

#### An Overview

t was little more than a decade ago that the deaf population of the United States found themselves restricted to vocational and technical education opportunities that were available only in residential schools for the deaf or on the job. The usual deaf adult was lucky to have learned a trade such as baking, shoe repair, woodworking, drafting, or printing while in school or through apprenticeships. Even graduates from Gallaudet College in Washington, D.C. with bachelor's degrees in liberal arts considered themselves fortunate if they found employment readily; and more often than not they ended up in the field of teaching or printing for which they were ill-prepared. Deaf people as a group were either unemployed or underemployed, and vocational rehabilitation counselors did not find it easy to close the files on their deaf clients.

Over the past twelve years vocational and technical education opportunities for deaf persons have broadened dramatically and, as a result, so have their employment opportunities.

In September of 1968 the National Technical Institute for the Deaf opened its doors on the campus of the Rochester Institute of Technology and, in the process, opened the doors of every other college on that campus to the deaf. In September of 1969, Under the co-sponsorship of the Rehabilitative Services Administration and the Bureau of Education of the Handicapped, three regional vocational education programs were initiated at Technical Vocational Institute in St. Paul, Minn., at Seattle Community College, in Seattle, Wash., and at Delgado Junior College in New Orleans, La. All three of these programs are still active and today each serves between 100 and 150 deaf students.

An amendment in 1968 to the Vocational Education Act provided that 15 percent of the federal dollars used to support vocational education at the state and local level must be used for education of handicapped persons. As a result, many community colleges throughout our country have initiated programs in vocational education for the deaf.

Because of NTID's emphasis on the career development of its students, it has grown to be interested in the career development of all deaf people. NTID is interested in having deaf children and adolescents become more familiar with the world of work and careers that are now available to deaf people. NTID is interested in having these deaf youngsters have educational experiences that are work or career-related; and is interested in helping deaf adults add to their vocational and technical skills through continuing education.

It would seem that NTID's interest in these matters is complemented by the career development interests of the Model Secondary School, the continuing education interests of Gallaudet College, the growing interest in mainstreaming and the congruent universal interest in career education, and the new very basic thrust toward equal employment opportunities for the handicapped.

With all these as part of the current status, it can be hoped and perhaps predicted that the future will bring to all of our handicapped people, and, therefore, to all of the deaf, what is today available to every young citizen of Sweden—that is, an exposure to the work world and the community through a blend of career and vocational education programs which begin as early as the third grade.

Certain further emphasis is given to vocational and career interest throughout the remainder of the student's schooling, and once the individual is out in the larger world, life long learning possibilities are provided on a continuing basis. So it should go in the future for our handicapped and, therefore, for the deaf!

Julian L. Custle

Dr. William E. Castle Dean/Director

#### National Technical Institute for the Deaf

NTID is the only national technical college for the deaf.

It is national in the sense that it was created by the federal government and was designed to provide educational opportunities for qualified students from every state in the nation.

It is **technical** because it trains students for careers in technological areas

It is a college because it provides educational opportunities in a post-secondary environment.

It is for the deaf in that it serves people with substantial hearing impairments. Also, in order to teach this special clientele, curriculum and classes have to be designed and/or adapted with the special needs of the deaf in mind.

NTID was created because the deaf population has been underemployed or unemployed historically. It was clear that educational opportunities for the deaf were needed in technical fields, and many people felt that, if given specialized training, the deaf could succeed in many technical careers.

#### NTID is:

a public law—89-36 to be exact. It was established by an Act of Congress and is funded through the U.S. Department of Health, Education and Welfare.

**located in Rochester, New York,** on the 1,300 acre campus of Rochester Institute of Technology.

part of RIT. It is one of the ten colleges of RIT, just like the College of Business or the College of Engineering.

