in education, health, labor, and welfare. He is eager to share his Congressional experience with his students when he returns in September.

"The students really keep me alive with their questions and ideas," he says. "I think I'm able to bring the realism of the administrative end of academics to the classroom, while they stimulate me with their concerns. I get so much energy from them."

Inhabitant of Many Worlds

By Kathleen Sullivan

Avram "Rudy" Vener says that 10 years from now he'll be orbiting Earth in a space station, and after five minutes talking with him, there's no reason to doubt it. There are probably few things in this world, or any world, for that matter, that Rudy can't achieve.

The 29-year-old Weston, Connecticut, native is pursuing a bachelor's degree in computer science from RIT and plans to graduate in 1986. In the meantime, he divides his time between studying, a part-time job at a computer firm, and keeping up to date on the latest in science fiction novels and space technology.

Rudy came to RIT to take advantage of NTID's support services, particularly those designed to help hearing-impaired students who have visual problems as well.

At 23, Rudy was diagnosed as having retinitis pigmentosa. At the time, he was an electronic technician at Digitech Data Industry in Ridgefield, Connecticut, a position he had taken after high school. Electronics was his first love, but he had to leave that field when poor vision prevented him from using high density electronic boards with "too many conductors too close together."

Enter computers, first as a hobby and then as a serious career choice. "In reality," he says, "my decision to get a computer science degree was forced on me by necessity, by circumstances beyond my control."

Such scientific lingo is a result of Rudy's avid interest in science and technology. He is a member of La Grange 5, an international group that advocates space colonization. He also is a 1983 winner of RIT's Kearse Writing Award for his science fiction entry, "The Encounter."

Rudy's academic credentials don't end there. He is the winner of a $1,000 scholarship from the Westport/Weston (Connecticut) Foundation, and a $1,500 Floyd Qualls Memorial Scholarship from the American Council of the Blind. Rudy was one of 12 winners chosen from more than 400 applicants for the latter award, given annually to superior blind and visually impaired students enrolled in postsecondary schools.

Judging from his grade point average —3.6—Rudy has not been hampered by his hearing or visual problems. "I've taken several communication courses through NTID," he says, "including tactile signing." (In tactile signing, deaf-blind persons cup their hands lightly over the back of an interpreter's hands or have an interpreter sign and/or fingerspell in the palms of their hands.)

Rudy finds he receives communication best from a tactile interpreter in class or teachers using a microphone that feeds directly into his hearing aids. Either way, he relies heavily on note-takers—hearing students who take notes for hearing-impaired classmates.

As part of his curriculum, Rudy had to complete a cooperative work experience. He spent 10 weeks with Computer Distribution Associates, a small firm in Pittsford, New York. Rudy wrote systems and applications software for a Jupiter Ace 4000 computer, using the computer language FORTH.

As a programmer, he got to do "the kinds of things I used to do with microcomputers at home—but I got paid for it." He could fit the entire computer system into his backpack, and at first he often did, so that he could do some "at-home studying."

"I was a little nervous when I started," Rudy confesses. "This was my first job programming, and I wasn't sure how I'd measure up."

If he has any qualms about his computer capabilities, Rudy can always find a sympathetic ear at home. His father, a consultant, is also interested in computers, and the two occasionally spend hours on the phone trying to "de-bug" particular software problems. "It's not the easiest thing in the world to do on the telephone—long distance—through an interpreter!" Rudy laughs.

Rudy joined the American Association of the Deaf Blind (AADB) in 1981, and attended a convention at Gallaudet College the same year. "That was probably the most interesting experience I've ever had," he says. "It was my first time away from home and I'd never been with so many deaf-blind people at once."

Evidently, he enjoyed himself, since he signed on as a member of the Accommodations Committee during the AADB's convention at NTID this past summer.

When he gets his degree, Rudy says that he'll "plaster it on the wall and go into business for myself." Or, he amends, he might go directly into a master's degree program in computer science. His third alternative? "To transfer into a field that would allow me a good shot at landing a spot on a space station."

You may just have read about the world's first intergalactic computer programmer.

> Without a word, Jared reached for the controls of the tachyar scanner to confirm what he already dreaded was the truth. One minute later, after strapping himself into the command chair, he sat there, scowling. That thing out there had no business being where it was. Intergalactic space was notoriously as empty as a banker's heart.
>
> You needed lots of empty space when you were in Kluger drive. You could not go near a gravity well of any significant size when the Kluger drive was operating. Ships that do so tend to reappear in normal space as rapidly expanding clouds of dust and miscellaneous molecules. You also could not change course while in Kluger drive. Why this was so remained a mystery, since no one who had tried it had ever returned to explain what had gone wrong.
>
> from "The Encounter"

THE N·T·I·D COMBO

Musical Ambassadors to Denmark

The NTID Combo gets ready to play. From left, Nancy McCormick, Willa Joyce James, Jay Becker, and Barry Kramer.

By Ann Kanter

The four students from the NTID Combo were the only hearing-impaired people at the Symposium—a worldwide gathering of medical doctors, therapists, and music educators seeking improved techniques for the education of the handicapped.

"The audience kept one eye on the presentation and the other glued on the students—just watching the sign language. They were obviously fascinated," said Robert Mowers, "and later they came up and said how beautiful it was to watch."

Mowers, NTID performing arts music teacher, was describing the audience reaction at the Third International Symposium in Music, Medicine, Education, and Therapy for the Handicapped, which was held last August in the Danish seaside town of Ebeltoft.

Mowers and Diane Habeeb, another NTID performing arts music teacher, accompanied the Combo to the Symposium to demonstrate to the international audience that deaf people can produce quality music.

The Combo is a four-piece musical group whose membership changes almost yearly, as students graduate. At the time they went to Denmark, the members were: Jay Becker, drummer; Willa Joyce James, pianist; Barry Kramer, alto, soprano, and baritone saxophonist and clarinetist; and Nancy McCormick, guitarist and occasional singer.

The Combo, believed to be the nation's only deaf college-level musical group, specializes in background or dinner music combined with Broadway show tunes and scores from movie sound tracks. "We want to enlarge the students' cultural horizons," says Mowers, "and so in addition to teaching them how to produce music, we want them to understand how the pieces fit into the ambiance of a period in history. We select numbers to represent the different stylistic phases in American music—swing, shuffle, hard and soft rock, jazz, and boogie." Their repertoire includes such oldies and current hits as "Back Bay Shuffle," "After You've Gone," "I'll Be Around," "Satin Doll," "Hello Dolly," "Arthur's Theme," and "Love the World Away."

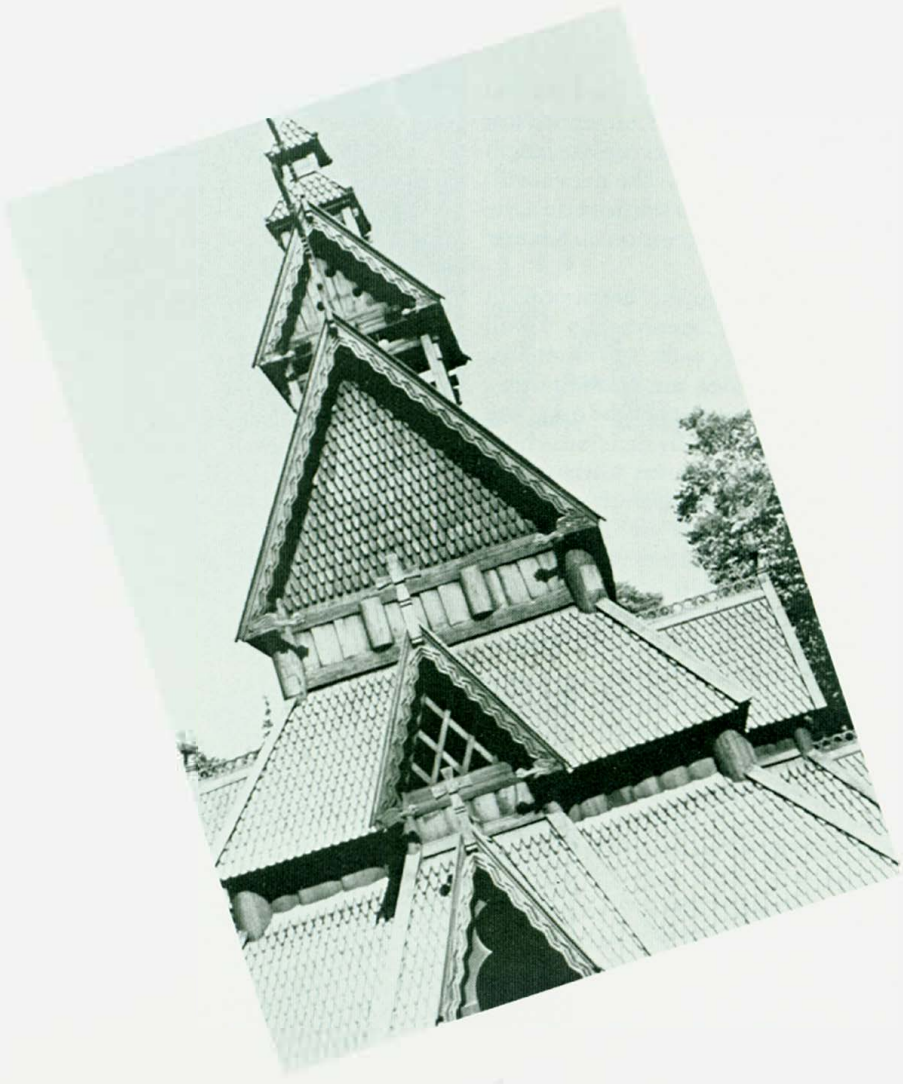
The Combo is an outgrowth of a unique music program, begun six years ago at NTID by Mowers and Habeeb. The program's singularity evolves from Mowers' feeling that "musical talent lies in your brain, not your ears. Ninety percent of the students who come to NTID have some residual hearing. We try to teach them to use what they have." Mowers' philosophy contradicts the feeling of many hearing people that since deaf people cannot hear, they cannot make music. The NTID Combo is proving Mowers right.

