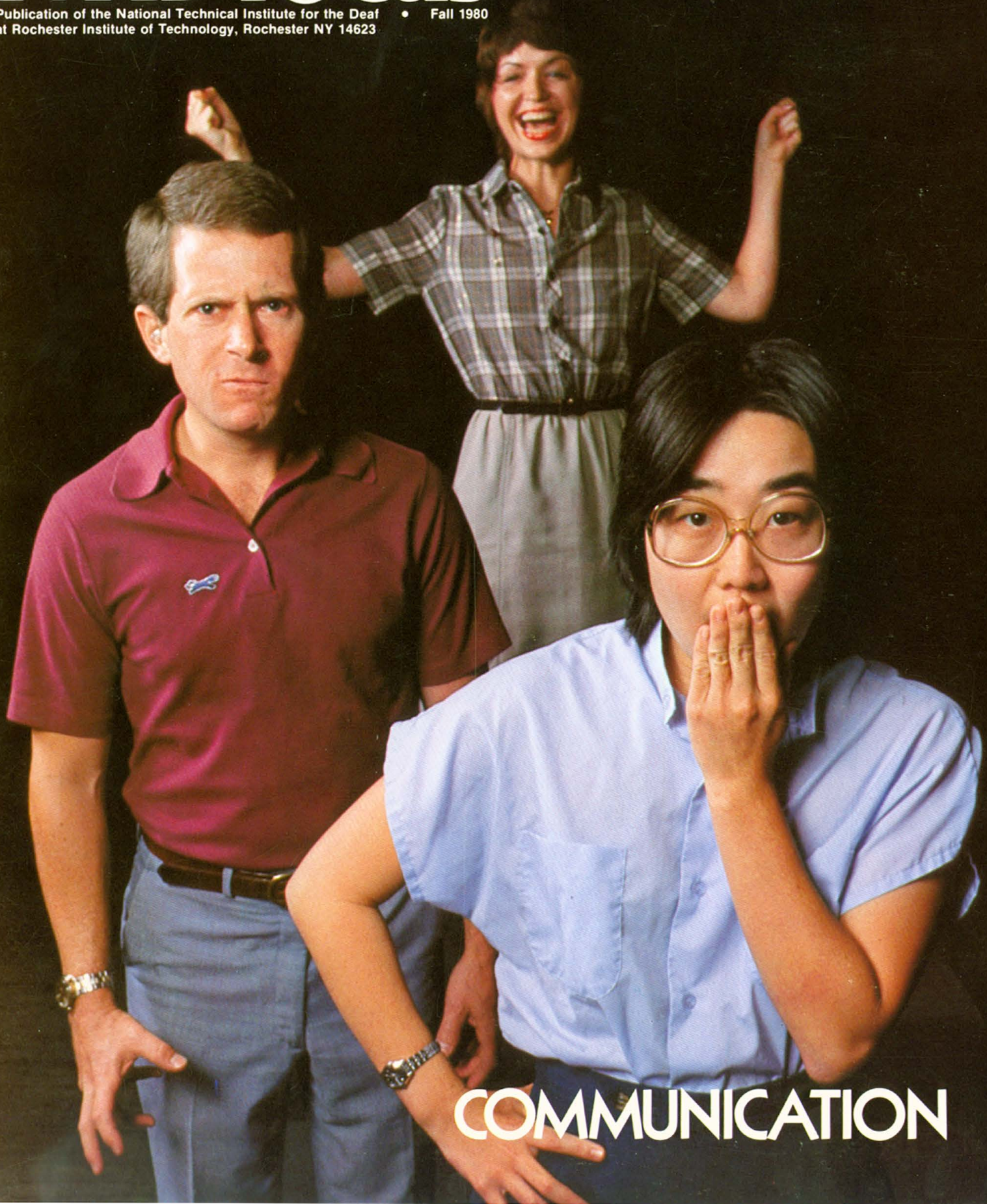


NTID focus

Publication of the National Technical Institute for the Deaf • Fall 1980
at Rochester Institute of Technology, Rochester NY 14623



COMMUNICATION



William E. Castle

An Overview

In order to communicate, everybody must be able 1) to convey ideas in some expressive form so that other people can understand those ideas and 2) to receive ideas as they are conveyed by someone else. There may have been a time when deaf people could not communicate at all, because they were either not understood by others or they could not understand others. Indeed, there were times when many thought that deaf people could not speak and they were described as deaf and dumb or deaf-mute, generally incorrectly. As a matter of fact deaf people can communicate in many ways, and they do.

Many deaf persons express themselves through a combination of speech, sign language, and fingerspelling and for their receptive communication prefer to have others express themselves in the same way. Some deaf persons express themselves through a combination of speech and fingerspelling only and prefer it when others do the same. Some deaf persons prefer to express themselves through speech and natural gestures only and want others to do the same because their receptive communication is based on speechreading and/or use of residual hearing. Still others express themselves by using only American sign language and are most receptive when others do the same. Nearly all deaf persons can also express themselves through writing and have an ability to read; and it is an understood fact that these two abilities are highly variable among deaf persons as they are among non-deaf persons.

In many circumstances, of course, it is not possible for deaf persons to communicate directly for themselves. In such circumstances, the services of an interpreter are required. Once again, there are preferences among the deaf regarding interpreters—some prefer simultaneous interpreters who use simulated speech, sign language, and fingerspelling; others prefer Rochester method interpreters who use simulated speech and fingerspelling only; others prefer oral interpreters who use only simulated speech and natural gesture; and some need interpreters who use only American sign language with a heavy overlay of body movement and facial expression.

In recent years other developments have occurred that facilitate communication with deaf persons in other ways. Legitimate theater has become more accessible to deaf persons because of creative or artistic interpreting and because of specific theater for deaf persons such as the National Theater of the Deaf and the Experimental Education Theater of NTID at RIT. Museums and galleries have been made more accessible to deaf persons through the provision of interpreters. Motion pictures and television are vastly more accessible to deaf persons because of a national program for captioning films and because of the newly established National Captioning Institute. Telephone communication also is vastly more accessible to deaf persons because one among them, Dr. Robert Weitbrecht, invented an acoustic coupler that allows the use of teletypewriters over regular telephone lines; and because NTID at RIT initiated an instructional program to teach deaf persons special techniques for using the telephone.

Those of us from NTID at RIT are proud to be an important part of removing barriers that prevent optimal communication with and among deaf persons by supporting all such things as are described above or in the remainder of this publication.

William E. Castle

Dr. William E. Castle
Vice President of Rochester Institute of Technology
Director of National Technical Institute for the Deaf

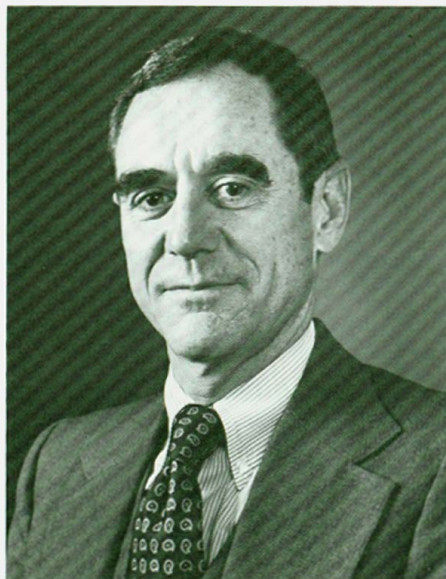
National Technical Institute for the Deaf at Rochester Institute of Technology

The National Technical Institute for the Deaf (NTID) at Rochester Institute of Technology (RIT) represents the first effort to educate large numbers of deaf students within a college campus planned primarily for hearing students. Unique in the world, NTID is a vital part of RIT's 1,300-acre campus in suburban Rochester, N.Y.

"We want RIT students to be well-rounded individuals," says RIT President M. Richard Rose. "Having a unique institution like NTID on campus really enriches an RIT education. We all become more complete persons by having the deaf and hearing students working together, side by side. We develop an appreciation for a whole different set of life expectations and begin to see ourselves and our environment in new ways. In our more reflective moments, we have the opportunity to think of the career potential that deaf students had before NTID and the career potential that they have now. We at RIT get a sense of satisfaction and fulfillment out of knowing we have a part in that change."

NTID at RIT provides educational opportunities for qualified students from every state in the nation and, through educational outreach, publications and related services, serves deaf persons throughout the world. In order to do so, curriculum and classes have been designed and adapted to meet the needs of deaf persons.

Established by an Act of Congress and funded through the U.S. Department of Education, NTID conducts research to understand better the role of deafness in education and employment and to develop innovative teaching techniques.

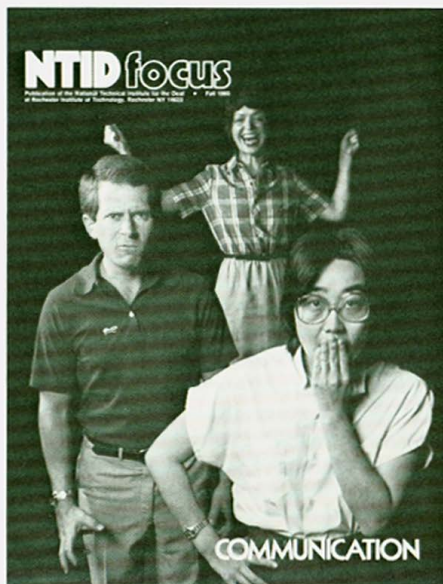


RIT President M. Richard Rose

NTID focus

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Fall 1980



At NTID at RIT, body language is but one form of expression used to communicate as demonstrated by faculty members Carol Akamatsu, Stephen Schultz and Julie Cammeron. Photo by RIT Communication photographer Rod Reilly.