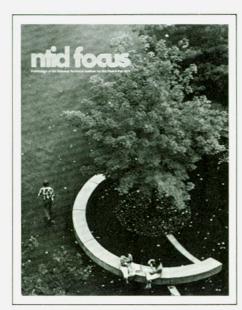
unique, Having NTID as part of RIT is the first effort to educate large numbers of deaf students within a college campus planned primarily for hearing students. It is the only one of its kind nationally or internationally.

young. It was established in 1965, and after several years of planning, programs began in 1968.

growing. The first group of 71 students enrolled at NTID in the academic year 1968-69. The 1979-80 average full-time enrollment of 900 students will represent almost every state in the nation.

exciting. NTID is reversing major trends for the employment of the deaf. To date, 95 percent of NTID's graduates seeking employment have found jobs. Ninety-four percent have been hired in jobs at a level equal to their training, and 84 percent have been hired in business and industry.

searching, creative and changing. Nothing keeps a place more alive and dynamic than the energy and spirit of faculty, staff and students who are united in a common goal, and who are able to be creative and imaginative.



Autumn in New York is a special time for NTID students. Here students take advantage of the spectacular fall foliage and the balmy days of Indian summer. Photo by RIT Communications photographer Rod Reilly.

This is a publication of the National Technical Institute for the Deaf at Rochester Institute of Technology, Rochester, New York.

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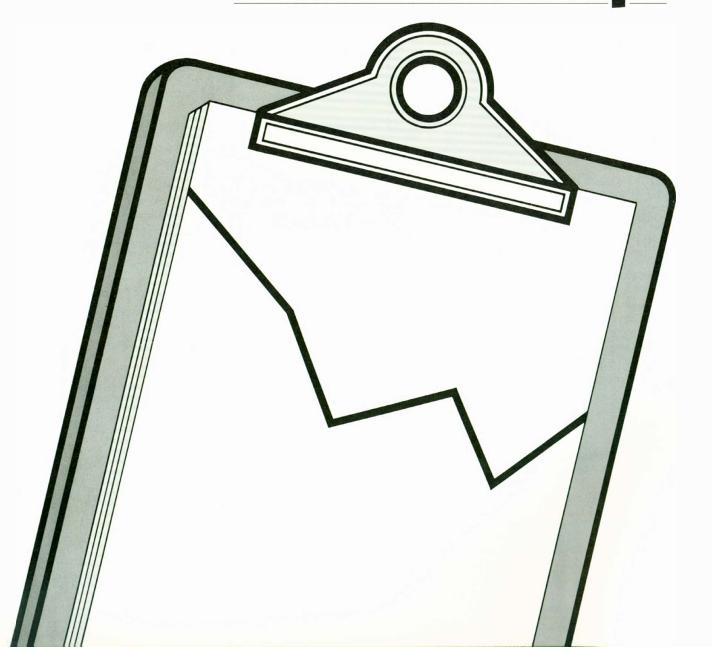
The materials herein were produced in the course of an agreement with the Department of Health, Education, and Welfare.

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## Medical Record Workshop



andy Collier, RRA, medical record department supervisor at Hennepin County Medical Center, Minneapolis, Minn., was one of seven supervisors in the United States to become oriented to the psychology of deafness this past spring. She participated in a two-day workshop at NTID with deaf students who were accepted in a cooperative/work experience at each of their hospitals.

A cooperative/work experience is one in which students spend time working on-the-job to gain actual experience in their field of study.

"We thought a workshop of this kind would help the supervisors ask questions about the experience and get a feel for the students they would be supervising," says Marilyn Fowler, registered record administrator and instructor for NTID's program.

Fred Hamil, chairperson for the Department of Applied Science/Allied Health Professions adds, "The supervisors discussed the expectations for the cooperative/work experience with the students, met with NTID staff to learn about communication techniques, and generally picked up tips to help make the co-op experience as beneficial as possible, both for the student and the hospital."

Other supervisors who attended the workshop were: Melinda Nicholson. RRA. Memorial Hospital, Jasper, Ind.; Bonnie Lee Benes, RRA, Methodist Hospital of Indiana, Inc., Indianapolis; Judy Heidacher, ART, Bethesda Hospital, Cincinnati, Ohio; Mary Ruth McGalliard, RRA, Saint Vincent's Medical Center, Jacksonville, Fla.; Caroline Paige Taylor, RRA, University Hospital of Jacksonville, Fla.; and Sharon Insero, RRA, Highland Hospital, Rochester, N.Y.

Based upon what they learned at NTID's workshop, the supervisors can better design summer programs to expand students' present experiences and skills in the medical record field.