The trip to Denmark came about when Donald Shetler, professor of education at the Eastman School of Music, invited Mowers to address a class of graduate students on methods of teaching music to deaf youths. Shetler, who also serves on the Board of Directors of the International Symposium, was so excited by NTID's program that he felt it deserved international exposure. He expressed this feeling in a letter to Ole Bentzen, the Symposium president, who would be making a world tour investigating facilities for the handicapped. Bentzen visited NTID in January 1983, and was so impressed with the Combo that he invited them to perform at the Symposium the following summer.

Coincidentally, a member of RIT's Board of Trustees witnessed the Combo in action at the Chatterbox Club in Rochester and was so inspired by the performance that she made a contribution to RIT "to support performing arts activities in the best way possible." This generosity and enthusiasm convinced Dr. William Castle, director of NTID and of RIT's Creative Arts in Complementary Learning Program, that the best use for her gift would be to help finance the Combo's trip to Denmark. He next began "a small fund-raising campaign" to secure the rest of the necessary monies. Two-thirds of that amount was raised from other board members who have special interest in the program and the presence of deaf students on the campus. The rest was contributed by private donors from the Rochester area.

In addition to playing numerous "gigs" in the Rochester area, the Combo had already performed for the Mid-Atlantic States Music Therapy Conference in Pittsburgh, Pennsylvania, and for the President's Committee on Employment of the Handicapped in Washington, D.C., where each member had received a commendation certificate signed by Committee Chairman Harold Russell.

"Of course, they have to have talent," says Habeeb. "They must be able to handle chords and keep the beat—but there's more involved than that." She explains that they need the social maturity to get along with others in the group and the poise to socialize with the college president and members of the National Advisory Group. "They must be able to handle themselves at dinner with people from all over the country who will want to ask them a lot of questions."



Gol Stave Church at the Folk Museum in Bygdoy, Norway, a stop on the Combo's homeward route. The church, which dates from the year 1200, is part of a preserved district comprising 170 buildings from all over Norway. Photo by Jay Becker.

Mowers says this ability stood the students in good stead in Denmark, where the conferees joined the NTID group at mealtimes, eager to talk to the students and relieved that their inability to sign was no obstacle. (All four Combo members speak and speechread well.)

Mowers explains the importance of the Combo's demonstrations at the Symposium: "Since the passage in 1975 of Public Law 94-142 on the mainstreaming of handicapped students, music teachers all over the country are finding hearing-impaired young people in their classes, and they don't know how to deal with them. Often the deaf student falls by the wayside—not because teachers don't want to teach them, but because they don't know how. When our students prove that they can make music despite their hearing impairment, they demonstrate what teachers can accomplish with other students. At the same time, they act as role models for deaf students and adults the world over."

The Combo's main performance in Denmark was a 45-minute concert they gave for the approximately 200 delegates at the opening session of the Symposium. A measure of the impression they made may be seen in James' recollection: "They gave us a standing ovation! The people in the audience stretched their arms straight out in front of them and clapped and clapped to a steady beat. It seemed to reverberate throughout the auditorium, and they wouldn't stop until we played an encore."

It was the students' first trip to Europe, and they were impressed by the cleanliness, the lack of litter and crime, and the kindness and courtesy of the Danish citizens. One particular incident made a tremendous impression. The young people were sightseeing in downtown Copenhagen when Kramer felt a hand on his shoulder and turned around to face a breathless Dane holding Kramer's camera, which had somehow

slipped out of his pocket. The man had called out, but of course Kramer had not heard him, and so he had run the length of a block to catch up. The man's willingness to go out of his way to return the camera made a big impression on Kramer and his friends.

The students were also unanimous in their delight at Copenhagen's Tivoli Amusement Park with its fountains, flowers, music, rides, games, and restaurants. Kramer's eyes still light up at the memory of an especially delicious chocolate mousse. Becker was intrigued by the blonde, blue-eyed Danish girls, and James was impressed by the Danes' knowledge of their history and places of interest, and in their national pride, expressed by flags flying everywhere. McCormick recalls the magical moment of an approaching thunderstorm "with the sun setting on the water, the lightning flashing, and the clouds rolling in like a great dragon." Although the memories the students treasure are personal and distinct, the four are unanimous in their desire to return to Denmark.

For the students, the trip will probably always be one of the highlights of their lives. They have brought back a contagious enthusiasm, increased self-confidence, and a broadened perspective based on an awareness of differing values and life options.

But as much as the young people may themselves be enriched by their experience, there is a potential for still greater and more far-reaching effects inspired by their presence and performance at the Symposium.

Habeeb says, "A lot of people from all over the world heard about NTID. Many of them saw sign language for the first time and learned that many deaf persons can also speak and speechread. It was a fantastic opportunity for them to learn about deaf people and the resources available to them at NTID, and how our students use those resources to lead more effective lives."

Mowers adds, "If they take these ideas home and implement them, we will have helped to open up new possibilities for deaf people everywhere."

NTID's Attention-Getting Music Program

In 1974, Robert Mowers was teaching at Monroe Community College (MCC), and his work with an occasional hearing-impaired student stimulated him to do research on music education for deaf people. "I read everything that existed in three days, and the near-total lack of information made me angry enough to try to develop my own ideas and techniques on the subject."

At that time, there was no music program at NTID, nor for that matter, at RIT. However, in 1975, an NTID theatre director who wanted to produce the musical, "Joseph and the Amazing Technicolor Dreamcoat," called Milford Fargo of the Eastman School of Music to see if he knew anyone who could handle the music direction. Fargo remembered that Mowers, a former Eastman student assistant and guest instructor, had done "Joseph" for his church and a choral literature class. A happy partnership was formed.

After producing a highly acclaimed "Joseph" and "Celebration" for NTID and discovering that there was no music program at the Institute, Mowers received permission to conduct a pilot program. He recalls those days when "we met in hallways, vacant offices, and dressing rooms...."

Today, the program has grown—it currently handles up to 65 students a quarter—and Mowers says that with expanded facilities, it could handle 100.

"The first step with a new student," says Mowers, "is to teach a concept of what music really is. The textbook definition of music is organized sound—noise is unorganized sound. Those of us with a musical background have some idea of what organized sound is, but to a hearing-impaired person without that orientation, it means nothing. So we have to demonstrate organized sound visually and orally. We must explain why it's necessary to keep a steady beat.

"To be good in music demands discipline, and it's a real learning experience. Many students think they can take music for one quarter and be great players. That's not reality. We warn them about it, but their first quarter is what makes them believers. The ones who stick with it are really dedicated."

One of the dedicated ones is Willa James. She says, "Being in the music program is an important part of my life here at NTID. Every Wednesday after Tiger Band practice we all go to Friendly's for ice cream, and Bob has had us to his home for a party. It gives us a chance to get to know each other outside of class.

"Bob and Diane Habeeb [another NTID music instructor], give so much of themselves. They're sincerely interested in us as human beings, and they treat us like mature, young adults. That gives me a good feeling about myself."

James, like fellow student Barry Kramer, performs not only in the Combo, but also in the RIT Tiger Band. It is made up of 75 percent hearing students and 25 percent hearing-impaired students, and may be the only such band in the country. Mowers explains, "As the NTID music program expanded, students from other colleges on the campus, for whom there was no equivalent program, began to join us."

The band provides music at athletic events and other campus functions, such as the recent 15th anniversary celebration. It has achieved one of Mowers' goals—to integrate hearing-impaired and hearing students. He calls it "an education for hearing as well as hearing-impaired students" and says it is "one more bridge between the worlds of deafness and hearing."

Mowers says, "The most valuable thing about music in terms of NTID is that we get people's attention. The Combo makes the public aware that hearing-impaired persons can make music. That seems impossible to most hearing people. Once they accept that, it's easier for them to understand that deaf people can do a lot of other things. The Combo is a 'shake-em-up organization.'"

The unique nature of Mowers' program has attracted attention from around the country and around the world. Two schools in Florida and one in Buffalo heard about it at a conference and wrote Mowers asking for guidelines to set up their own programs. And in the spring quarter, Mowers hopes an intern will be joining him from Australia. "He's been writing to me for the past four years. He wants to be able to teach hearing-impaired people, and the only place in the world he can come to study is here at NTID."

OUTREACH • TO ANTIGUA

By Richard Schmidle

Kathleen Isaac wished she could take the building home with her when she left.

Isaac is head of the Red Cross School for the Deaf on the Caribbean island of Antigua. As an intern at NTID last summer, she got a close look at the programs and facilities of a school that serves as a model for educators of deaf persons around the world.

NTID offers internships to graduate students in deaf education and professionals from education, business, and industry. With the support and supervision of experienced staff members, interns have the opportunity to expand and practice their skills with a population of deaf college students.

Isaac came to NTID to learn how to detect vision problems among deaf students and to improve her ability to test hearing and fit hearing aids. Her stay at NTID was supported by the Rochester-Antigua chapter of the Partners of America, a non-profit, private organization linking 43 of the United States with 27 Latin American and Caribbean countries in a voluntary sharing of resources and skills.

Under the direction of Dr. Donald Johnson, professor in the Division of Communication Programs, Isaac enrolled in a vision screening class jointly sponsored by NTID and the University of Rochester. She learned to detect color vision problems, near-far vision difficulties, and other vision problems that may require the attention of an eye doctor.

Her study at NTID gave her experience with procedures and technical equipment that are not available to her on Antigua. She describes the Lyndon Baines Johnson building, the main academic building at NTID, with an admiration bordering on envy.

"I'd like to see my students in a facility like this," she says. "I'd like to see them grow like this. I think they can. But it's not an easy process without the technical assistance."

Isaac's school in the city of St. Johns is supported by the Antigua Red Cross with help from the island's government. Its students range in age from 3 to 18 years.

Although Antigua is some 1,300 miles southeast of Miami, the Red Cross School is not isolated from problems common to other schools for the deaf. Like school administrators elsewhere, Isaac faces demands that often exceed resources.

The rubella epidemic that swept the United States in the early 1960s resulted in a larger than normal number of children born with hearing defects. Schools like NTID are stretching to accommodate those young Americans who are now reaching college age. A similar epidemic hit Antigua in 1979. Of the 14 children enrolled in the Red Cross School this year, most are deaf due to maternal rubella, Isaac says. Next year, when the 1979 babies reach the mandatory school age of 5, the enrollment will increase.