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Produced by
the NTID Public Information Office (PIO)
Michael R. Franco
Director

Editor
Susan J. Watson
Senior Publications Editor, PIO

Art Director
John Massey, RIT Communications

Designer
Lynda Whalen

Writers
Stephen Dingman
Howard Mann
Cynthia McGill
William Repp
Lynne Williams

Photographers
A. Sue Weister
Rod Reilly

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COMMUNICATION

Yes, Something Can Be Done

The Communication Program of NTID at RIT offers deaf students nearly 100 courses. "I doubt that many students have been in an environment where there are so many kinds of communication services offered under one roof," says Dr. Kathleen Crandall, associate dean and director of the Communication Program.

"It's not unusual for deaf people to go to one place for one service and to another for a different service" she adds. "NTID at RIT represents the first school to offer a comprehensive communication program in one place."

All of these communication services are directed at one major goal: to

maximize each student's communication abilities. One of NTID's acceptance requirements is that students must have at least a 70 decibel hearing loss (ISO) in the better ear.

Dr. Crandall points out, "If you look at the communication skills of our students, you will see a great variety of different abilities in listening, speechreading, speaking, reading, writing, and in manual/simultaneous skills. You can't just put these students into the same classes. Each has very different needs. Students select communication courses according to their communication goals and characteristics.

To reflect students' communication

goals, the four instructional departments of NTID's Communication Program are divided by students' English language levels. Each of the four departments has integrated professionals, speech and language pathologists, audiologists, English specialists, and manual/simultaneous communication specialists. Depending on the level, a department may also have a reading or writing specialist.

Ms. Jackie Gauger, coordinator of assessment says, "We find out what students' basic skills are and place them in communication courses that build on those skills or help students learn new skills. We're finding that most students want to use their hear-

ing to its potential and different students have different degrees of potential."

Deaf students' hearing sensitivity and the way they use their hearing or their ability to discriminate speech is tested during NTID's Summer Vestibule Program or their first two quarters on campus.

"It's important to look at what students' individual goals are," Dr. Crandall emphasizes. "If we had a student who was a staunch supporter of one type of communication, we would not coerce that student into changing his or her own philosophy or attitude toward communication." The majority of deaf students at RIT have



Donna Burfield (right), an RIT manual/simultaneous communication specialist for NTID, practices with Mary Elizabeth Faulkner, a second-year deaf student in office practice and procedures.



Dr. John Albertini, chairperson of communication instruction II, reviews materials with Dr. Kathleen Crandall, associate dean of Communication Programs, in the English lab of NTID at RIT.



Sidney Barefoot, chairperson of communication instruction III, assists student with speech in the self-instruction lab.



Speech pathologist John Conklin helps students with word pronunciation in the Speech Lab.

some speaking, listening and sign language skills.

Dr. Frank Caccamise, communication research associate, says that students are adults and we treat them as adults. We advise them on what communication methods might be most beneficial to them, but the final choice is theirs.

"We would like our students to be good leaders in both the deaf and hearing community," he adds. "Those students who are highly skilled in spoken or both spoken and signed communication will have the greatest opportunity to serve in leadership roles—in the deaf community, in the hearing community, and as links between the two."

The communication specialists' first concern is that the student has some way to receive information in the classroom. It could be oral/aural, or manual/simultaneous communication. Once one method of receiving information is working, the potential for developing other communication skills is developed.

While almost all deaf students want to improve their communication skills, sometimes negative experiences dampen the will to try one more time.

Because of these experiences, much of the advisory process at NTID deals with helping students overcome those feelings.

Dr. Crandall relates, "Improvement has often not been immediately observable so people get frustrated. It's as if you were learning how to play the violin and after 13 years of lessons, you still were not very good at it. I'd doubt that you still would want to learn the violin. But maybe deep down inside, you really want to be a concert violinist. Yet because of the frustrating experience you've had, you don't want to open the door to more frustration. This is the kind of dilemma that some of our students are in."

Many students who have had negative experiences with learning speech prefer to learn speech at NTID through individual speech therapy. Once students reach a point where they feel good about what they can do, they're ready to open up in front of a small, supportive group.

Dr. Crandall sees the goal of maximizing each students' communication skills as a continual challenge, especially since NTID's instructional communication goals challenge the pre-'70s research on learning communication skills.

"When I started at NTID in 1974," Dr. Crandall remembers, "the great body of research had shown that there was relatively little you could do to improve skill development after the early teen years. One of the more promising things we've found is that we can take people at this age level—and if we provide them with the correct services and individualized programs—we can demonstrate a gain in their communication skills."

"We can take students that are 19 or 20 years old and, given the right services, their speaking skills will improve, their listening/speechreading skills will improve, they can learn to use hearing aids where they haven't before and they can improve their reading and writing skills. Now NTID at RIT is disseminating a new body of research."

According to Dr. Crandall, "There's lots of work still to be done to increase the level of learning above and beyond what we have done here, but, we now have the door open and can say, 'Yes, something can be done.'"

Stephen Dingman



Sign Language

America's Third Foreign Language?

The demand for sign language increases every day with the desire and opportunity to communicate with the deaf. *Newsweek* reported in January 1980 that as many as 2 million people know some form of sign language.

Sign language is only one way to communicate with the deaf, however, and is one of many methods used at NTID at RIT. Walk down the halls of the several colleges of RIT and observe people communicating with their voices as well as with their hands.

"In 1974, the American Speech-Language and Hearing Association reported sign language as being the third most frequently used non-English language in the United States," says Larry Arthur, chairman of the communication instruction department IV at NTID. "Some people categorize sign language as a foreign language, with Spanish first and Italian as the second foreign language most frequently used."

While NTID faculty are required to learn sign language, students have the option of not taking sign language classes. However, many deaf students at NTID who do not know sign language take courses to learn it because they desire to know how to communicate with those deaf persons who depend on it. More than 450 faculty and staff and 150 students participate in sign language classes during the year.



"The teaching of sign language is an emerging, contemporary profession," says Larry Arthur, chairman of NTID's Communication Instruction Department IV.

"I had a mental block against using sign language because I'm basically an oral deaf person," admits Jim Casey, a junior majoring in photography. "When I came to NTID, my sign language instructor, Donna Burfield said, 'It's great that you can understand other people, but how are you going to communicate with someone who doesn't understand you?'"

Since then, Jim has not only taken the two student sign language classes but also has enrolled in a class offered to faculty and staff. Classes available to faculty and staff include three levels of basic communication, basic review, two levels of intermediate communication, conversational and conceptual signing. Students can enroll in basic or intermediate simultaneous communication classes as well as the faculty/staff classes.

"We don't force sign language on the deaf students," says Donna Burfield, manual/simultaneous communication specialist. "They discover that it's a useful communication tool, especially when meeting new deaf friends."

"The growth in the acceptance and use of sign language has been spurred by the media," Arthur points out. "For example, the National Theatre of the Deaf has performed on *Sesame Street* for several years and a few actors used sign language in the movie, *Towering Inferno*."



"It's great working at a college that recognizes sign language teaching as a profession," says Paul Menkis (center) with students Mona Courtney and Kevin Taylor.

"Along with sign language, it's important for students to know technical signs for their subject areas," Dr. Frank Caccamise, research associate, adds.

Caccamise, William Newell and Marilyn Mitchell-Caccamise are co-directors of an NTID-sponsored, nationally based technical signs project which involves collecting, evaluating, selecting and recording signs used for technical communication.

Videotapes and instruction manuals containing more than 800 technical words and their corresponding technical signs have been developed in eight subject areas. These materials are available through the Special Materials Project in Indianapolis, Ind.

Sign language is not only a language but a professional discipline. NTID at RIT is one of the few colleges throughout the country hiring sign language specialists as faculty with rank and tenure opportunities.

Another step in upgrading the profession has been the establishment of the Sign Instruction Guidance Network (SIGN), a function of the Communicative Skills Program sponsored by the National Association of the Deaf. Of 400 sign language specialists in the country, approximately 40 are comprehensively certified by SIGN. The rigorous requirements for certification include 240 teaching

hours and a bachelor's degree.

A comprehensive certification allows specialists to teach the spectrum of sign language skills from Signed English to American Sign Language.

Paul Menkis is one of the very few comprehensively certified specialists. He happens to be deaf.

"Persons having rank or certification shows that sign language is in fact a professional discipline," says Menkis. "It's great working at a college that recognizes sign language as a profession."

"We have some excellent sign language teachers," says Mary Lou Basile, coordinator for faculty communication training, "because NTID places heavy emphasis on training its faculty and upgrading their skills."

NTID faculty and students carry their skills with them into the community. They were involved in sign language programs made available through the Rochester Museum and Science Center, Rush-Henrietta and Greece Central high schools, Monroe Community College and Southtown Merchants Association.

Helen McCabe, coordinator of community services, handles student involvement in teaching sign language outside of NTID. Two students taught a six-week course last spring to 15 employees of the Hilton Inn-on-the-Campus Hotel.

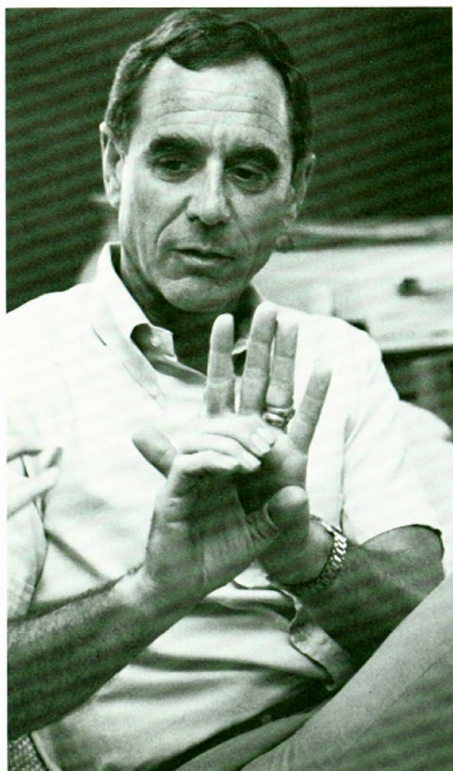
Last year, 600 people of all ages enrolled in RIT's Free University. These free, evening sign language classes are taught by faculty, staff, and students of NTID and people from the community.