An interesting highlight of the workshop consisted of fitting each supervisor with ear molds to simulate deafness. Since their hearing became impaired, they could better understand the problems deaf people have communicating.



Sharon Insero, (right) RRA medical record department supervisor at Highland Hospital, Rochester, N.Y., gets acquainted with her co-op student, Mary McGualey of Manhattan Beach, Calif.



Judy Heidacher, (left) ART medical record department supervisor at Bethesda Hospital. Cincinnati, Ohio, works with her co-op student, Patti Smith of Cincinnati.

# Medical Grads Do Well

#### Linda Corrado

inda Corrado, a medical records program graduate, has received the Scholarship Award from the Medical Record Association of New York State.

The award recognizes Linda's academic achievement for her 3.84 grade point average and community activity as a volunteer worker with the First Bible Baptist Church of Greece, N.Y.

She is a graduate of the Little Falls High School, Little Falls, N.Y. and lives in Henrietta, N.Y. The MRANYS Scholarship Award is the first of its kind given to an NTID student.

Currently, Linda is employed as a data abstract coordinator in the medical records department of the Highland Hospital, Rochester, N.Y.



Linda Corrado (left) and her supervisor Sharon Insero.

#### Eleanor Greiner

By Sally Lofton Simpkins The Augusta Herald Augusta: Georgia

leanor Greiner is a doer.
The active mother of two boys, aged 10 and 13, she's employed in the medical records department of the Veterans Administration Medical Center, enjoys sports and outdoor activities and is involved in work of the Augusta chapter of the Georgia Association for the Deaf.

Next month she will participate in a week-long leadership workshop sponsored by the National Association for the Deaf. Selected for the summer project after participating in Phase I of the program earlier this year, Mrs. Greiner said her objective is to try to help deaf people to carry their load.

The workshop is designed to train leaders, who, in turn, can help in the development of other leaders.

"Augusta needs someone to be a leader to work with the deaf, so I'm doing it." Mrs. Greiner said through an interpreter. Mrs. Greiner, you see, has been deaf since birth.

Mrs. Greiner, 33, was instrumental in the establishment last November of an Augusta chapter of the Georgia Association for the Deaf, explaining that deaf people tend to "stick together, and the association is a means of their spreading out."

"Deaf people like to asociate with others, but it is difficult," she said, "Hearing people tend to think the deaf are something to be afraid of."

Mrs. Greiner, a native of North Augusta, said she wants to begin teaching sign language to hearing people, hopefully starting with a class at the VA Medical Center.

"Communication is our biggest problem." she said, adding that if the deaf could communicate more with hearing people they could more easily stand up for themselves. It was explained that the silent by-stander is often looked over or forgotten.

"The deaf are very patient," she continued.

According to Mrs. Greiner, there are only two certified interpreters in Augusta.

"We need more than that," she stated. Aiding in her communications at home is a special teletype telephone device which is set up to type out telephone messages and through which she can in turn send messages. The only problem is that the person calling has to have a teletype telephone also

"It would be nice if there were more around but they are hard to get." she said. "If there were more, I wouldn't have to depend on my boys as much."

She said there are only two others in the Augusta area—one at the North Augusta Police Department and the other at the Office of Vocational Rehabilitation.

Speaking of job possibilities, she said deaf people are very skilled and can do many kinds of jobs—if hearing people would give them a chance and not be afraid.

Mrs. Greiner has been on the job at the VA since October and is preparing to take the Accredited Record Technician examination.

A graduate of the School for the Deaf in Cave Springs, Ga. she decided to go back to school in 1974, graduating from the National Technical Institute for the Deaf, in Rochester, N.Y., four years later

The medical records course doesn't normally take four years, she said, but there were several factors which resulted in the extended course. One of those factors was a broken leg. It was broken when she took a spill from her younger son's skateboard. "I'm very involved with my children."

Her supervisor at the VA said she initially "had some reservations" about hiring a deaf worker but added, "it has worked out beautifully. If I had any in the beginning, I don't anymore." she stated.

In addition to her job at the VA and her work with the Association for the Deaf. Mrs. Greiner completed a course in data processing at Augusta College this past spring quarter.

"I passed, but I never thought I'd make it," she said. The major difficulty is again, communication.