Isaac encourages hearing-impaired children to attend the Red Cross School even before the age of 5. Postsecondary education for deaf students is not available on Antigua, and she feels that the early start in school will give them an advantage later in life. Isaac knows of parents who have sent their deaf children to Canada or England for college training, but says that few families on the island can afford that expense.

Isaac is a determined woman. Despite

limited facilities at the Red Cross School, she is proud of her accomplishments there and pleased with her staff of two certified teachers, a teacher aide, and three assistants.

"It's been hard finding people willing to take up the role," she admits. "Not many people want to deal with deaf people. It makes me feel good when our students can get a job and associate with hearing children."

Sign language is used occasionally at the Red Cross School, but speech and lipreading is the most common method of communication. "I encourage my students to communicate orally," Isaac says. "They may not meet another deaf person after they leave school."

Both English and a dialect are spoken on Antigua, posing another problem in the use of sign language. Since sign language there is based on English, deaf children from the country, where the primary language is dialect, are at a disadvantage if manual language is used.

Public acceptance of deaf people on Antigua is improving, Isaac says. She credits part of the improvement to graduates of her school who are succeeding at jobs with local businesses.

"It's regrettable that we are not able to further their education," she says. "Although we don't have the technical facilities you have, we try to put our students in circumstances where they can grow on their own." About a year before a student leaves the school, Isaac begins looking for a job training program or other work matching the student's abilities.

Isaac returned to Antigua with a knowledge of vision screening and a fresh perspective on education of deaf students. She's working with the Partners of America to obtain the equipment needed to conduct her own screening tests, and is planning a course to share her new knowledge with other schools and agencies.

Recalling her experience at NTID, Isaac says, "I would do it again. There is an outlook at NTID, an inspiration that makes you more aware of what your children can do. Instead of resting, you can push more, and you make the parents more aware of what their children can do."

Rubella–A Family's Story

By Lynne Williams

It all started with "a funny little rash" that lasted only half a day. It was hardly worth mentioning, except that Norma Wangel was in the first trimester of her fourth pregnancy.

Between 1963 and 1965, the worst rubella epidemic in recorded history swept the United States and, ultimately, the entire world. In 1964, more than 7,000 children in the United States were born deaf as a result of the epidemic.

In 1964, the Wangels were an average family. Norma was an antique dealer who enjoyed art; William "Bill" was a rising young IBM executive. They had three sons: David, 9; Robert, 7; and Marc, 3. This fourth pregnancy was unplanned, but by the time Beth was born, the entire family was excited and happy. "She was beautiful and lively," says Norma, "and the fact that she was a girl, after three boys, was icing on the cake."

When Beth was 7 months old, Bill was promoted and the family moved to Washington, D.C. The baby was so "sweet and wonderful" that no one suspected something might be wrong. However, Norma had raised three children and she began to notice that Beth wasn't saying those first words the others had mimicked as infants—"mama," "dada," and "no no."

"I mentioned it to our pediatrician," Norma recalls, "but he insisted, 'There's nothing wrong. She's fine, so don't worry.'"

But Norma did worry, and she kept after the doctor. Finally, when Beth was 2, he admitted that maybe all was not well and made an appointment for her at nearby Children's Hospital. Doctors there made the heartbreaking diagnosis: a hearing loss due to rubella during pregnancy.

"The effect was devastating," Norma says, "not only for me and my husband, but for our oldest son, David, who was 9 at the time. He wouldn't believe it. Bobby and Marc were really too little to understand.

"I didn't know what hit me. My first reaction—and I can transport myself into that day so easily—was that I wanted to murder my gynecologist. I felt such rage. I was blaming him—I think all of us were. I couldn't imagine the doctor letting this happen."

Beth Wangel

The Wangels had no experience with deafness. "We were totally frightened by it," Norma admits. "It was especially difficult because Beth looked so perfect. I kept thinking, 'Maybe they made a mistake. Maybe this is just a nightmare.' We had never had to cope with a handicapping condition in the family."

They did cope. They took Beth to an audiologist who fitted her with a large hearing aid attached to a harness on her tiny chest. "Beth was only 2 years old," Norma says. "I guess we were lucky with her. Other parents said that their toddlers flushed the hearing aids down the toilet or dropped them into sandboxes. Beth was pretty good. We told her not to touch it and she didn't... most of the time."

Dr. Gerard Walter, an NTID researcher, points out that before 1983, about 80 percent of NTID's entering students wore hearing aids. With the recent influx of rubella students, that percentage has jumped to 92, and the Institute's Hearing Aid Shop has had trouble keeping enough batteries on hand to meet the needs.

When Beth was quite young, the Wangels began to worry about her education. "I had dark visions about having to send my child away," Norma recalls. "I knew I didn't want to do that. But there didn't seem to be any people who could offer suggestions or point out the options open to parents with hearing-impaired children."

They finally elected to place Beth in a nearby program for the hearing impaired. Norma was disturbed to discover that Beth would be among other children with multiple handicaps. "In retrospect, I realize that I was very insecure about the whole thing," she admits. "All I knew was that she was placed with a lot of children who were making terrible noises. I know now that I was mistaken. Many of those children have turned out wonderfully, but at the time, it was very frightening for me."

During those early years, Norma worked with Beth daily, talking to her, painstakingly drilling her on vocabulary. "It was exhausting to work and work for hours just to get her to say one word. I talked to her constantly, even though there were times when I knew she didn't understand. When she was 5, Bill and I went to Europe for three weeks. When we got back, I noticed that she wasn't talking. That clinched it. We decided to pull her out of the county hearing-impaired program. It was obvious that, without me in the house, she wasn't getting enough speech training in the school."

The Wangels and several other parents took their children out of that program and placed them with a private tutor, who gave the children auditory training and taught the parents how to work with them at home. This tutor taught Beth through the fourth grade —working independently with her in the early years, and later in conjunction with the neighborhood school.

Norma and William Wangel

NTID researchers have found no academic differences between rubella and non-rubella students. As a group, however, their speech is better than non-rubella students, and they have better speechreading skills.

Bill, in the meantime, was working on a number of committees for the handicapped, fighting for better programs for hearing-impaired children. "Sometimes it made me angry that he didn't share enough in helping Beth to speak," Norma says. "I knew what he was doing was worthwhile; it was just that I was working with Beth all alone and would get very frustrated. I also knew he couldn't cope with the trying situation of getting Beth to say one word. I forgave him because I know that we all are not made able to cope with the same things."

In one instance, however, Bill's work for special interest groups was to have a direct impact on his daughter. When Beth was only 5, he was a member of an IBM group invited to visit the recently established National Technical Institute for the Deaf.

"It was a group of 10 or 15, and they spent two days with us," recalls Dr. Ross Stuckless, director of Integrative Research. "I remember that he said he had a young daughter, deaf from rubella, and that until he came to RIT, he had no idea this kind of opportunity was available for deaf people. He was so pleased."

According to Norma, once Bill saw NTID, there was no other place for Beth to go. However, that was far in the future, and they first had to deal with elementary, junior high, and high school.

Norma describes Beth's years between age 2 and 10 as ones of constant transition. "We were floundering. We kept looking for something better." Resource teachers and resource rooms had been initiated in neighborhood schools, but only a few available hours each week wasn't enough. The Wangels managed, for most of those years, with a combination of mainstreaming in regular schools and the help of the tutor.

"It wasn't easy," Norma asserts. "There were many battles with the board of education. Bill was great at that. He was fighting for better programs and for tutors paid for by the schools. I had no energy for the battle. All my energy went to helping Beth."

One bright spot during those difficult years was a neighborhood school in Bethesda, Maryland, where Beth attended the second through fourth grades. Norma gives much of the credit for the good experience to the school's principal, whom she describes as wonderful.

"He adored Beth and saw her admittance as a challenge.

"You know," she adds thoughtfully, "a lot of how we handle things is based on how we look at life. To one person, it's a challenge, to another a burden. It makes a difference.

"She had some wonderful teachers at that school," Norma continues. "They became involved—so involved that one eventually became a tutor for deaf students."

However, by the time Beth reached the fourth grade, her schoolwork was becoming more difficult, and then her longtime tutor decided she could no longer handle all of her students. Again, the Wangels were forced to look for another program.

Beth spent her remaining elementary school years in her original county program, which by this time had been revamped. "It wasn't great," Norma says, "but it was better. It was housed in a regular school and now had some good teachers."

Beth recalls that during most of her elementary school years, she was the only deaf child. "I got along well with my hearing friends," she says, "but I did have trouble with grammar and English schoolwork. I had one teacher who became very interested in me. She even took time to work with me every day in her home after school. She would take the book, write out the questions, and I would write the answers."

Although she had trouble with grammar, she had good math aptitude. "I could hear but not understand the teacher," Beth explains, "so I would just look at the board and the book, and pretty soon I would figure it out."

In junior high and high school, Beth was mainstreamed in regular schools and says she always felt comfortable with hearing students. "I did have deaf friends, but I also had many hearing friends."

Beth's ability to function with hearing friends was due, in large part, to the efforts of her parents. As a child, Beth was included in many of their activities. She was taken along on Norma's buying trips and antique shows, and was encouraged to interact with all kinds of

people. "If she came to me and said she wanted a hot dog, I would say 'O.K., here's some money. Go get it.' And she would," Norma says. "She also got jobs by herself when she was 15 or 16. We made her do it that way."

As Beth neared the end of her secondary program, she began collecting information about colleges and programs —Gallaudet, the University of Maryland, NTID, and others. Although Bill told his wife that NTID was what he wanted for his daughter, he never mentioned it to Beth. "That is a real surprise to me," she admits when told later of his preference. She stresses that he never seemed to favor one college over another. "We just gathered the information and discussed it as a family.

"I looked for a place with hearing people, with a good social life, and with a good communication program and accounting major," Beth explains. Her Scholastic Aptitude Test score in math was high.

Her mother preferred a completely hearing environment. "Every time Bill mentioned NTID, I would say, 'Maybe she can go to the University of Maryland or some other place.' I asked her auditory teachers, I spoke with people from NTID, and I always asked, 'What other options do we have?' Everyone said the same thing, 'The only place for Beth is NTID.' I knew that the University of Maryland had support services so we talked to their representative, and even he said NTID was the best place for her. So I did a turnaround. You must be realistic."