"Two families with deaf children visited our church and I wanted to communicate with them to make them feel welcome," recalls Dorothy Pastalenic, who works in Helen McCabe's program as a volunteer. "I enrolled in a sign language class through Free University and I'm so glad I did."

A faculty member taught RIT President M. Richard Rose basic conversational sign language. Dr. Rose, his wife Clarice and Craig, their youngest son, were "fast learners," recalls Dominique Mallery, manual/simultaneous communication specialist. "It was a lot of fun teaching them."

"Sign language is an art, a skill and a fast growing professional discipline," says Dr. Rose. "I have a great respect for those proficient in sign language or other methods of communicating with the deaf. We at RIT get a sense of satisfaction and fulfillment out of knowing we are a part of the language and profession."

Cynthia McGill



"Sign language is an art," says RIT President M. Richard Rose.



People of all ages, including little people, participate in sign language classes offered by RIT's Free University.

Teaching English Skills

to Deaf Students

By the time students reach NTID at RIT, one might suppose that the problem of language would be resolved," says Edward L. Scouten, history specialist for the Office of the Director. "Unfortunately, that is not the case. Language is still a great problem. For hearing-impaired students, English skills are always a subject to be learned, but seldom mastered. It is a heartbreaking subject.

"People can be dunces at mathematics and the neighbors will never know, but if they cannot express themselves adequately in English, everyone knows," he continues. "For this reason, it's also a subject for which they understandably have a great antipathy. People don't like things that embarrass them."

Educators of the deaf have been wrestling with this problem for more than 150 years and have come up with some promising methods which, coupled with technological advances, have produced some positive results, Scouten points out. However, there are no final answers as yet and no single method seems to work in all cases.

Dr. Kathleen E. Crandall, associate dean of the communication program at NTID, explains that there are two divisions at RIT which teach English skills to hearing-impaired students. The one most students enter first is NTID's communication program, designed to develop basic English language skills.

The other, within RIT's College of General Studies, offers courses which satisfy the New York State requirements for general education courses.

"We administer tests to incoming students to determine whether or not they have reading and writing skills comparable to hearing RIT students," Dr. Crandall explains. "Any student who cannot demonstrate comparable skills enrolls in our courses. We find that approximately 95 percent of the incoming students need some remedial English language instruction."

NTID requires students to demonstrate comparable skills or enroll for five quarters of English language courses. If, during the course work, students achieve comparable skills, they move on.

The range of reading and writing skills varies greatly among entering students. Guidelines for admission to

NTID at RIT state that, in addition to having a certain hearing loss, students must have an average educational achievement of at least the eighth grade level. The Admissions Office looks at a variety of skills, including mathematics, so it is possible for students to attain an eighth grade average and still be lower in English skills.

"In addition to reading skills, we also look at writing abilities, Dr. Crandall explains. "Unfortunately, there is no precise way to measure grade level for writing skills. We're primarily interested in how well students can communicate a message in writing—their 'writing intelligibility.'"

"Our goal is to improve our students' skills until they are able to write clearly and concisely enough to be understood," she continues. "This is often crucial because students in the work setting may find themselves with people who are not able to understand their speech and who are not familiar with manual communication. In this situation, the only common element will be writing."

In addition to classroom experience with a trained English specialist, students are given assignments in



Eileen Biser applies her "No-Fail" recipe for good writing to an English composition class in the College of General Studies.

NTID's reading and writing labs. In the work situation, students will be expected to monitor themselves without much guidance. The labs provide the bridge between the structured, guided classroom and the world of work.

A faculty member is available in the lab but does not deal directly with the students unless a special problem arises. Labs must be used in conjunction with classroom work.

NTID has English specialists for each of five levels of English instruction. These specialists work with others trained in receptive auditory skills, speechreading skills, and speech production skills of manual/simultaneous communication abilities. All work at students' individual levels. Whatever students are learning in the listening and speaking area should mesh with their reading and writing coursework.

"The people who deliver the English language instruction are specifically trained as language teachers," Dr. Crandall stresses. "Often their background is linguistics or psycholinguistics. Some have been trained to teach English to foreigners."

The great majority of NTID students are prelingually deaf, having lost their hearing before they acquired language skills. For these students, English must be taught almost as a foreign language, by surrounding them with correct English at all times. Scouten advocates speechreading supplemented with fingerspelling and writing because he feels it gives the clearest picture of the language with all its idiosyncrasies.

"My thesis is, and always will be, 'English through the use of English,'" he says.

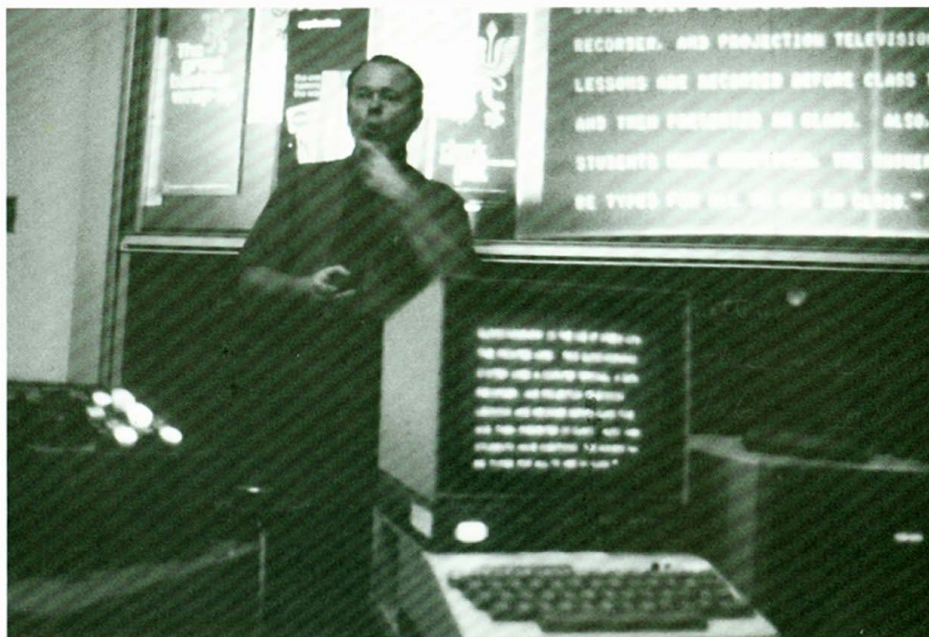
Larry J. LoMaglio, NTID English specialist, is another staunch advocate of teaching English by surrounding the student with its structure and principles in technical, as well as English, classrooms.

"We can create an English environment through signed English, fingerspelling, overhead transparencies, captioned slides and films," he says. "Overhead transparencies are very useful in classroom discussions because main points can be reproduced in standard English, reinforcing skills."

The glossynograph, developed at NTID by English Specialist Andrew Malcolm, is especially helpful during classroom discussion. The instructor types what is being said in class and the image is projected on a television screen in correct English.

"I also think we can have an impact on the students' English skills by becoming involved in the technical areas," LoMaglio adds. "It provides the additional motivation of using language from the area which interests them most."

This method works well in the departments where it has been tried, notably in medical records technology and physics. LoMaglio has worked directly with Marilyn Fowler, director of the program, to develop language-based lessons. She provided him with the content she wanted taught and he suggested strategies and developed exercises which presented both the content and concepts using standard English. English specialists also help students write laboratory reports for physics, biology and engineering labs, with the instructors serving as content specialists.



Andrew Malcolm demonstrates the Glossynograph which he developed for use in NTID's Communication Instruction Department.

"When students are called upon to use their language skills in a way that is directly applicable to their technical area, they go about it with an entirely different attitude," according to LoMaglio.

"While they're at NTID, students can survive quite well using a minimum of standard English," he continues. "They can communicate, not only with their peers but also with most of the faculty and staff. However, when they begin their co-op work, they quickly discover they must use speech and the written word to be understood. They return from this experience with a generally better attitude toward communication instruction." He adds, with a rueful smile, "You can't tell students these things. They must experience them on their own."

Once NTID students have satisfied the English language requirements for a certificate or diploma, they can cross register in RIT's degree programs. At this point, they become part of the general education instruction department in the College of General Studies, under the direction of Chairperson Lawrence L. Mothersell. These professionals are dedicated to helping deaf RIT students compete successfully with their hearing peers.

"In other instructional areas, teachers have considerable leeway in what they can do," points out Eileen Biser, associate education specialist, "but when it comes to reading and writing, definite standards are set. Those standards are the English language. This is probably why it's the most difficult thing to teach. Our English composition course is the measuring stick against which students are tested to see whether or not they will be able to succeed in other RIT courses. They must pass this course in order to earn an associate's or bachelor's degree, meeting the same requirements as hearing RIT students."

Students who have progressed to this level still have a wide range of writing skills, and all enroll in a 10-week course to develop specific writing skills.

"Most students come to me with very little experience in using written language to communicate beyond the sentence level," Mrs. Biser says. "I must take them from that level and teach them how to write a composition and finally a research paper."

After much "hair-tearing, foot-stomping and hand-wringing," Mrs. Biser came up with a method she calls "Mrs. Biser's Super-Duper, No-Fail, Easy-To-Use Recipe for Creating Delectable, Delightful and Delicious Written Compositions."

The eye-catching poster she created for the course is entitled, "Thrill & Amaze Your Family, Friends, Teachers, Employers, AND Yourself . . ." The "recipe" lists the following ingredients: you, an alert mind, a quiet place to think and write, organization skills, logical thinking skills, grammar skills, library/research skills, a dictionary, current handbook of English, writing pads, white composition paper, pens and pencils, erasers and a wastebasket. She then lists eight steps in the writing procedure: saturate, concentrate, investigate (for research paper only), formulate, incubate, actuate, evaluate, perfectuate ("not a real word," she explains, "but it fits"), and finally, celebrate!