"I had a note taker and an interpreter, but it's hard when you're trying to watch the board and watch the interpreter at the same time."



Eleanor Greiner

Reprinted with permission from the Augusta Herald, Augusta, Ga., June 1979



NTID's self-instruction laboratory provides a monitored setting in which students can practice improving their communication skills

## Self-Instruction Lab

ndividualized instruction will become a necessity, rather than a luxury. Because of the great number of people to be taught, the great variety in their backgrounds and finally, the necessity to provide instruction when the learner needs it, the traditional class and classroom model will have to be replaced. The learner must be able to begin when the need occurs and at the place and pace most appropriate for him."

(G. Noar, "Individualized Instruction" Every Child A Winner.")

#### **Practice Makes Perfect**

Improving the communication skills of hearing-impaired students is time-consuming. Repetition plays a big part in mastering speech proficiency, and it usually comes after years of determined application. This effort not only takes a great deal of time for the hearing-impaired person; it also lessens the teaching time devoted to new concepts.

NTID uses a unique, individualized, self-instruction laboratory. It gives students supplemental, independent

classroom practice that helps lessen time demands for the teacher. And it improves student skills.

The Learning Center lets students practice several aspects of communication important to NTID's hearing-impaired population.

At present, the Institute has practice units in auditory training, speechreading, speech, and manual/simultaneous communication.

NTID also is studying the effect of increased practice on communication skill development. One study (Orlando,



The lab is set up to allow students to choose to work completely on their own (top photo) or to get help from an instructor who can aid in their practice (bottom photo).



1975) showed that reduction of articulation errors is directly related to the amount of time spent in instruction. In essence, the more a student practices under highly structured conditions, the more likely he will achieve success in developing communication skills.

#### Diversity of Student Communication Skills

Dr. Donald D. Johnson, director of the Office of Educational Extension, helped to develop the Self-Instruction Learning Center, "Monitored selfinstruction is essential," he says, "if most NTID students are to achieve their communication potential. Success in communication instruction for the deaf requires large amounts of individualized attention."

Communication skill levels of entering NTID students vary greatly. And it's because of this variation that individualized instructional strategies are necessary. "It's almost impossible to group students homogeneously for many types of communication instruction and insure the amount of practice necessary to maximize learning."

Johnson says.

The average student spends about three years at NTID. The Self-Instruction Learning Center gives students a

greater opportunity to develop the level of communication skills they need for academic and career success during this short time period.

#### Learning Center Uses

The Center allows greater scheduling freedom, since instruction need not coincide for large groups (the lab presently operates five days a week; 54 hours per week). It also incorporates instructional materials and procedures closely matched to student needs, and lets students progress at their best rate.

The Center serves approximately 750 hearing-impaired students per year—about 80 percent of NTID's population. The remaining 20 percent have either completed their communication course requirements or participate in an off-campus cooperative work experience.

#### Learning How it Works

Each student gets a brochure that explains the sign-up procedures and use of the equipment. Both hearing and deaf students monitor the lab along with the instructor and are always available to answer questions about lab procedures or instructional materials. Required lab assignments are provided by classroom instructors. The students themselves are responsible for knowing when they are ready to use the Center.

The instructor works with students to monitor their progress and help solve their problems. This personal contact lets the instructor receive feedback about student progress and input for curriculum changes that will improve laboratory materials. It also helps the instructor check student comprehension of classroom content.

#### Laboratory Hardware

The Center has 21 carrels. Each one contains a cartridge storage area, color TV monitor, video-cartridge player, binaural amplifier, audio-cassette unit, headphone (six have attached boom microphones), student work area, posture swivel chair, and master power switch.

The binaural amplifiers provide high-level output independently controlled for each earphone. A protection circuit limits the output to a maximum 137 db. (The binaural amplifiers were designed and manufactured for NTID by the Center for Communications Research, a nonprofit research laboratory located at 1545 St. Paul Street, Rochester, N.Y. 14621. Those interested in securing similar items should contact that organization directly).

The carrels used for speech training are equipped with boom microphones for recording and audiocassette units with both record and playback functions. That way, students can practice both receptive and expressive pronunciation skills and learn to monitor their own speech.