Norma said she remembered when Beth was floundering in elementary school. "I had to ask myself, 'Do I want her to go through that again?' I finally realized I had to let her go and see. I also had to go by Beth's feelings."

During Beth's junior year, the family was dealt another blow. Bill learned that he had cancer. Norma describes it as "a year when a lot was happening." They planned a visit to the RIT campus, their older son was getting married, and Bill's health was deteriorating. "A lot of that time period is blurred for me," she admits. "Beth was excited about the trip, and I seem to recall that we decided to combine it with an antique buying trip. I know it was 'rest and relaxation' for Bill."

Shortly thereafter, Beth applied to NTID and was accepted. She became a member of the largest entering class in NTID's 15-year history, which included many students deafened in the peak year of the rubella epidemic.

In 1982, 310 new students entered NTID. In 1983 the number jumped to 522. In the years 1975 through 1982, only 8.6 percent of the students had rubella-related deafness. In 1983, that figure was 45.4 percent.

Bill did not live to see his dream for Beth fulfilled. "My father died one week before my birthday in September 1982," she says, the pain obviously still fresh. "When that happened, my three older brothers just took over. We are all very close, and they were there to help and support me. It's like having three fathers and three boyfriends as well as brothers.

"The only problem," she adds, "is that whenever I have a problem, they want to rush up here and solve it for me. I have to tell them, 'No, I can solve this by myself.'"

It seems fairly certain that her brothers' visits can be purely social. Beth's academic skills were so strong that she was able to enroll directly in RIT's bachelor degree program in accounting. All students in this program are required to take some data processing courses and, during the first quarter, she found herself working with computers.

"At first it was very frustrating," she admits. "But I kept trying, and reading the instruction sheet, and I figured it out. Then I was able to pass the practicum and the quizzes." Now Beth finds that her deaf friends seek her out when they have problems with their computer work.

Dr. Stuckless says that many instructors are commenting on the quality of this year's class. "I'm teaching a course and I'm delighted with my students. We have no hard data, but people who deal with the students observe that they seem to be more motivated, they use their voices more, and they seem more mature than previous classes. It is not just the rubella students—it's the whole class in general."

More than 8,000 children were born deaf during the three years of the rubella epidemic. Dr. Stuckless has gathered statistics showing that, because of the immunization program initiated in the United States after the epidemic, there will be 20,000 fewer hearing-impaired children between now and the end of the century. Dr. Stuckless works closely with the Centers for Disease Control and the World Health Organization, both of whom promote immunization throughout the world. "The United States can be proud of the lead it has taken in this program," he says.

The Centers for Disease Control in Atlanta found that historically, epidemics occurred at seven-year intervals, but since the 1963-65 epidemic, none has occurred in the United States. In 1982, as few as seven children in this country may have been born deaf as a result of rubella.

As Beth begins this new phase of her academic career, it appears to the family that the worst of her struggle is behind her.

"Every time I visit my grandmother in Florida she starts to cry," Beth says, laughing. "I say, 'Grandma, why are you crying? You don't have to cry.' And she says, 'I'm just so proud of you.'"

Diary of a Dedication

The dedication of the Hugh L. Carey building, the fall meeting of NTID's National Advisory Group (NAG), and RIT's Homecoming Weekend all combined to make the weekend of October 13-15 the Institute's most spectacular celebration ever. Under the direction of Special Events Manager Robert Baker (shown below pondering yet another detail, and at bottom left, with RIT Government Relations Director Deborah Stendardi and Visitation Specialist Ella Ford), more than 600 visitors, including NAG Liaison Dr. Herman Goldberg (center), were graciously shepherded from daily meetings to evening receptions—the latter held in NTID's canopy-filled courtyard. Making sure that the sound matched the setting was the job of Associate Professor Robert Pratt, right.

Sunshine Too brought the theatrics of "The Stray Cat Strut" to an appreciative Thursday evening audience that included many of NTID's original founders and staff members: top, Dr. Diane Castle, Maurice and Maxine Forman, and Louise Frisina; bottom right, Betty Toney, Alice Beardsley, Jan Baader, Elizabeth O'Brien, James Stangarone, and Dr. Donald Johnson. NAG member and dinner speaker Edward Martin, and dancers Susan Warmerdan and Susan Galligan were also part of the evening's festivities. Meanwhile, workers continued building the outdoor stage for Friday's dedication ceremonies, finishing only three hours before a morning downpour forced the ceremony into Ingle Auditorium.

Longtime friend and NAG member Hettie Shumway, below, was the center of attention as she headed into Ingle Auditorium to hear, among others, RIT President M. Richard Rose, Rep. Barber Conable, and RIT Board of Trustees Chairman Frank Hutchins sing the praises of guest of honor Hugh L. Carey. The former governor, center right, was similarly surrounded by well-wishers and autograph seekers after the ceremony.

The RIT Tiger Band earned enthusiastic applause for its speedy indoor setup and fine-tuned processional. The NTID Combo, facing page, also lent musical fanfare throughout the weekend. At right, Dr. Castle chats with Rep. Frank Horton.

Governor Carey (facing page, top and bottom) presided over a news conference following the ceremony and in front of the building that bears his name. As Professor Robert Panara enjoyed the festivities, Dr. Castle and Project Administrator Jan Baader discussed the next event. Too quickly, the weekend was over, as students and staff gathered for a final afternoon of Homecoming fun.


NTID
COMBO

THE POWER TO STIR

Student Founds National Program for College Peers

By Lynne Williams

What goes into the making of a leader? Is it a good role model? Is it the influence and encouragement of parents? Does it grow out of active participation in groups and organizations? Or is it a combination of any or all of these factors?

David Nelson is an NTID student leader cross-registered in RIT's School of Computer Science. Although active in many organizations during his six years on campus, his most notable accomplishment has been the founding of the National Association for Hearing-Impaired College Students (NAHICS).

David's leadership qualities first began to emerge during his high school days at the Florida School for the Deaf in St. Augustine. He gives much of the credit for this to his teachers. "They saw my potential and encouraged me," he says.

"David came to us at high school age," says Cheryl Johnson, a dance instructor at the Florida School for the Deaf. "He came from an oral background and really adjusted well to school. He was one of the first males to join my interpretative dance group right after it went co-ed," she adds. "This was a local traveling group that spread deaf awareness. David was a good representative of the school; you could always depend on him."

David served as his class treasurer, a member of the student council, statistician for the basketball team, and assistant manager of the high school's snack bar. "I hated the food in the cafeteria, so I got a job to earn money so that I could eat at the snack bar," he jokes.

He also was a member of the Junior National Association of the Deaf (Junior NAD). His first visit to the Junior NAD Convention in North Carolina in 1976 was a turning point in his life. "It was then that I decided to become more involved in organizations for the deaf," he says. "A short time after that convention, I became president of Junior NAD."

In high school, David took a trip sponsored by Close-Up, an organization that coordinates visits to the Capitol for students interested in government. David and other deaf students from high schools throughout the country had the opportunity to see some of the nation's leaders at work. "I had been in school organizations for the deaf, but that was the first chance I had to see how the government works for the people." It was another milestone in his path to leadership.

Three weeks before graduation, David was invited to participate at a camp for parents of deaf children. Sponsored by the Easter Seal Organization, the camp is held every year to answer parents' questions about their children.

"It was the first time the organization had invited a deaf person to talk to the parents," he explains. "I talked about how much better things were for deaf people now. I told them that there were organizations and colleges for deaf youngsters. I think I helped them have a more positive attitude about having a deaf child," David continues. "Up to that point, all they had heard were the negative things. I told them some positive things."

Ceal Touchton, of the Deaf Services Bureau in Miami, remembers David as a staunch supporter of deaf services while he lived in the area. "When he went to the Florida School for the Deaf, he wasn't able to keep up his activities with us," Touchton says, "but he always stopped in on school breaks to see how things were going.

"David is a character," she continues. "He's so outgoing and easy to communicate with. He's so pleasant, yet he has definite ideas about deaf people's rights. 'Let's do this. Deaf people need this. Why don't we get that?' He can be quite adamant about these things."

David graduated from high school in 1978 and entered NTID as a data processing major. As soon as he had settled into the college routine, he discovered a void.

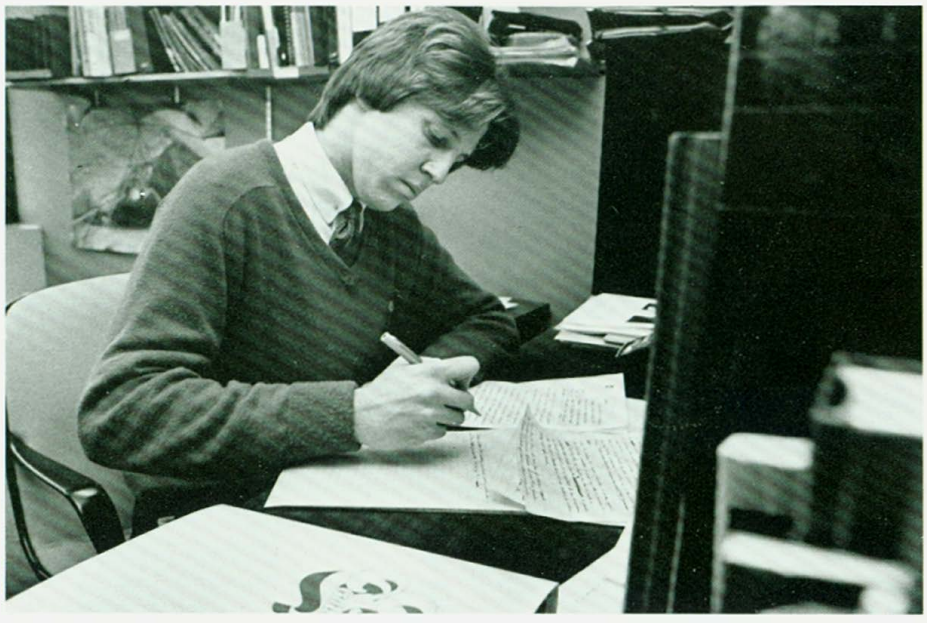
"I saw a lack of communication between deaf college students," he says. "Deaf students at other colleges didn't know what was going on at NTID and NTID students didn't know what was going on at other colleges." He found that the Junior NAD dealt with problems and concerns of high school students, the NAD answered adult concerns, but no organization existed for deaf college students.