"What I am teaching is critical thinking and any student can benefit from that," Mrs. Biser says. "I also talk a lot about my philosophy of writing. In the early weeks, my biggest chore is to turn students on to writing after 15 or 16 years of hating it. I tell them I love words and I think writing is an important tool for many things in our lives. Firing them up to produce is my greatest challenge."

Mrs. Biser presents her material as visually as possible with charts, graphs, outlines, posters, sign language, pantomime and "anything else that helps get the ideas across."

Richard LeRoy, another associate education specialist, is a staunch supporter of the "Biser Recipe" and uses it, with great success, in his own classes. RIT has been his first opportunity to work with deaf students.

"The reading club was a good experience for me," he says. "I began to appreciate more fully all the language problems these students face every day. It made me very sensitive to their need for intensive reading help."

A year ago, he joined the general studies group and began teaching a writing class.

"In our classes, students must write six or seven compositions in 10 weeks, plus a research paper," he says. "As an RIT basic skills class, we must follow the policies of RIT general studies and, for these students, that's very difficult. In order to help them, we schedule many individual conferences to discuss their progress, their papers and their problems."

Loy Golladay, professor emeritus and deaf associate education specialist, says, "Without input through their ears, deaf children do not develop the feeling for the language that's so important. It's our job to find ways to replace that lack in basic vocabulary and sentence structure."

Golladay insists that intensive read-

ing is essential to the development of language skills. Sometimes a student's interest in a particular book is strong enough to overcome the difficulty of the material, he maintains.

"I remember one girl in my high school class who was born deaf," he relates. "I introduced her to *Gone With The Wind*. Although it was a difficult book, she loved it so much she read the whole book during one weekend. I don't know if she got any sleep. When we can convince students to read voluminously, we usually see an improvement in their overall language skills."

Robert Panara, associate education specialist, echoes Golladay's feelings on the merits of reading. "We must encourage deaf students to read, read, read—with a passion as well as a purpose."

Panara is one of the few deaf professors who teaches integrated classes of hearing and deaf students.

"I write on the blackboard a great deal," he says. "I prepare many handouts, outlines of my talks, and special notes about the piece we're studying, whether it's a novel, short story, play or poem. I also assign passages from Shakespeare for students to recite because I want them to get the feel and flavor of this artistic language." His face mirrors his enthusiasm and love for the subject. "When I was young, I was required to do a lot of memorizing and recitation. I think it's a tragedy that this is not done more frequently. When you recite, you absorb the phrases and sentence patterns which are so important."

Panara also teaches poetry to deaf students and has been questioned about the advisability of such a course, given their language difficulties. His explanation appeared in an article he wrote for the December 1979 issue of the *American Annals for the Deaf*.

"Why teach poetry? For the very same reason we teach the language arts. Poetry is one of the best means of developing a vocabulary and improving overall communication skills. It helps stimulate creativity and self-expression, and it encourages the development of a student's intellectual faculties—imagination, thinking and interpretation. Finally, as in exposure of dramatics or dancing, it makes students react emotionally and sensitively to artistry of expression. Through the language of poetry, students can learn to perceive how the commonplace is made to seem uncommon, how old words can be expressed with freshness, originality and beauty."

Lynne Williams

Interpreting

Bridging the Communication Gap

During orientation, a student interpreter gives directions to a lost first-year student. In an emergency, another assists Campus Safety communicate with an injured deaf student. Another interprets a lecture for a deaf student in a mainstreamed (predominantly hearing) classroom.

These interpreters are part of NTID's Department of Interpreting Services (DIS) under the Education Support Service Programs. DIS provides interpreting services as needed and desired by the consumer, including oral and sign language. Oral interpretation is the mode in which the interpreter mouths what the speaker is saying with or without using the voice. Natural gestures and body language may be used and the interpreter may paraphrase what is being said using words that are easier to speechread. This is an important mode of interpretation because many deaf students at RIT through NTID come from oral schools. Accommodation is made for each student's preferred communication mode.

"Interpreters bring the instructor and deaf student closer together," says Julia Kraemer, an NTID student who recently graduated from RIT with an associate's degree. "Without interpreters, NTID students could not be effectively mainstreamed into hearing classes."

With the largest deaf student enrollment and professional staff in the history of NTID at RIT, the Institute today relies more than ever on interpreting services. A staff of 62 provides more than 1,400 hours of interpreting services each week at RIT.

"The last few years have been a time of rapid growth and change for interpreting services on campus," reflects Marilyn Mitchell-Caccamise, DIS chairperson. "An average of 10 of our interpreters become newly certified or additionally certified each year by the National Registry of Interpreters for the Deaf."

Interpreters are assigned to areas throughout RIT and to each of its academic colleges. Each college has a core of three to eight interpreters supervised by a lead interpreter. Two additional core teams are responsible to the area of liaison (all non-academic activities) and Intercom crisis.

"I'm a 'people person,'" admits Lisa McDaniel, lead interpreter for the General Education Support Team since 1976. "I love watching the interpreters grow and learn from their experiences as much as I love interacting with the faculty and students."

Eight hundred interpreting hours were requested last spring in the area of liaison which includes dorm activities, movies, concerts and student organizations. Due to the demand of interpreting services that quarter, only 300 hours of interpreting were provided.

Four nights a week, news and television programs are interpreted by DIS in cooperation with the Department of Instructional Television.

The Intercom office is open during specified hours for students to receive assistance in placing emergency or personal phone calls.

In addition to their regular campus services, interpreters assist in instruction in NTID's Summer Vestibule and



Meredith Ray, professional interpreter at RIT, interprets the local evening news in cooperation with the Department of Instructional Television.

Basic Interpreter Training programs, perform in NTID and community drama productions, and provide general interpreting services throughout the community.

"I've been told that the staff of professional interpreters here is among the finest in the country," says Ms. Caccamise.

RIT prepares many of its own interpreters through NTID's Department of Interpreter Training, also under Education Support Service Programs. The department is chaired by Anna Witter-Merithew.

The Basic Interpreter Training Program (BITP), one of its components, celebrated its 14th program last summer. To date, more than 500 interpreter trainees from RIT, across the country and Canada have participated in the program. DIS has hired many BITP graduates.

The BITP curriculum focuses on educational interpreting with emphasis on expressive and receptive interpreting skills. The trainees' curriculum also includes the interpreters' code of ethics and an introduction to various specialties such as legal, medical, mental health and religious interpreting.

The Department of Interpreter Training also provides in-service training for RIT interpreters. Jeanne Wells, interpreter trainer, holds a mini-series including seminars on deaf/blind interpreting, voicing and oral interpreting.

"It's vital to keep in mind that deaf and hearing-impaired students at RIT come from all kinds of backgrounds and have different schooling experiences," says Dr. T. Alan Hurwitz, associate dean of the Education Support Service Programs. "Many of them have never seen an interpreter before, much less know any sign language when they first come to NTID. On top of this, we must take into account that these students have various communication skills, abilities, and needs. Students must play a crucial role in identifying and determining their own interpreting needs. Lead and staff interpreters play an important part in working closely with students and teachers to effectively implement and maintain an interpreting service. Our interpreter programs are designed to meet those individual student needs."

Cynthia McGill



Katharine Gillies, lead interpreter at RIT, is reverse interpreting or voicing for Robert Mather, attorney, and graduate in social work from RIT through NTID.



Constance Menkis, professional interpreter at RIT, interprets for Arthur Simon (foreground), member of NTID's National Advisory Group and colouner of the Oral Deaf Adults Section of the Alexander Graham Bell Association Board.

Learning Aids for Deaf Students

The classroom is large. Twenty-five students shuffle papers, scrape their chairs, whisper, sneeze and cough.

For the hearing students, the room doesn't seem particularly noisy. Most hearing people have learned to ignore noise. However, for the hearing-impaired students using hearing aids, each sound is amplified and sometimes distorted into a distracting cacophony. In this situation, deaf students may simply turn their hearing aids off and rely on interpreters and notetakers.

However, a device which is being evaluated by a group of interested NTID students is giving new hope to all deaf students who take classes in the other cross-registered colleges of RIT. It uses wireless FM transmission to send the instructor's voice directly into FM receivers which can be connected to students' hearing aids.

"It works on the same principle as an FM radio," says Jaclyn S. Gauger, coordinator of assessment for the Communication Division, "except that the microphone used by the instructor is the transmitting station and the student's hearing aid is the radio, which receives just one frequency."

Most deaf students have some residual hearing, and this device is engineered to make the best possible use of that ability, however limited. Its most important feature is that it amplifies the instructor's voice above background noise.

"One student who had just started using it decided to take it to the Hettie Shumway Dining Commons to see how well it worked in a noisy setting," recalls Melody Bricault, communication assessment and advising specialist. "She and 12 of her friends picked a time when the commons was crowded and they went wild over the results.

"One student told us his goal was to be able to glance away from the instructor and interpreter often enough to take his own notes," Ms. Bricault reports. "With this device, he was able to do it."



Thomas Iten, RIT photography faculty member, lectures to hearing-impaired students Kim Hurdelbrink and Robin Shay, using the Phonic Ear, a wireless FM transmitter/receiver. This enables him to speak directly into their hearing aids.

At present, there are 19 receivers at RIT, with nine transmitters. It is not necessary to have an equal number because most classes have more than one hearing-impaired student and the instructor can transmit to as many as six receivers.

The units (one transmitter and one receiver) cost approximately \$700 each, but Ms. Gauger points out that they are less expensive than upgrading the acoustics in all RIT classrooms.