For auditory training, the audio-cassette units have an additional control channel. This channel can record cues which permit students to rewind and advance the tapes to specific places. This is done by using a digitally encoded number on the tape so that upon playback, the three-digit display indicates the material being worked on. The other control signals are programmed stop-and-review functions, the tape can be automatically stopped or continued.

#### Courses Offered

NTID has produced and developed instructional tapes for courses such as Pronunciation, Technical Communication, Refinement of Conversational Speech, Speechreading, and Individual Speech Therapy. Each classroom instructor assigns materials to practice in the Center, which focus on the specific objectives of the course.

#### Future Plans

NTID's Communication Division staff is involved in ongoing research to develop more programs of individualized instruction. The Communication Skills Instructor attends all classes, as new materials are produced for the lab, to update knowledge of course content and insure better service to the students. Soon, NTID hopes to offer copies of these courses to other professionals in the field as part of its Educational Extension efforts to share NTID products.

For more information about the Self-Instruction Center, write Office of Educational Extension, National Technical Institute for the Deaf, Rochester Institute of Technology, One Lomb Memorial Drive, Rochester, N.Y. 14623.

For details about the physical setup and hardware of the Center, write for InfoSeries II. Equipment Designed to Improve the Communication Skills of the Deaf-PB292046/AS, distributed by the National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, VA 22161, at a cost of \$4.75 each.



# Graduates

### National Technical Institute for the Deaf

#### William E. Castle, NTID Director RIT Vice President

#### **Art Department**

Thomas Raco, Chairperson Candidates for Associate in Applied Science Degree

"Rhonda Lynn Gee	Orchard Lake. MI
Mark Warren Hughey	Roslindale, MA
Robin Ann Wysocki	Dudley MA

#### **Business Careers Department**

James J. De Caro, Chairperson Candidates for Certificate

Candidates for Certificate	
Christine Mary Barber Schenec David T. Bennett Chickama Michael Ray Braun Le Suzanne Randolph Donnan Manche Hubert Elfrink Fronte Harold M. Herrington Al James P. Hinchcliffe Stam John Andrew Hovan Jr To Lawrence J. MacDonald Mal Annette K. Meunier Schenec William J. O Connell, Ill Provid Paul Francis Petrie Cincin Paulette Price Broo Joseph Gerard Rhodes Evan Alfonso Mario Sabatelli Binghar Joseph John Scognamiglio	auga GA eeds ND ester. MO enac. MO ustin. TX eford CT edo. OH den MA tady NY lence RI enati. OH klyn. NY sville. IN
Staton Is	1 - 1 6 157

Joseph John Scognamiglio
Staten Island, NY
Marjorie A, Thacker..., New Lexington, OH

#### Candidates for Diploma

Nancy Marie Avery	Orchard Park, NY
Kathy Ann Carpenter	
Christine Ann Clark	
'Sharon Denita Ellis	Cincinnati OH
Stephanie Jean Kandes .	
Jill Ann Lukingbeal	
Annette Therese Madden	
Mary C McGovern	
Corinne Elizabeth Murph	y Niagara Falls, NY
Frederick F Neffle	
Mary Beth Sherman	Metairie, LA
Randi Susan Silverman .	Miami FL
Deborah Ann Thomas	Kenmore NY
Bruce K. Zelek	Yardley, PA
Dean Robert Zimmerman	

#### Candidates for Associate in Applied Science Degree

Barbara Lynn Anderson Rochester, NY
Tracy Roberta Barnes Springfield MO
Mary Marcelle Barovian Cleveland, OH
Catherine Marie Boboly . W. Keansburg, NJ
Mark J. Bower Indianapolis IN
Nowell Boyler Macedon, NY
Marie Ann Campbell Union OH
'Karla Sue Cizerie Girard KS
Thomas Edward Czeslawski Berwyn IL
Debra Dee Dipzinski Davison. MI
Denise Finkelstein Metairee. LA
Becky A Fuller Needham MA
Andrea Beth Gnesin Westwood, NJ
Donna Lynn Gregan Englishtown NJ Debbe Ann Hagner Mt Prospect IL
Howard Kent Hammel Augusta, MT
'Karen Lynn Huggy Chicago IL
Carol Marie HulkaLisle IL
'Joseph E Jambrozy Lakewood. OH
Terry Margaret Johnson St. Louis MO
Linda Margaret Keithline St. Louis MO
Anthony Francis LaRocca Commack, NY
'William B Mathewes Falls Church VA
Charlene Mattox Waycross, GA
Christopher George McManus, Babylon, NY
"Erika Moltzan issessamm Brookfield IL
Linda Napierla Binghamton, NY
'Sigmund S Orlowski Roselle Park, NJ
Teresa Marie Pawlikowski
Mayfield Heights, OH