In July 1980, he attended the NAD Centennial Convention in Cincinnati, Ohio, as a delegate from NTID. "Most of the discussion was about adult issues. There was almost nothing about college-age students," he explains. "So I made a motion that a committee be organized to help with the problems of college students. It passed, but I was told later that nothing would come of it," David adds wryly. "The organization had passed its first resolution 10 years before, and every two years after that, but the idea had gone nowhere."

David was undaunted. He joined forces with fellow deaf student Paul Singleton from Gallaudet College and they forged ahead with plans. David asked Dr. William Castle, director of NTID, to support a meeting of college students. Dr. Castle agreed that it was a worthwhile cause, furnished the needed financial support, and the first meeting was held at Gallaudet the following October.

"I was acting president," David continues. "We didn't have any bylaws and we couldn't legally elect officers, so we were acting officers." Bylaws were drafted at that meeting and at a second one held the following March at NTID.

"The bylaws were changed three times before the final draft," David adds. They were finally adopted at the group's first convention at California State University at Northridge in October 1981. At that time, David was elected president for a one-year term. "I wasn't too crazy about being the president," he says. "I had always done my work behind the scenes. I felt that you learned more that way."



During the NAD convention in St. Louis the following summer, July 1982, the National Association of Hearing-Impaired College Students became a student affiliate of the NAD. "Even though we are an affiliate, we function independently," David stresses. "We don't even meet at the same time." However, the NAD recently hired a Youth Relations director whom David can contact if the organization has problems. The position is coordinated by the NAD and the National Fraternal Society for the Deaf.

During the St. Louis convention, the group decided that a one-year presidential term was not appropriate. Participants felt the president barely had time to learn the job before the term ended and a new president was elected, so they extended the term to two years. "I wasn't happy about that," David admits. "My term now ends in April," he adds, obviously counting the days.

Despite his reluctance, David concedes that he has learned a lot during his involvement with NAHICS. "I've become good at public speaking," he says. "And I've learned about the work of the government, college administrators, and hearing college student leaders. I've met all kinds of people, and learned a lot through mistakes."

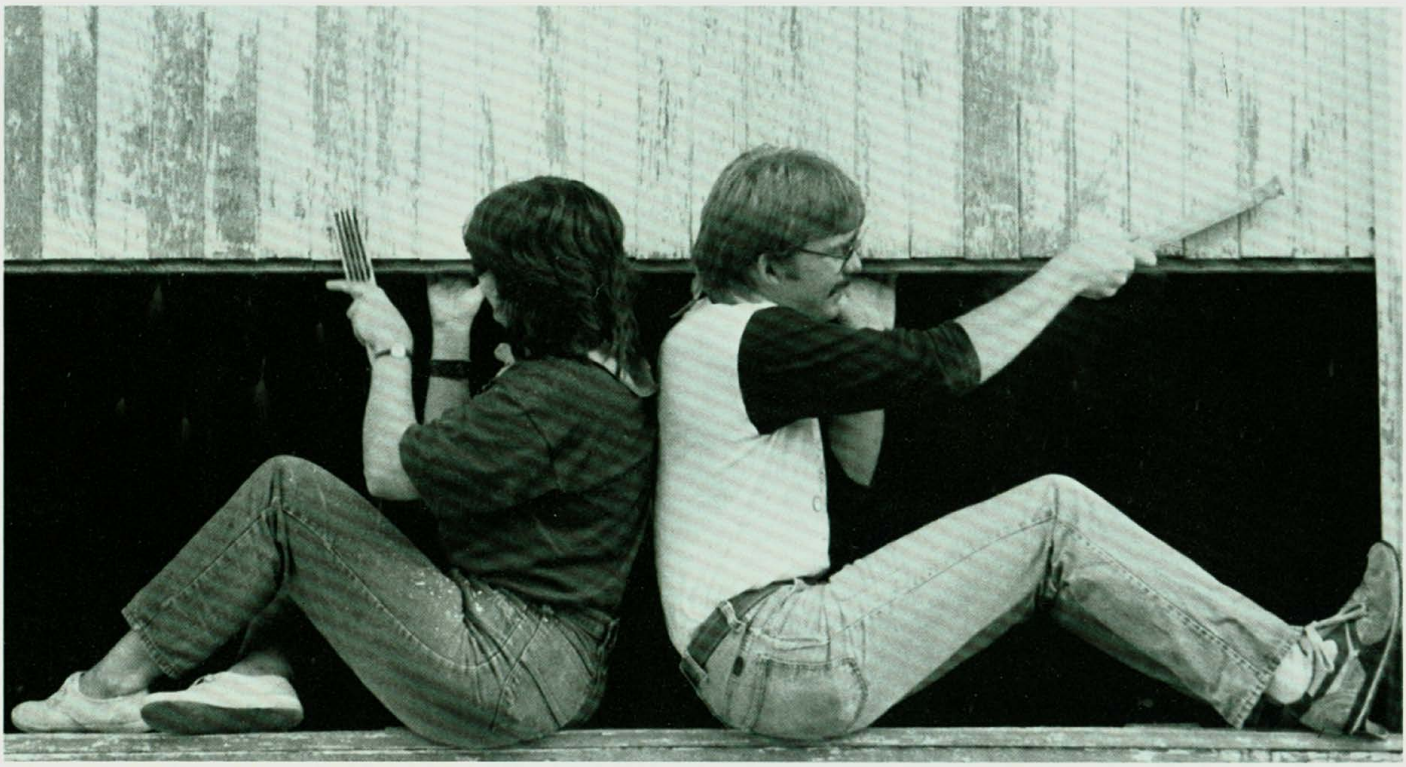
David plans to continue his involvement in associations of and for deaf persons when he completes his college career. "I expect to be involved in the state NAD organization first," he says. "I want to get to the grass roots and find out what the problems are. Once I'm known, then I would like to get involved on a national level."

David earned an associate degree in data processing in 1981 and is pursuing a bachelor's degree in computer systems in RIT's College of Applied Science and Technology. Ceal Touchton hopes that David will return to the Miami area. "We don't have many deaf professionals here," she says. "We could use a leader for the community."

But David's plans may take him to other parts of the country. When he graduates, he plans to apply for a one-year fellowship with Congress before beginning work on a master's degree. "I'm not sure what I will study," he admits, "but I lean toward business or public administration."

A number of colleges and universities have approached David about their graduate schools. His first question to each is, "What kinds of support services do you have?" He grins. "I usually know what the answer is: 'Not much.' I know because I have friends at those schools or have observed the programs. So I tell them that they must improve their support services *before* I will agree to enroll."

Sisters and Brothers



By Emily Leamon

There is a feeling of easy friendship in this room with the wood-panelled walls and furry carpet, the meeting place of Delta Alpha Sigma sorority. The weekly session of the campus Greek Council has ended; a group of students gathers near the bar to chat.

It is easy, for a moment, to imagine yourself in a rambling Greek-revival mansion on a quiet tree-lined street on the edge of campus. But step outside the room and the long cinder-block hallway reminds you that you're in the basement of a modern college residence hall. Fraternities and sororities at RIT, unlike those at many other colleges, are housed in Institute residence halls.

Greek house members at RIT work hard to maintain the independent and casual spirit typical of off-campus fraternities and sororities. Their efforts appear to be working. At RIT, like other colleges nationwide, Greek life is thriving. Within the past three years, RIT's Greek Council has added two fraternities and a sorority to its ranks.

The fraternities, Sigma Kappa Tau and Zeta Pi Mu, and the sorority, Delta Alpha Sigma, have more in common than their Greek letters. All were formed by hearing-impaired students of RIT.

All three fraternal groups are independent of national organizations. Some were started with seed money provided by NTID; all now earn their operating expenses through membership dues and fund-raising activities. Delta Alpha Sigma and Zeta Pi Mu were founded in the spring of 1981; Sigma Kappa Tau opened its doors a year later.

Since there was no vacant space on campus for these three new groups, existing fraternities and sororities donated space for them to hold their weekly meetings and social events.

All three groups are open to hearing students; the only stipulation is that "pledges" be proficient in the use of total communication.

Conversely, the so-called "hearing" fraternities and sororities are open to NTID students. But to date, not many deaf students have chosen to exercise that option.

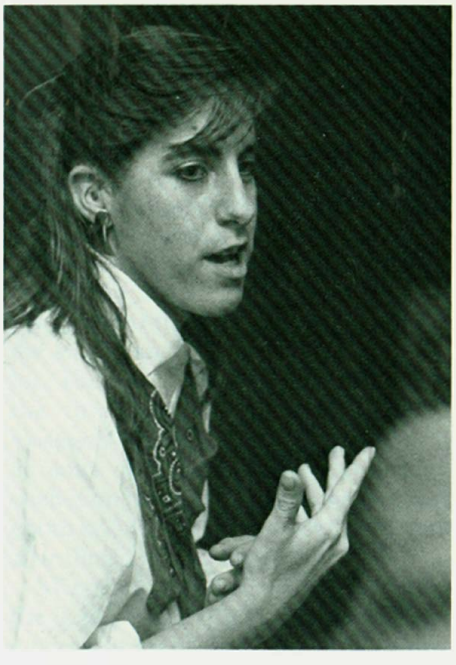
While it might seem that the goal of mainstreaming is lost when deaf students form their own fraternities and sororities, students involved emphatically insist that their goal in establishing these groups is to participate more actively with their hearing peers. The strategy seems to be working.

Some of the finest examples of mainstreaming on campus have been generated as a result of the new fraternities and sorority, says Mike D'Arcangelo, RIT's Greek Council coordinator. Deaf students sit on the Greek Council board with hearing students, working together in a leadership capacity, making joint decisions and gaining some mutual understanding in the bargain.