Ms. Gauger stresses that this device is not a substitute for other supports. "Basically, this is used in combination with simultaneous communication, speechreading, facial expression and body language."

Probably the most valuable aids for deaf people are the telecommunication devices which have been installed throughout RIT and the Rochester community. With these machines, hearing-impaired people are able to tap into a network of TTY/TDDs throughout the nation. The equipment ranges from large expensive units to small portable machines which can be

moved from office to office, wherever the need arises.

Even the telephone is no longer the inaccessible instrument it used to be. Amplification devices, installed directly into the receiver are being improved, and special classes are conducted at RIT through NTID to instruct students in the use of the phone.

In addition to communication equipment, there is a broad range of small personal devices designed to help deaf people cope with day-to-day problems. They include digital and standard clocks, timers and bed vibrators. For people who are easily awakened by light, there are clocks that use a flashing light as the alarm. For heavy sleepers or deaf/blind people, there are several kinds of bed vibrating units, some small enough to use when traveling.

A permanent display of these helpful devices has been set up in NTID's hearing aid shop by Dr. Diane Castle, telecommunication specialist.

Lynne Williams

Body

Language

An Important Part of Telling the Story



"Grrrrrrrr," Communication Specialists use Body Language to express anger. Left to Right: Stephen Schultz, Barbara Holcomb, Samuel Holcomb, William Newell and Dr. Bonnie Meath-Lang.

As we interact with one another, we use much more than just our voices," says Dr. Frank Caccamise, research associate in NTID's Communications Division at RIT. "Our eyes, our faces, our gestures, even our bodies can speak volumes without any verbal exchange. Even our formal language mirrors the involvement of our bodies as we 'keep a stiff upper lip' in times of trouble, 'bite our nails' in anxiety, and 'jump for joy' when we're excited. All these phrases acknowledge that our bodies do transmit messages."

Dr. Bonnie Meath-Lang, English specialist in communication instruction, adds, "When we discuss body language, we mean more than physical presence. It's the way people react to one another, what effect their movements and gestures have on someone else."

Using her hands to help, she explains that the study of body language is becoming more widespread, extending to the study of other cultures. Although the use of body language is universal, the same gestures do not mean the same thing to all people and are not used to the same degree. Some cultures rely heavily on body language, while others consider it impolite. In western countries, it is used less than in Mediterranean and Middle Eastern countries where words alone are considered inadequate.

In the early '40s, cultural anthropologist David Efron studied communication patterns of Jewish and Italian immigrants in the U.S., paying particular attention to the members of his own family. He observed that his grandparents and other first generation people were very free in expressing themselves nonverbally. An entire vocabulary of gestures existed with meanings so precise, they were almost equivalent to formal sign language. Although specific gestures exist in American society, they are not as prevalent as in other cultures, and often are not accepted as readily. After years of study, Efron found that by the third generation, these expressive gestures had virtually disappeared.

The study of body language includes movement, space, touch, voice (other than speech), use of time and costume. At RIT, the people involved in its use are primarily concerned with kinesics, which is communication through body movement. Within this category are facial expressions, hand gestures that are not formal signs, and body postures.

"There is a lot of body movement associated with the education of the

deaf," says Dr. Meath-Lang. "When you visit residential schools for the deaf, you are surrounded by tiny children demonstrating what they need. This occurs regardless of the communication modes used in the school, and both precede and accompany language acquisition."

She finds the increased use of body language "very liberating, very freeing. And it releases a lot of physical energy."

"We try to encourage faculty and staff to lose their inhibitions, to loosen up," Dr. Caccamise points out. "In sign language and simultaneous communication (signs with speech) classes, we encourage beginners to try to convey a message using their faces and bodies. We ask them to consider what they would do in a foreign country if they didn't know the language. The importance of combining all their communication skills for effective communication is stressed."

Talented deaf instructors like Barbara and Sam Holcomb are particularly adept in the use of body language as they tackle classes filled with hearing faculty and staff. Stephen Schultz, communications specialist, mesmerizes his classes daily with his unique brand of pantomime, body language and sheer acting talent. He acts out new vocabulary until each student understands completely. The most successful are

those who are able to learn effective use of their faces and bodies.

"Whether using the spoken word or sign language, body language is important," Dr. Caccamise stresses. "When asking a question, people lean forward with questioning looks on their faces, whether signing or speaking."

William Newell, another RIT manual/simultaneous communication specialist for NTID, adds that certain types of questions in sign language don't have an interrogative word. The only difference between a question and a statement is the body posture and facial expression accompanying it.

"Hearing-impaired people can mask their true feelings, just as hearing people do," Newell says, "but unless it's intentional, there is generally a better match between what they are communicating in their formal language and what they are feeling."

"To hearing people, the importance of body language often is not as apparent as it is to hearing-impaired people," he continues. "We think of it as totally separate from the rest of our spoken language. Because sign language and fingerspelling are physical, and because expression and body movement are physical, we link them more closely. Actually, the difference is not that great. Just watch hearing people discuss something that pleases, excites or infuriates them."



"Have I got a deal for you!"

"We often are not consciously aware of body language when a person is talking," Dr. Caccamise points out. "We may only be aware that one person is very interesting, emphasizing important points and holding our attention, while another one puts us to sleep. It's my premise that not only is body language part of the language of signed communication, it is also part of the language of spoken communication and spoken communication is less effective without it."

Newell notes that gesticulation was an integral part of ancient languages. When public speaking was taught, the proper gestures were taught along with it. This was especially true with the rhetoric of ancient Greece and Rome.

Dr. Meath-Lang admits that it is sometimes disconcerting for hearing people to come into an environment like NTID because the need for demonstration is so great. "Faculty and staff can't rely just on vocal communication," she says. "I cue in a lot to my students' faces because they are such good actors. They've been acting all their lives. Some background in the theatre has helped me tremendously in this respect also."

She recalls an experience which attests to the fact that much can be picked up through close observation of body language without hearing or recognizing the spoken word.

"One night I had a meeting in one of the dorms and discovered a number of students sitting around watching the television program, *Eight is Enough*. I always have felt this particular show relied heavily on dialogue, and since this one was neither interpreted nor captioned, it should have been very difficult to follow. None of these students had significant residual hearing, and lipreading was severely limited because of awkward camera angles—backs and side views of faces—and the fact that the camera did not always follow the speaker. In spite of these obvious drawbacks, the students had figured out the plot, with surprising accuracy, by zeroing in on nonverbal clues. I was struck by the implications this had for teaching. If we can make efficient use of body language during our classes, we are adding another level of clues for our students to draw upon."

Dr. Meath-Lang feels strongly that teachers must change some of their attitudes. As professionals, they are taught to mask their feelings and remain objective. They must hide feelings of anger, frustration or impatience. However, if the hearing-impaired student is picking up on clues that a hearing student might



"Eek, a mouse!"

miss or ignore, another approach must be considered. She concludes that it is better to be completely honest than to risk sending students conflicting signals which might be confusing or upsetting.

Her students' papers are full of perceptions they pick up from the people around them. "Often the students worry, 'How is the teacher reacting to me?' 'How does the person I just met feel about me?' 'My parents are worried, but they didn't tell me.' These worries are common and we compound them in a misguided attempt to protect the student."

The body language courses offered at RIT are open to both deaf and hearing students, with almost half the enrollment made up of hearing-impaired students. Students recognize that they can learn to apply body language in a variety of experiences outside the classroom.

Dr. Meath-Lang admits there is conflict for the students. Young people often are very concerned about their image, so they worry about how they look to others. This creates a struggle within themselves about using body language. "To many of my students, restraint means 'cool' and they associate that with greater

control over their lives. In reality, hearing people could learn a lot from them."

She hopes that this confining image of "cool" will dissolve in coming years. Since the 1950s, body language has been an object of serious study by respected academicians and institutions, and nonverbal communication is slowly gaining credibility. As more people begin to understand that it is a valid means of communication and not just another fad of the "now generation," she hopes they will begin to feel better about using it as a proven asset to their overall ability to relate to others.

"No matter what the ultimate role of body language will be here at RIT for deaf and hearing people, it must be something people feel comfortable about using," Dr. Caccamise concludes. "There are differing opinions about methods of teaching hearing-impaired students, and it's important that we leave all avenues open for instruction of *all* students. No opportunity should be missed in the continuing search for new ideas and better ways to accomplish our goals."

Lynne Williams



Linda Gottermeier makes an ear mold impression for deaf RIT student Susan Mezger. Once the impression is made, it is sent to a factory for refining work and wiring.

The Hearing Aid Shop

“Here to Serve”

My hearing aid isn't functioning properly! Where can I go for repairs?" I'm having feedback sounds coming out around my earmold."

"Where can I buy more batteries for my hearing aid?"

These are some of the common concerns of RIT's deaf students. NTID's Hearing Aid Shop offers them many different services, including hearing aid maintenance, tests, repairs and supplies.

Jaclyn S. Gauger, coordinator of communication assessment, points out that the hearing aid shop also helps audiologists evaluate new products.

Linda Gottermeier, hearing aid shop technician, has "the basic responsibilities to help the students with hearing aid problems and to have different supplies for them to purchase. I also

see that the audiologists are getting the necessary products and hearing aids they need for hearing aid evaluations."

At least 50 hearing aid evaluations are done during each quarter and often students sample three to 10 different types.

As a way to assure that students continue to wear hearing aids, the hearing aid shop technician records the usage of hearing aids and supplies, repairs or modifies minor earmold problems and sees that broken hearing aids are shipped to the factories for repairs while the student is given a "loaner."

Both Ms. Gauger and Gottermeier agree that the hearing aid shop is not just a "service shop." It is a place where students can learn to understand different hearing aid problems

and what can be done to solve them. They can learn the implications of hearing aid evaluations and the proper selection of an appropriate hearing aid for their needs.