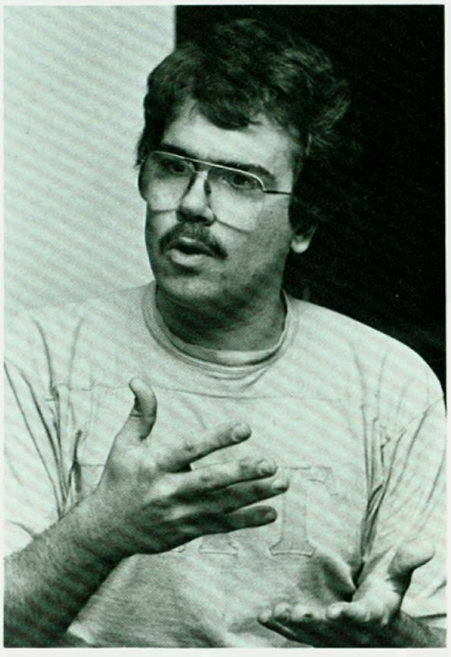
"If all deaf students were integrated into the other fraternities and sororities, they probably wouldn't have the opportunity to become officers," says Eleanor Rosenfield, chairperson of NTID's Department of Student Life. "This gives them a push into positions of authority, and allows others to see them in this role."

The evolution of the Greek system at RIT, she says, "is probably more realistic in terms of how deaf students are going to interact with society later on; we all seek some degree of comfort in the social arena."

At the same time, says D'Arcangelo, a lot of what he calls "exciting, informal mainstreaming" is taking place within the fraternity/sorority system.



Mary Fracassini



Ricky Johnston

One of the ways the brothers and sisters of these organizations have gotten to know hearing students is through community service activities.

Last October, a group of sorority sisters, including 10 women from Delta Alpha Sigma, helped coordinate a "county fair" for patients at Monroe Community Hospital. After an orientation conducted by the hospital staff, they plunged into the planning and execution of the fair, which proved to be a great success.

Thirty-four deaf and hearing students also participated in a Christmas party at Monroe Developmental Center, a home for mentally disabled persons.

Any imagined difference between "deaf" and "hearing" students quickly vanished as the group united in a common goal.

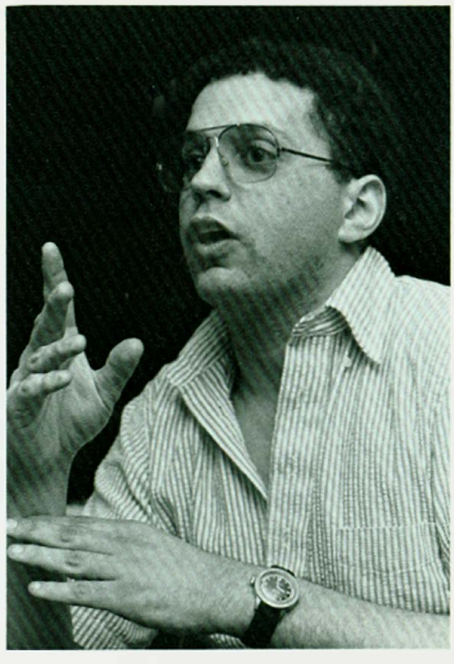
A center staff member referred to them as "the best group of volunteers we've ever had. The deaf students used mime, they smiled, and it was good for the patients to have to assert themselves a little to get what they wanted."

In December, the brothers of Sigma Kappa Tau brought 23 boys from the Rochester School for the Deaf (RSD) to RIT for lunch and a tour. All the planning and organizing, which required about six weeks of work, was accomplished by vice president and philanthropic chair Fred Hartman. Two or three times during that same month, members wrapped gifts for patients at Monroe Community Hospital.

Zeta Pi Mu's community service includes contributions to Hi-Line, a telephone service for deaf persons; WXXI-TV, the local PBS television station; and RSD. The group plans to expand its community service efforts this year.

Mary Fracassini, a third-year accounting student from Fairfield, Connecticut, leads Delta Alpha Sigma. She explains how belonging to a sorority helps deaf women meet hearing students: "We don't want to be isolated here. By working on community service projects we meet hearing people and feel we're getting out 'on the mainland.'"

"It was awkward for the hearing people at first," adds Hartman. "But we found we could loosen their tension. Now we're at the point where we're helping them relax with us."



Fred Hartman

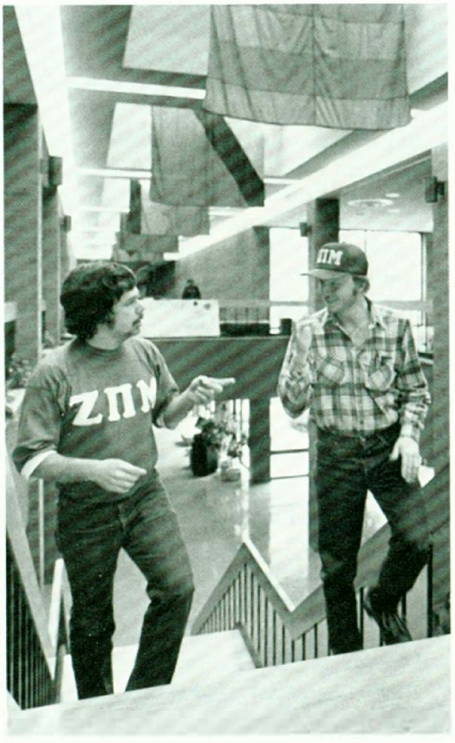
Not all of the reaction has been positive. Members of the deaf fraternities and sorority are occasionally criticized by their fellow students for choosing to socialize with hearing students.

Yet D'Arcangelo feels there is little regret on the part of the students who persist in joining and being active in the fraternities and sorority. "I think they're having a really rich experience," he says.

"The benefits of having all the different sororities and fraternities on campus are proving to outweigh the difficulties," adds Rosenfield. "Otherwise, RIT wouldn't have them."

Sigma Kappa Tau is headed by President Richard (Ricky) Johnston, a third-year mechanical engineering technology student from Uniontown, Ohio, and Hartman, a business administration major from New London, Connecticut. Fred Palchick, an accounting major from Miami, Florida, is the president of Zeta Pi Mu.

NTID personnel advise the three groups, helping them make financial decisions and sort through the necessary paperwork. Professional Interpreter Aaron Gorelick advises Sigma Kappa Tau, and Communication Specialists James Stangarone and Sam Holcomb are



Above, Greek students undertake an annual project for the benefit of RIT or the surrounding Rochester community. This year, they restored the carousel at Genesee Valley Park, located near the RIT campus. Left, Fred Palchick and former Zeta Pi Mu president Larry Mackey chat in NTID's "street" area.

advisors to Zeta Pi Mu. Delta Alpha Sigma's advisors are General Education Teaching Assistant and Student Worker for Campus Ministries Sally Taylor and Business Careers Counseling Supervisor Lee Twyman-Arthur.

Through partnership in the Greek Council, off-campus activities, and a common love of intramural sports and other campus programs, these fraternity and sorority members are stepping further into the mainstream. The benefits to them and to the Institute will last far beyond their years at RIT.

Of Bagels, Books & Blessings

By Ann Kanter

Barry Lenick came to meet other Jewish students, while Charles Roth was more specific: "I want to meet a nice, beautiful girl!" Teddy Burkhart wanted to learn more about Judaism. His friend, Michele Jaques, accompanied him because she's "fascinated by the Jewish culture."

It was a hot August day when the four NTID freshmen piled into a van headed for "A Jewish Tour of Rochester." Driving and conducting the tour was Rabbi Alan Morse, associate director of the Rochester Area Hillel Foundation and director of Hillel at RIT and the State University of New York College at Brockport.

Lynn Klafter, a fourth-year social work student at RIT and program coordinator of the Jewish Cultural Enrichment Program (JCEP) at NTID, skillfully interpreted the conversation that flew back and forth among the van's occupants. It was a heterogeneous group in several ways. Lenick and Roth are from Framingham, Massachusetts, and Cleveland, Ohio, respectively. Both are oral students who attended mainstreamed schools and didn't know sign language before coming to NTID.

Burkhart and Jaques come from St. Louis, Missouri, and Denver, Colorado, respectively. Their fingers fly through the air, signing their thoughts in the language they've practiced since their senior year of high school.

The students congratulated Rabbi Morse on a neat parking job as he maneuvered the van into a tight spot in the suburban Todd Mart Plaza parking lot. Then the hungry group headed for the first stop on their tour—Fox's Kosher Delicatessen. Over bagels, chicken soup with matzoh balls, and sandwiches on Jewish rye bread, the students got to know each other and talked about why they'd joined the group.

The group was formed in response to the JCEP, which began in August under a two-year grant from the Jewish Community Foundation of Rochester. It is administered by the Rochester Area Hillel Foundation, a constituent agency of the Jewish Community Federation of

Michele Jaques admires an antique silver Sephardic Torah cover in the Temple B'rith Kodesh museum. Enclosing the display are decorated wooden doors that housed the Holy Ark in the Temple's former location on Gibbs Street.

Rochester, Inc. Under Klafter's direction, the JCEP hopes to provide the 120 Jewish students at NTID with the religious training and social and cultural background enjoyed by their hearing contemporaries.

Rabbi Morse explains: "Judaism is more than just a religion. The Jewish people has a culture and a language and art forms that are rooted in the soil of Israel—if not in the physical sense, at least spiritually."

In the past, most deaf students lacked knowledge of these roots. Steve Schultz, an NTID alumnus and staff member serving on the JCEP's advisory committee, says, "When I was a student at NTID, few of my classmates had much religious education. Deaf students then had very little awareness of what it meant to be Jewish."

The JCEP plans to change that. Through weekend retreats, instruction in Jewish practices, seminars on Jewish issues, and Sabbath and holiday services, it hopes to make deaf Jewish students aware of their rich heritage. Recent events include a bagel brunch, pizza party, and Shabbaton (an all-day mini-retreat held on the Sabbath). There also have been deli dinners and other integrated social events.

All of these activities are led by Klafter, who explains that the JCEP's grant, designed to meet the needs of deaf students, also encourages interaction between those students and their hearing peers at RIT.

An integrated Sabbath service for hearing and hearing-impaired students was held during Parents' Weekend. For the present, services are being held in Hillel House in the basement of Colby D, a student residence hall. High Holiday services were held in the more capacious Student Union.