Ms. Gottermeier points out that the Hearing Aid Shop provides opportunities for graduate interns in audiology to learn the basic techniques of hearing aid troubleshooting.

Hearing aids are usually replaced every three to five years. RIT's deaf students can build up their "consumer" experiences in hearing aid care and services through the Hearing Aid Shop. When they complete their education at RIT through NTID, they should know how to make the very best use of their hearing aids.

Howard Mann

National Technical Institute for the Deaf
Rochester Institute of Technology

Tutoring/ Notetaking

A Vital Service



Good classroom notes are vital to deaf and hearing-impaired students. Fortunately, deaf students mainstreamed in RIT classes with hearing students can focus most of their attention on the instruction and interpreter—not on taking notes.

NTID hires hearing RIT students and alumni as tutor/notetakers for deaf students in the classroom.

The Tutor/Notetaker Training Program (T/NTP) at NTID trains more than 50 RIT students each year. Currently, more than 114 hearing students at RIT work as notetakers or tutor/notetakers.

"The tutoring/notetaking service is an essential part of my learning," says Mary Beth Barber, third year deaf student in RIT's social work program. "I think this service makes the difference as to whether a cross-registered student makes it or not."

"While working together, the tutor/notetakers and deaf students get to know each other as individuals—not as 'the deaf' or 'the hearing,'" says Jimmie Wilson, coordinator of the program.

Early in the history of NTID, the components of good notetaking were

identified, the questions of how the notes should be taken and by whom were answered, and the methods of training were devised.

Dr. Ross Stuckless, director of integrative research, led the development of a looseleaf notebook with carbonless pressure-sensitive paper which is still used today by the notetaker. The tutor/notetaker, who can make several copies of notes at one time, agrees that the notebook and special paper make the job easier.

Dr. Russell Osguthorpe, now a research scientist at Brigham Young University, developed a pilot program in 1975 to train 10 RIT hearing students to work as tutor/notetakers for RIT deaf students in mainstreamed classes. Before 1975, professionals and student volunteers worked as tutor/notetakers or notetakers. As a result of this pilot program, Dr. Osguthorpe found that deaf students preferred notes taken by trained notetakers as opposed to those taken by untrained student volunteers.

Two manuals were written based on interviews with deaf students and teachers, the experiences of professionals working as notetakers, and the research of Osguthorpe and

others. The manual developed by Osguthorpe, *The Tutor/Notetaker: A Guide to Providing Academic Support to the Mainstreamed Deaf Student*, is the current textbook for the program. John Panara, assistant coordinator of T/NTP, assisted Osguthorpe during the developmental stages of the manuals.

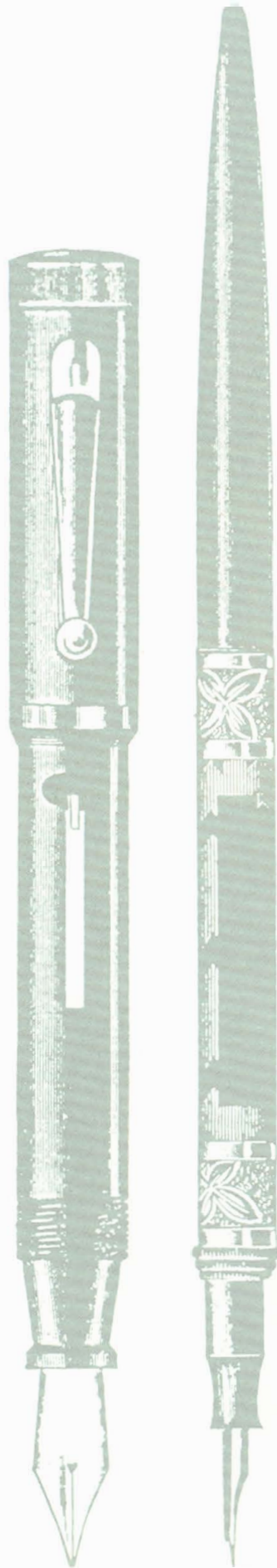
The Manager's Guide, written by Osguthorpe, Jimmie Wilson, Warren Goldmann and John Panara, reflects the experiences of the early professionals. Both manuals are available through the Alexander Graham Bell Association for the Deaf, Inc. in Washington, D.C.

The requirements and responsibilities of the tutor/notetaker characterize the NTID Model. The tutor/notetaker should not be enrolled in the class for credit but should have taken the class ready.

"The RIT tutor/notetakers are required to participate in a 30-hour training program, have at least a 3.0 grade point average (out of 4.0), be willing to fit their tutor/notetaking responsibilities into their own class schedule, and feel comfortable in working with deaf students," says Jimmie Wilson. "They are paid for



A tutorial session in computer science for a deaf RIT senior Deborah Von Drasek (left), with Sharon Palmer, a fifth-year RIT tutor/notetaker, can make a difference.



studying in preparation for tutoring, reworking notes, preparing supplementary study materials, working on critical vocabulary, meeting with classroom teachers and the tutor/notetaker manager, and attending in-service training activities. They're also paid for actual time spent in tutoring or taking notes in class."

"It's been the best job I've ever had," says Sidonie "Sid" Merkel, a fourth-year textile design student and tutor/notetaker for two years on the NTID support team associated with RIT's College of Fine and Applied Arts (CFAA). "Because of this experience, I may further my education in deafness."

As evidence of the excellence of her work, Sid received the 1980 Beth Duffin Award for outstanding performance as a tutor/notetaker.

The tutor/notetaker manager plays an important role in the NTID Model.

"Because of the large number of deaf students on the RIT campus, support services are managed by a support team with a tutor/notetaker manager assigned to each RIT college," says Wilson.

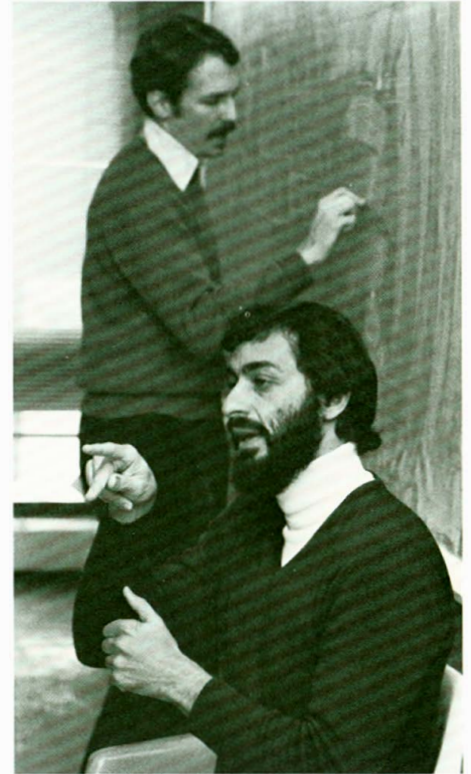
"Being a manager and teacher, I can see the program's effect on students from two different perspectives," says Judith Zerbe, assistant professor and tutor/notetaker manager on the CFAA support team. "The program is exceptional."

The tutor/notetaker model is shared with other schools and programs through workshops sponsored by NTID at RIT and at regional centers around the country. Wilson, Panara and others have conducted workshops

in Seattle, Wash.; Chicago, Ill.; St. Paul, Minn.; and Waco, Texas.

"It gives you a feeling of satisfaction to train others to set up a program like ours," says Zerbe, who assists often in training. "The program really works."

Cynthia McGill



Assistant professor Dominic Bozzelli (sitting) shadow teaches an engineering class with assistant professor Kevin Foley.



The Tutor/Notetaker Training Program, coordinated by Jimmie Joan Wilson, trains more than 50 RIT students each year to work as tutor/notetakers.

Communications Research

Theory into Action

Today's rapidly increasing technical discoveries often create a need for new words to identify technical concepts. These technical discoveries also create a need for new technical signs to identify these same concepts for the nation's 14 million deaf and hearing-impaired people.

NTID at RIT is sponsoring a nationally based project to collect, evaluate and record signs used for technical communication.

Videotapes that contain more than 800 technical words and their corresponding technical signs have been developed in eight subject areas, including math, English, business, engineering and fine and applied arts. Each word is signed, spoken, and captioned with spellings and diacritical markings to aid pronunciation. The videotapes are being used for instruction by RIT faculty, staff and students.

In addition, instruction manuals which describe the signs and their appropriate positions and movements are also being developed. The videotapes and instruction manuals, which are independent of each other, will soon become available for dissemination to deaf education programs

throughout the country and to other nations.

"Communications research at NTID is an integral part of the total research effort at Rochester Institute of Technology," says Dr. M. Richard Rose, RIT president. "NTID's presence at RIT gives our communications research people a unique opportunity to apply their research in a test market situation. Our deaf and hearing faculty, staff and students help us refine the products of our research and make them more marketable for others."

Another NTID communications research project currently in progress is meeting the continual need to provide deaf students with opportunities to practice communication skills through materials used in the classroom.

Thirty deaf RIT students are practicing speechreading lessons developed from materials taught in the formal classroom through the use of a Dynamic Audiovideo Interactive Device (DAVID). The system incorporates computer-based learning and instructional television. The DAVID system also has potential for instruction in both sign language and oral communication modes.

Several DAVID systems will be installed in the NTID Self-Instructional Laboratory next year to help meet the needs of all deaf students in speech-reading courses.

Dr. William E. Castle, vice president of RIT and director of NTID, says, "One of NTID's basic missions is to conduct communications research that can be applied to develop new, imaginative teaching methods.

"We believe that the DAVID system and the additional practice it provides our deaf students will result in a significant improvement in speech-reading ability and thus assist in improving the communication skills of deaf people," he adds. "We plan to make the DAVID system available nationally to deaf education professionals once the preliminary research data on the pilot group of deaf RIT students is completed."