"By next year we hope to have more appropriate surroundings for our services," says Rabbi Morse, "because at that time, the Interfaith Chapel should be completed." (Ground was broken for construction of the chapel on June 15, 1983, and the dedication is targeted for October 1984.)

Anticipating lunch at Fox's Delicatessen: from left, Lynn Klafter, Teddy Burkhart, Michele Jaques, Barry Lenick, Charles Roth, and Rabbi Morse.

Rabbi Morse hopes that the JCEP program, which he thinks is the first of its kind in the country, may serve as a model for other colleges with deaf Jewish populations. One of the program's possible objectives is to set up a course of studies leading to bar mitzvah, for students who have not yet participated in this traditional ceremony. Rabbi Morse says, "Of the 60 NTID students I know, fewer than 10 have been bar mitzvah." Other goals are to create previously nonexistent links to the general Jewish community, along with an awareness of the needs of hearing-impaired persons; to identify and create job opportunities for Jewish deaf persons in the community; and to produce a media presentation to be used in other universities that have deaf students.

Meanwhile, the four freshmen who had lunched together at Fox's Delicatessen continued their tour by visiting Temples Beth El and B'rith Kodesh and the Jewish Community Center (JCC).

Jaques, Lenick, and Burkhart were intrigued by antiquities and Israeli objects on display in the small room that is set aside as a museum at Temple B'rith Kodesh, while the highlight of the tour for Roth was the varied selection of athletic facilities at the JCC. These facilities also made a hit with Lenick, although what he rated more important still was "meeting other Jewish students." Burkhart concurred: "I really had a wonderful time. What I enjoyed most was the fellowship and meeting some new people."

Jaques' favorite part of the tour was "visiting Beth El and B'rith Kodesh. I hope we'll have another day trip and get to see all the other Rochester temples."

Toto: A Dog for All Reasons

By Ann Kanter

Deaf people have a choice—they can spend from $200 to $800 for a home lighting alert system or find some agency willing to sponsor a hearing ear dog for them. That can cost about $3,000. But cost is not the critical factor, since deaf people do not finance their own dogs. The issue is one of choice between modern hi-tech equipment and "man's best friend."

That choice is not always clearcut. That's the message that Adele Polk and representatives of other dog training centers have for deaf people.

Speaking last September at a meeting of the Monroe County Association of the Hearing Impaired, Polk, a trainer for Red Acre Farm in Stow, Massachusetts, explained that hearing ear dogs are not for all deaf people. "Some people don't like animals, and others are allergic to dogs. Obviously, a dog is not for them. But for many deaf people, a hearing ear dog can help protect their safety and also be a loving friend."

NTID students Lisa and Jay Malmeth tried the lighting system. "It was a mess," says Jay, "with wires all over. We were worried that our little girl [Sarah, 2] might play with the wires or trip on them. It wasn't safe. Besides, if there is a power failure, the lights won't work, but a dog will!"

That was why the Malmeths, as married students who live in an apartment without the benefit of the special warning devices that are built into the dorms, decided to get a hearing ear dog. (Hearing ear dogs are neither necessary nor permitted in the dorms.) They, with Jane Bolduc, coordinator for NTID's Training and Media Services Department's Internship Program, attended Polk's presentation.

Jay and Lisa Malmeth at home with daughter Sarah and Toto.

Bolduc adds illustrations from her own experience. "When I'm outside in the yard, Chance [her hearing ear dog] tells me if the phone rings in the house. No light could do that! I still have the lighting system as an extra precaution —but Chance makes me feel *secure*. If people approach the house, she lets me know.

"Before I had her, my mother used to call me on Sunday mornings and wonder why I didn't answer the phone. I have a light in my kitchen [where the phone is], but it was so sunny, there were times I didn't see it. Now Chance always tells me when the phone rings!"

Polk demonstrated how this works. Using a telephone and a tape recording of the phone's ring, she showed how her dog, Daisy, runs to her at the sound, jumping up and pawing on her skirt until she follows Daisy to the phone. Then, using a large doll and a recording of a baby's cry, she showed how Daisy could alert a deaf mother to her infant's needs.

Adele Polk sets alarm clock and feigns sleep while her dog Daisy waits.

The alarm goes off and Daisy springs into action.

Daisy lands in a "wake-up" posture upon her "sleeping" mistress.

According to Polk, Red Acre Farm trains such dogs to respond to four or five different sounds that the client selects. In addition to alerting their masters to a ringing phone and a crying baby, dogs are trained to respond to such sounds as an alarm clock; a knock, buzz, or doorbell ring; a whistling tea kettle; an oven timer; and even the sound of an object their master has dropped.

One sound to which all Red Acre dogs are trained to respond is a smoke alarm. Their reaction to it is different than to any other sound. When the smoke alarm goes off, they get their master's attention and then drop to the floor. They don't lead their master to the source of the sound as they would with a phone or doorbell ring, because the smoke alarm is apt to be located near the fire.

Hearing ear dogs are relatively new, compared to seeing eye guide dogs for the blind. In 1976, the American Humane Association (AHA) in Denver, Colorado, began training dogs to hear for deaf people. To help meet the growing demand for these dogs, AHA authorities set up additional hearing ear dog training centers in San Francisco, Milwaukee, and at the Red Acre Farm in Massachusetts.

Adele Polk and Daisy take time out for a hug.

There are other training centers in different parts of the country, such as International Hearing Dog, Inc. in Colorado, which supplied Bolduc with Chance. Bolduc was the first person in Rochester to receive a hearing ear dog. The second and third Rochesterians to get such dogs also got them from the Colorado source. The Malmeths selected Red Acre Farm, a newer facility which services New York and New England, because its location made it easier for them to visit.

Unlike seeing eye dogs, which are frequently bred for their work, hearing ear dogs do not come from any particular breed. On the contrary, they are usually dogs of uncertain lineage, which have been rescued from extinction at an animal shelter. Polk says that dogs selected by Red Acre Farm are usually about 1 year old. Before being chosen for training as hearing ear dogs, they must pass tests for intelligence, curiosity, friendliness to people, and responsiveness to sounds. Ninety percent of all dogs fail these tests. The ones that pass are spayed or neutered, given shots, and quarantined for two weeks to lessen the chance of infecting other dogs at the center.

The staff at Red Acre Farm includes teachers of the deaf, interpreters, and a master trainer with 12 years experience breeding and training dogs for professional shows. Dogs are trained to respond to voice and standard dog-training hand signals. (Manual signs that deaf people use to communicate with each other are too small for teaching to dogs, Polk says.)

She stresses the importance of the dog's being under its master's control at all times, especially in public. Training includes learning to obey commands such as "heel, walk, sit, stay, lie down, and come" and responses to the smoke alarm and other sounds. This training takes from four to six months.

"Since our dogs will be working in people's houses or apartments, we train them in a home setting at Red Acre. Still, there will be a period of adjustment to new surroundings," Polk says. "We have the client visit our farm so the dog doesn't have to get used to new owners and a new home at the same time."

The evening of Polk's demonstration fell within the week during which "Toto" was being introduced into the Malmeth's home and to their daughter, Sarah. It was basically for this purpose that Polk had made the trip from Massachusetts to Rochester.

She spent four to six hours each day training Toto in the Malmeth's apartment. In the beginning, Toto only responded to sounds during his training sessions. But as he lived with the Malmeths, and Lisa and Jay reinforced the training begun at Red Acre Farm, Toto learned to alert them to the sound of their smoke alarm, phone, doorbell, and alarm clock.

During the early weeks, a local representative of Red Acre Farm visited them to see that things were going smoothly and to iron out any problems. After three months, when Toto was responding to sounds spontaneously, he became a certified hearing ear dog.

To prove this, the Malmeths received a special orange blaze leash and an owner's card. This entitles Toto to accompany them without extra charge on all modes of public transportation such as buses, trains, and planes; to all public places such as hotels, restaurants, and shopping centers; to places of entertainment and amusement; to resorts; and to other areas to which the general public is invited. New York is one of more than 40 states where hearing ear dogs are allowed access to public places.*

Jane Bolduc enjoys a chin lick from her dog, Chance.

Polk says that Red Acre Farm accepts applications for hearing ear dogs from anyone "with a severe to profound hearing loss who is over the age of 21 and living independently."

She adds, "Although it costs about $3,500 to train these dogs, there is no charge to the recipient. Red Acre Farm is a non-profit organization receiving financial support from individuals, foundations, service clubs, and corporations. MONY, [The Mutual Life Insurance Company of New York] has sponsored Toto's training and placement with the Malmeths."

"Before I worried about not hearing the smoke alarm, the doorbell, and the phone. Now Toto will alert me," says Lisa Malmeth. "He'll make me feel secure. When you think how many dogs are abandoned, I'm glad someone finally realized the valuable service they could perform for deaf people. For us, a dog truly is 'our best friend!'"

The others are Alabama, Arizona, Arkansas, California, Colorado, Connecticut, Florida, Georgia, Illinois, Indiana, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, and Wyoming.

Taking a Byte Out of the Future

By Lynne Williams

It's a field where the computer requisitioned six months ago may be obsolete by the time it's delivered. It's a field where half of what is known about computers today will be out of date in five years. And it's for this volatile field that NTID faculty members must educate technically competent students.

They have their work cut out for them.

"Two years ago, the National Center on Employment of the Deaf indicated that students with an associate degree in programming were becoming increasingly difficult to place," says Dr. Charles Layne, assistant dean and director of the Division of Business Careers. "It also was becoming difficult to find co-op jobs for them. This was a grave concern because a cooperative job placement is a requirement of the program."

This indication that the data processing curriculum was not meeting the needs of students and, therefore, those of business and industry, prompted a review of the program. Department planners studied a report by the Association of Computer Machinery (ACM), co-authored by nine members of the association, including data processing faculty members Richard Walton and John Sweeney. They discovered some interesting trends within the computer industry.

The report stated that people in computer operations were being seen as more professional and more mobile, and that opportunities, salaries, and the number of jobs in operations were increasing.

"We learned that computer operations, as compared to systems and programming, was becoming more of a profession and that, until recently, you didn't need an associate degree in order to get into operations," Dr. Layne says. "Most operations jobs involved on-the-job training primarily.

"We interviewed employers all over the United States who told us they wouldn't hire anyone with an associate degree in programming when they could easily hire a baccalaureate candidate," Dr. Layne continues. "A graduate with a bachelor's degree has more training, different kinds of training, and, in general, would be the more suitable candidate."

As a result, the Division of Business Careers has proposed a change in the data processing curricula to emphasize computer operations. New students enrolled in the fall of 1984 will be the first to be placed in the new program; students already enrolled in data processing will complete their original programs.

This is not the first time the program has been changed in NTID's 15-year history.

"In the early years, we had an advisory committee," Dr. Layne explains. "One member complained about the quality of our product and somebody said, 'Why don't you come here and work on it?' And he said, 'Maybe I'll do that.'"

The member was Robert Berl, and that's just what he did.

"My involvement with NTID started in 1974, when I hired a data processing graduate," says Berl, now chairperson of Data Processing. "A year later, I received a follow-up questionnaire. I critiqued it rather heavily in relation to the graduate's overall skills, which I thought were too low. I was very honest."

His frankness earned him an invitation to join the advisory committee set up to review the department's program. "They asked us what we thought of the current curriculum, and each member had an evasive answer."

Berl, however, did not mince words: "I think it's so bad that if you don't change it, don't ever ask me to hire another one of your graduates."

Then, about four years ago, the Association of Computer Machinery came up with recommendations for a two-year curriculum including guidelines for an associate level degree in operations. "We decided that if we could educate our students to meet those guidelines, they would be able to move into industry, be productive quickly, and have a minimal training period," Berl says. "Computers have become so sophisticated that they have become a career path for many people. The associate level degree in operations fills that need. If we can provide this level of education, then we are servicing the exiting student well. Of course," he adds, "any change in curriculum is a gamble."

If it is a gamble, the Data Processing Department is hedging its bets. An important hedge is a closer tie with RIT's School of Computer Science, which also has changed the curriculum for its bachelor of science degree.

"Students who wish to transfer to the School of Computer Science will have a sequence of courses to help them make the transition to a five-year program," Dr. Layne explains. "RIT has a good computer science program with many options. We hope to identify, as early as possible, those students who have the skills and who plan to transfer. This will probably occur sometime after their first year.

"This means that students will go directly into RIT's third quarter and will even be allowed to take RIT's final exam," Berl explains. "I think it's a big step."

As a result, NTID's operations courses, along with required accounting and business courses, will be accepted as a 20-credit minor. RIT's new bachelor of science degree requires a minor concentration, and will accept that minor as a business operations concentration.

Close physical proximity fosters cooperation between the two colleges. The new Hugh Carey Building, which houses the Business Careers Program, is adjacent to the Ross Memorial Building, home of the School of Computer Science.

Students also may choose the associate track, leading directly to an operations position in industry.

Walton is pleased by the changes. "My background basically is in computer operations," he says, "and this change means that some of the operations courses we teach will be beefed up. For instance, we've been teaching one type of operating system. We probably need to include at least three for the new curriculum. There are new control commands, new informational messages, and new response types that students must learn. They must also learn that more than one job can be run on the computer at a time. It's possible to run three, four, six, even as many as 35 jobs at one time," Walton explains.

"This brings the student into the heavyweight world of data processing. General Motors, IBM, and Eastman Kodak use their computers at that level. This means more responsibility for the computer operator," Walton stresses. "If you blow one program here, you must worry about how it affects three or four jobs down the line."

Within the new program, students will learn skills such as generating and setting up a system. "In this area," Walton suggests, "the computer operators are at least partially responsible for customizing and tailoring the computer operating system to the specified needs of a particular business.

Facing page, first-year students work in NTID's microcomputer lab. Left, Richard Walton's Multi-Programming and Spooling Console Operations class gains computer operations experience: standing from left, Patty Bastensen, Lisa Kay, Jennifer Waters, and Diane Lux; seated, Richard Walton and Bruce Denhart. Above, Patty Bastensen loads a disk pack into the IBM 4331 Mainframe Computer.

Francine Morinello completes her data processing homework in the microcomputer lab.

"We have never done an overview of business systems and how they fit together," Walton adds. "We have looked at computer operations from the viewpoint of running one job. Here's a job, you run it, and you're finished. However, most business systems require taking information, editing it, changing it, updating it, running reports, and doing calculations. All of these things depend upon each other. You can't issue somebody's paycheck until you get their timecard, so it has to go through multiple levels."

The Data Processing Department recently acquired a state-of-the-art computer, IBM's 370/4331. "Our other computer was obsolete by seven or eight years," Walton says. "The new one is much the same as those being used in business. It is slightly smaller, but we don't need the power that most businesses need. We can show students examples on a smaller scale that are directly applicable in larger scale processing.

"Students are acquiring some powerful tools that we had not been able to teach them within the limited four-course type of computer operations," Walton adds. "It has now been expanded to about 12 courses."

The program also will give the department a chance to expand its offerings. "We've never taught a course on how to set up a computer room—how to place the machinery, what the appropriate computer is, and the architecture and facilities," Walton explains. "We didn't teach it in operations and there was no need to teach it in programming. In programming, your working area is your desk top. In operations, your working area is that computer room."

The department also has added an introductory course for students with weaker skills that gives them a chance to work on math and reading without having to deal with heavyweight technical courses at the same time.

"We're giving them an overview—a feeling for what their courses are going to be like, so they will have a better foundation when they move to problem-solving work with computers," Walton adds.

The department still expects to have some students who will need programming courses. "Occasionally, we get a student who comes from a 'Mom and Pop' outfit and expects to learn about computers in order to go back and work for that small business," Dr. Layne says. "If those students want an associate degree in data processing and need those programming courses, we will provide elective support for them."

No one expects the changes to stop with this new curriculum. "Any curriculum, no matter how much time and effort you put into it, will change," Berl says. "You think you're doing it in a reasonably good manner. You have contacts with placement and you gather the research and statistics. You give it your best shot, but you still know it will need more work." He explains that the details can't be worked out until the faculty actually go into the classroom and try out the new curriculum.

"So we will continue to work on it," Berl stresses, "and by the time we finish in about three years, there could be enough changes in the data processing field that we may have to go through the whole process again.

"We set up the microcomputer room only four years ago," he continues. "The original curriculum never used microcomputers. Now they are being used in business occupations to teach accounting, do marketing simulations, help in the orientation to business class, and teach payroll management. All this has changed in the last three years. We're in a constant state of development, and we don't look at this curriculum as an end-all or cure-all. It is a shift of emphasis that will allow us to better service the students. Utopia, it's not." However, it is a step in the right direction.

NTID NEWSLINE

Mondale Speaks at RIT City Center

Former vice president and presidential candidate Walter Mondale was in Rochester in September and spoke at a Presidential Forum at RIT's City Center. Dr. William Castle, director of NTID and RIT's vice president for Government Relations, was RIT's official host and accompanied Mondale on a tour of the School of Applied Industrial Studies. Nearly 1,000 people, from school children to senior citizens, listened to Mondale, who remarked that, "One of the nation's most important assets is its educational resources such as this institute of technology."

Student Congress Lends a Hand

Members of NTID's Student Congress created a six-foot tissue sculpture of the "I Love You" sign in honor of NTID's 15th Anniversary and "Deaf Awareness Week." The project, coordinated by student Mark Morales, was the Congress' contribution to the dual fall festivities . Students who worked on the project include, from left, Morales, Ray Bateh, Mike Peterson, and Ron Popowski. Not pictured are Brenda Schertz, Susan Burns, and Rebecca Novita.

NOD Board Selects Dr. William Castle

Dr. William Castle, director of NTID, has been asked to serve on the Board of Directors of the National Organization on Disability, of which former president Gerald Ford is honorary chairman.

In November, Dr. Castle was invited by President Reagan to come to the White House for the proclamation ceremonies for the Decade of Disabled Persons.

The organization, which promotes full participation of America's 35 million citizens with physical or mental disabilities, supports and involves citizens and groups in working with partnerships at the local, state, and national levels. Dr. Castle joins a distinguished board that includes representatives from business, industry, government, and the medical profession.

NTID NEWSLINE

Kononenko Receives Alumnus Award

George Kononenko, a 1975 graduate of RIT through NTID, received the 1983 Distinguished Alumnus Award during Homecoming festivities in October. Kononenko, who received a bachelor of engineering technology degree in mechanical engineering technology, has been employed at Hewlett-Packard Company in Rockaway, New Jersey, since his graduation. As a project leader, Kononenko is responsible for developing electronic instruments and new projects. In his position, he directs five hearing workers.

Reflecting on his education, Kononenko says, "NTID prepared me well by exposing me to the world of high technology and helped me with my communication and interpersonal skills."

Dean Peter Pere, left, and George Kononenko.

Gallery Displays Student Photograms

A new "Discovery Room" at Rochester's internationally known George Eastman House displays the works of two NTID students. Jean Quello and Chuck Tyler's "photograms" were donated to the room by Robert Iannazzi, an NTID media specialist who advised the Eastman House on the project.

Iannazzi describes the room as a "scientific area where youngsters can learn about things like photographic processes and how to develop visual perception." The Discovery Room opened to the public in October.

Meredith Klonick Wins International Award

Meredith Klonick, a 1976 recipient of a certificate from NTID's Applied Photography program, won a bronze medal at the Kodak International Salon of Photography in Stuttgart, Germany, last February. More than 6,000 photographs were submitted by entrants from 31 countries. Klonick's prize-winning picture of a barn in the early morning mist was taken near the RIT campus.

Klonick is a lab assistant at Eastman Kodak Company in Rochester.

Members of NTID's traveling theatre company, Sunshine Too, confront a magical dragon in an elementary school presentation, The Land of Same. *Since its inception in 1980, Sunshine Too has presented cultural and deaf awareness programs to more than a quarter of a million people in 48 states and Canada. In 1983, the group toured 25 states and reached more than 70,000 people through performances and workshops. Members of the 1983-84 troupe are Dennis Webster, Kathy Holzwarth, Camille Jeter, Aaron Brace, Melanie Metzger, and Vicki Summers.*

Rochester Institute of Technology

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A Final Word...

RIT's worth will be based on the reputation of its graduates. We are especially proud to present these stories which show how some of our students exemplify a "can do" philosophy.

Dr. M. Richard Rose
President
Rochester Institute of Technology