A third research project is helping educators to discover the most effective way to caption television programs so that deaf children's comprehension is increased. NTID at RIT and WGBH-TV of Boston, Mass., are studying the effect of caption rate and language level. The studies are designed to create guidelines for captioning programs for children aged eight through 18.

Preliminary research shows that young viewers can comprehend the same information in captions presented at 60, 90, and 120 words per minute. Research also shows that captions written in simpler language helps comprehension. This is particularly true for poorer readers and with programs which are more verbal and less visual in format. WGBH-TV, a leader in children's educational programming, is now applying this research to its programming.

NTID at RIT conducts applied communications research that investigates the types of communication problems the deaf population have and why they have them, and looks into the development of more effective techniques and materials for the diagnosis and treatment of communication problems and the subsequent implementation of these materials into instructional programs.



Dale Metz, research associate (looking through camera), and Dr. Robert Whitehead, chairperson of the communication research department, film the vocal fold vibrations of a subject at the speed of 5,000 frames per second.

Telephone Training for the Deaf

At quick glance, Room 3201 in the Lyndon Baines Johnson Building at RIT resembles a small telephone company's business office, equipped with a pay phonebooth, telephones, television monitors, videocassette playback and audiocassette units. A closer look reveals special telecommunication equipment such as telephone receivers with amplifiers for the hard-of-hearing, and various portable and non-portable teletypewriters known as telecommunication devices for the deaf. (TTDs).

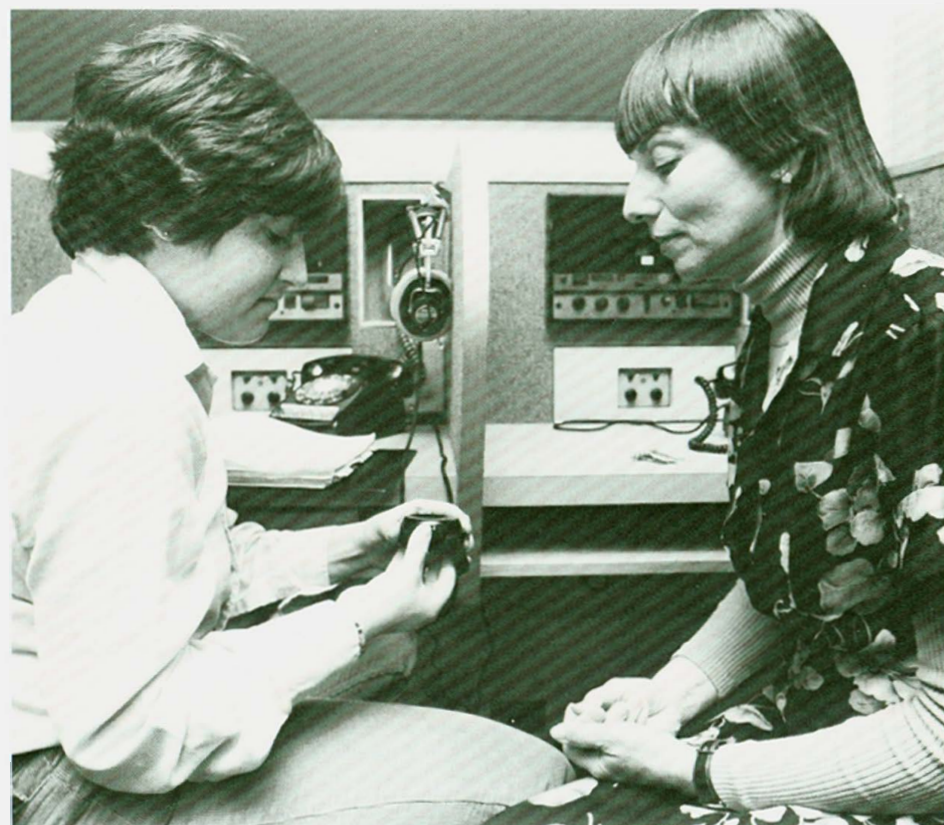
Better known as the Telephone and Telecommunications Lab, room 3201 at NTID is a specially designed classroom where deaf students learn the use of telecommunication devices. Dr. Donald D. Johnson, professor of audiology; members of NTID's communication program; the Center for Communication Research (CCR) in Rochester, NY; and an industrial design student from RIT worked together to design this special classroom.

Dr. Diane L. Castle, specialist in telecommunications training for the deaf, began instructing deaf RIT students in the use of the acoustic telephone in 1974. Since then, she has developed curricula for the telephone and telecommunication courses and has trained instructors for them.

Having a background in audiology, speech pathology and the education of the deaf "was not enough preparation for this job," says Dr. Castle. "There just aren't any college courses offered that can provide the skills necessary to teach the deaf how to use the phone."

After six years of research and development, NTID and Dr. Castle now have the strategies required to teach telephone communication to the deaf and the experiences needed to train instructors.

Classes have grown from a dozen students and one instructor in 1974 to three classes for telephone in-



Dr. Diane L. Castle, RIT specialist in telecommunications training for the deaf for NTID, instructs Beth Confino, a second-year deaf photography student, in the use of the hard-of-hearing amplifier for the phone receiver.

struction, five classes for telecommunication instruction and six instructors. Even though these are not required courses, students are eager to enroll. Students who were reluctant to use the phone are now readily using it in a variety of situations.

Forty percent of first-year students have the speech, hearing and language skills which enable them to enroll in the telephone course. Students whose skills are not at that level may take the telecommunication course regarding TTY's, although both courses are open to all students.

Students in both courses are introduced to the telephone system, signaling devices and telecommunication equipment.

In the Telephone Communications course, students learn to improve their ability and confidence in using the telephone with strangers. They learn how to use their hearing aids with the phone, how to make long distance calls and appointments, and how to use telecommunication devices. They also learn special strategies to improve their talking and listening on business and pay phones.



Stephen Schultz, an RIT telecommunication course instructor for NTID, demonstrates an upcoming lesson to Dr. Castle.

Deaf students must learn strategies that hearing people take for granted. For example, a hearing caller often associates a word with a letter. If a hearing-impaired person confuses "s" with "f," he or she learns to ask, "Is that 'f' as in 'Florida?'"

In the Telecommunication Aids course, emphasis is on using telecommunication equipment while gaining experience in using the phone. Students become familiar with the different telecommunication devices on the market and are encouraged to think about which may be

better for the home as opposed to the office. Using telecommunication devices, students learn how to make long distance calls, emergency calls, appointments and what to do if they have had a bad connection.

Students with limited hearing are taught how to use special codes for telephone calls. When they were young, many students arranged phone codes with their parents. For example, calling home for parental permission before spending the night at a friend's house required a code for an answer. The parent would answer

"no" or "yes, yes." The child may not have been able to hear the difference between "yes" and "no," but could detect the difference in the number of syllables.

During each course, the instructor works with students individually as they make a series of calls using different strategies or codes.

"I've learned so many useful phone codes," says Beth Confino, a deaf sophomore majoring in photography. "It used to be so confusing and frustrating to talk on the phone, but now I feel more comfortable."

"Speech for Telephone Communication," a course developed by Assistant Professor Marianne Gustafson, provides skills for improving speech to enhance telephone communication.

Stephen Schultz, an RIT manual/simultaneous communication specialist for NTID who was born deaf, is one of the instructors for the telecommunication course.

"I have to keep reminding myself that the phone is new to my students," he says. "It's exciting to watch their faces light up when they learn how to master a tool they've lived around for years."

The interest in telecommunication training for the deaf is rapidly spreading locally as well as across the country. Dr. Castle receives numerous inquiries and invitations to share the training materials. She has conducted workshops locally as well as in Canada, Florida and California. There are plans to disseminate the telephone course materials to users across the country.

"Our laboratory and courses are not only benefiting the students here," says Dr. Kathleen E. Crandall, associate dean and director of the communication program. "There's a demand for our expertise from people outside of NTID at RIT. It's good to know that what we're developing is beneficial to others."

Cynthia McGill

Deafness and Laughter



Pete Seiler, right, "lights up" Paul Menkis' cigarette sign.

Peter Seiler hasn't been able to hear the sound of laughter since he lost his hearing due to a bout with tonsillitis when he was six months old. But it hasn't affected his laughter development.

"I have no idea how I learned to laugh," he chuckles. "I remember seeing things that seemed funny and laughing. Laughter is natural."

Deaf people enjoy a good joke as much as anyone. However, the way that deaf humorists tell jokes is different from how most hearing people tell them. Deaf humor tends to employ visual humor, as opposed to verbal humor.

Seiler, staff chairperson of NTID's general education support team at RIT explains, "Generally speaking,

deaf humor tends to be very concrete. We tell most of our jokes about things we can see. Abstract jokes are told concretely and with help from exaggerated facial and body expressions or mime."

While deaf humorists rely much less on the subtleties of the English language than their hearing counterparts, they often modify the meaning of signs to create totally new and often humorous meanings.

Paul Menkis, acting area complex director, says, "A lot of deaf humor is in signs. For example, the often used figure of speech, 'rule of thumb,' might be expressed with a finger-spelled letter R on a thumb." Menkis adds, "Deaf people often laugh with their hands, too."

Seiler explains, "Playing with signs is considered a mark of intelligence, much the same that playing with words is among hearing people."

Jokes about current events or "in" jokes often are not understood by deaf people because many have little access to captioned television programs. Some deaf humorists think the new 20 hours a week of network-captioned programs will help deaf people learn what everyone else in the country is laughing at.

Seiler notes that a lot of deaf people didn't know what gasohol was when they saw an editorial cartoon of a car weaving down a road.

"Someone asked 'Why?' The answer is booze in the gasoline," he adds. "To explain the joke, I say, 'They pour whiskey in the gas tank.'"

Seiler, who sometimes sports a big black button with the words, "Deaf and Bright," in blazing white letters, says deafness can lead people to become cautious about laughing in public places. "In the movie, *Dr. Zhivago*," he says, "there's a scene where the Russian soldiers are running away and some officer jumps up on a water wagon to bark orders at them. Suddenly, I saw that he had this incredible expression on his face as a result of falling into a barrel of water. I broke out laughing hysterically in the theater—and the very next second I saw this pool of blood in the barrel of water. He had been shot, but I didn't know that before. Everyone in the theater was looking at me."

Seiler shrugs off that experience. He feels there's a lot to laugh about when observing human behavior. "People who don't ever laugh about deafness want to view it as a sad thing. We make jokes about hearing people, too. And I think it's important to be able to laugh at yourself."

Stephen Dingman

A New Language for RIT's Eisenhower Campus

Through the nationally renowned world studies program on the Eisenhower campus, RIT students can study Chinese, Japanese, Arabic, Russian, French and Spanish. Now, after seeing the results of a new, non-credit course on deafness and communication, it appears American Sign Language (ASL) will be added to the curriculum.

Dr. Warren Hickman, a faculty member at Eisenhower, one of RIT's ten colleges, says, "The first four languages are called our critical languages because we need to know a lot more about them. We need to know a lot more about communicating with deaf people too."

A 10-week course, "An Introduction to Deafness and Communication," was taught in Spring 1980 by NTID faculty who volunteered their services. The idea for the program emerged after an all-day seminar in Fall 1980 for faculty at RIT's Rochester campus and the Eisenhower campus.

Dr. Barry Culhane, associate dean of NTID general education programs, recalls, "Warren Hickman; Al Ossman, executive assistant to the Dwight D. Eisenhower campaign director; Larry Arthur, chairperson of communication instruction IV; and I were relaxing at The Red Barn, and Warren said, 'Wouldn't it be nice if we could learn something about sign language and communicating with deaf people?' We all agreed it would. When Larry and I returned to NTID, we wanted to make sure the faculty at Eisenhower knew that this wasn't just another 'wouldn't it be nice' conversation."

Arthur recognized the need to design an introductory course that dealt with deaf culture as well as basic sign language instruction. He quickly developed a curriculum that included topics such as "It's A Deaf, Deaf World," a simulated deafness experience; "Deaf Children and Families," a discussion of the process of family life when there is a deaf child; and "Educational Achievement and Learning Styles of the Deaf," a discussion of a variety of educational philosophies, settings and legislation that affect deaf education.

"The recruitment of NTID faculty was the easiest part of putting the course together," Arthur says. "It was just a matter of a phone call. I said, 'Here's what we're doing. Here's where we'd like to use you. Are you interested and would you be willing to do it?' We didn't have anyone turn us down.

"This kind of voluntary support shows the dedication and willingness our staff has to continue and broaden opportunities to learn something about deafness and communication," Arthur continues. "I think our staff also saw the course as an opportunity to help incorporate Eisenhower campus faculty into the RIT community."

Dr. Hickman says the reaction on the Eisenhower campus is "very positive. This course laid the foundation for us to go further."

The introductory course ended in May with a "silent dinner," during which no talking was allowed. Arthur says, "After nine weeks of practice in the classroom, we took everyone out, Dutch treat. Conversation is a very

integral part of the social situation. If people can't speak, they have to practice the sign language skills they've been learning. They find out that they really can communicate and communicate effectively at a surprisingly sophisticated level."

Stephen Dingman



Dr. Barry Culhane warms up guests at the Silent Dinner.



"Pass the ketchup please!" Dr. Hickman and Gail Rothman, one of RIT's career development specialists for NTID "talk" at Silent Dinner.

Miscellaneous

Mary Beth Barber Crowned Miss Deaf America

Mary Beth Barber was crowned Miss Deaf America of 1980 at the National Association of the Deaf's (NAD) Centennial Convention held recently in Cincinnati, Ohio. Mary Beth is a deaf social work major in the College of General Studies at Rochester Institute of Technology (RIT) through the National Technical Institute for the Deaf (NTID) in Rochester, New York.

As a representative of New York's Empire State Association of the Deaf (ESAD), Mary Beth competed with 31 state pageant winners and won the title with her overall beauty, poise and talent performance.

The Schenectady, N.Y. native credits her parents, Mr. & Mrs. Robert Barber, with teaching her to accept herself as a person.

"My mother and father would never permit me to say 'I cannot do this because I am deaf,'" Mary Beth recalled. "That's why I chose the song, 'I Will Survive' by Gloria Gaynor, for my music/dancing talent. This song expresses my feelings about my life."

She added that her goal as Miss Deaf America is "to encourage deaf people and hearing people to overcome any communication barriers they have. We all should be free to communicate with each other on an equal basis, and it's important to bridge the gap."



Mary Beth Barber

RIT Launches Lyon Lectures on Deafness

The recently established Edmund Lyon Memorial Lectureship at Rochester Institute of Technology commemorates a pioneer in speech education for deaf students. Coordinated by NTID at RIT, the series is the fourth endowed lectureship to be established at RIT, and is a gift of the late Mr. Lyon's twin daughters, Mrs. John Van Voorhis and Mrs. Francis Remington.

Edmund Lyon is best known for devising a phonetic finger alphabet which he hoped would "help the deaf to make their vocal communications more intelligible to their fellowmen."

He believed it was possible to communicate speech sounds by hand positions. The Lyon Phonetic Manual includes 120 separate hand positions for corresponding speech sounds.

Alexander Graham Bell, a pioneer in speech education for the deaf and a friend of Mr. Lyon, described the manual as having "the very greatest importance in articulation teaching. The child may see the incorrect sound that he gives as other children who hear incorrect sounds. I don't know an individual in America who has the natural abilities for an articulation teacher comparable to Mr. Lyon."

Dr. William E. Castle, RIT vice president and director of NTID, said, "This unusual lectureship on deafness will serve as a permanent memorial to Edmund Lyon and to the valuable role that various modes of communication play in the lives of the deaf people today."

The Lyon Memorial Lectureship series is expected to begin in Fall 1980. A task force committee has been formed to develop the series presentation relevant to various modes of communication techniques for deaf people.

Howard Mann

A.G. Bell Association Names Castle President-Elect

Dr. William E. Castle, vice president of RIT and director of NTID recently was elected the president-elect of the Alexander Graham Bell Association of the Deaf (AGBAD).

Dr. Castle serves as president-elect for two years beginning July 1, 1980 and will become president during AGBAD's 1982 international convention in Toronto. He will serve as president until 1984 and will continue to serve on the board of directors until 1986 as past president.

Dr. Castle has played a leading national role in bringing together the leaders of several major organizations serving deaf people in the United States. In 1979, he brought together the four respective leaders of the National Association of the Deaf (NAD), the International Association of Parents of the Deaf (IAPD), the Oral Deaf Adults Section (ODAS) of AGBAD, and the International Parents Organization (IPO) of AGBAD to discuss issues regarding deafness in the 1980s.

"I hope to see a further coming together of organizations serving the deaf," Dr. Castle says. "Our many organizations need to be able to arrive at an appropriate united front in the interests of deaf people without any one of the organizations losing its own rightful and historical identity.

"During our 1979 meeting, an important point of agreement among the four leaders was that the oral/aural components of 'total communication' must be restored by those who practice it. I'm really convinced that NAD, IAPD, ODAS, and IPO can readily establish a united front on many issues regarding deafness, including early identification, early intervention, the need for better quality education, and optimal implementation of Public Law 94-142 through the maintenance

of all legitimate alternatives from which the deaf and their parents may choose."

Dr. Castle served as dean and director of NTID until September 1979, when he was promoted to vice president of RIT, NTID's host institution. He retained his NTID director's position. Dr. Castle also serves as NTID's chief institutional liaison with the executive and legislative branches of the federal government and with national and international constituencies related to deafness.

A native of Watertown, S.D., Dr. Castle obtained his undergraduate degree in 1951 from Northern State Teacher College in Aberdeen, S.D. He later earned a master's degree at the University of Iowa and his doctoral degree in speech pathology and audiology from Stanford University.

Dr. Castle had extensive teaching experience at the college level before coming to NTID in 1968 as assistant to the vice president and as director of NTID's Division of Instructional Affairs. He was named dean of NTID in 1969 and director in 1977.



Dr. William E. Castle

NAD Chooses Hurwitz President-Elect

Dr. T. Alan Hurwitz, associate dean of the National Technical Institute for the Deaf (NTID) at Rochester Institute of Technology (RIT) has been chosen the new president-elect of the National Association of the Deaf (NAD). He was elected at the Association's Centennial Convention in Cincinnati, Ohio, July 5, by delegates representing each of the state associations, and by the executive board of NAD.

Dr. Hurwitz will be the 23rd president of the century-old consumer organization, which was established in 1880 in Cincinnati. The stated purpose of the NAD is "... to bring the deaf of the different sections of the United States in close contact and to deliberate on the needs of the deaf as a class."

"I'm really excited to be part of NAD's future," Dr. Hurwitz said. "I see many possibilities for the organization to become a strong leader in the 1980s in the areas of upgrading the quality of life for deaf people and providing quality education for deaf children."

In his position as associate dean of NTID, Dr. Hurwitz is responsible for the Institute's Educational Support Service Programs, which include interpreting, notetaking and tutor training programs, teacher effectiveness training, and educational support services for deaf students throughout RIT. He joined NTID in 1970 as an educational specialist with the rank of assistant professor for NTID within RIT's College of Engineering, and became the director of the Support Services Department in 1975.

Dr. Hurwitz has been active in numerous professional and social organizations. He served as president of the Empire State Association of the Deaf for two terms, beginning in 1975 and continuing through 1979, was a member of the Executive Board of NAD, and has a life membership in the Alexander Graham Bell Association for the Deaf and its Oral Deaf Adults Section.

For further information contact:



Rochester Institute of Technology
National Technical Institute for the Deaf

Public Information Office
One Lomb Memorial Drive
Rochester, New York 14623