Teresa Marie Pawlikov	VSKI
	Mayfield Heights, OH
Theresa Adell Perry	Ft Mitchell KY
John Rivera Jr	New York, NY
Blaine David Rupprech	nt St. Marys, PA
Rose Ann Sırıannı	Lewiston, NY
Donald Richard Smoiii	nski. Burton MI
Michael Andrew Spada	anuta Oceanside NY
Paula Kay Stengel	Denver CO
'John M. Toma	Cleveland, OH
Brian J Van Thyne	
Thomas Jeffrey Wille	Menomonee Falls, WI

#### Engineering Technologies Department

Edward Maruggi, Chairperson Candidates for Diploma

Lawrence Francis Anzalone Peter James John Bigotta	
George Oscar Cabouli	.Forest Hills, N
Jonathan Ming Dow	. Boca Raton, F
'Robert Paul Freeman .Jac	kson Heights. N
Behrouz Kabiri	Rochester, N
'Richard Wayne Robert Kue	ebel. Guilford, II
Joseph Anthony Laino	Cresson, P.
Thomas Wing Lam	Bronx, N
Robert Patrick Morris	Corona. N
Randy Joseph Plate F	lales Corners, W
Eric M. Ritz	Baldwinsville, N
Michael Adam Rosko	Water Mill, N
Alan Jay Shopshire	Monroe. N
Charles Leon Smith	Brookville, P.
Peter Stephen Weiss	. Oceanside, N

#### Candidates for Associate in Applied Science Degree

Douglas Alan Casto Carl Vernon Dunaway Daniel Paul Ford Robert Leslie Hatterick Robin Ryan Homer William Elton Kerr David H. Michel Michael T. O'Connor Anthony Thomas Pepe Mark Anthony Scarpelli James Simme Slay Patricia Swart Paul Howard Weiner Don Adrian Wells	Russellville, AFSuperior, W. Cynthiana, KYToledo, OFBirmingham, MCarmel, NYTopeka, KSRingoes, NJOrangeburg, NYLafayette, AL. San Diego, CAVillanova, PAVillanova, PAVillanova, PA

#### Technical Science Department

Fred Hamil, Chairperson Candidates for Associate in Applied Science Degree

Jacqueline Mary Allison Cincinnati, OH
'Sharon L. Applegate Dayton. OH
Allison Rae Atkins Milford. OH
Lynn Helen Benjamin Brighton, NY
Jeff Michael Bennett Mayfield Village. OH
James Marshall Carte Jr Cupertino, CA

*Linda Reinson CorradoW. Henrietta, NY
Stephanie Ann DeQuarto Rosedale, NY
Stuart Marc Fleitman N. Miami. FL
Kathy Ann Fraychineaud Gretna, LA
Dennis Eugene Hicks Eudora, KS
Denise Ann Kulbacki Antrim, NH
Deborah Mary Manley Scranton, PA
Robert Nelson McClung Chicago, IL
Beth Ann Marica Mellor Meriden, CT
Rochelle Suzanne Root Des Plaines, IL
John Patrick Rush Buffalo, NY
Luann Sleeper Suncook NY
*Craig W. SturgenTully, NY
George David Whitfield, Jr Dearborn, MI

#### Visual Communications Technologies Department

Walter Brown, Chairperson Candidates for Certificate

James E. Libman	W. Orange, NJ
Robert Paul Medress	Granada Hills, CA
George Mooney Smith, J	r Clinton, TN





#### Candidates for Diploma

Elkins Park, PA
Erie, PA
San Diego CA
. Addyston. OH
Willingboro, NJ
Brentwood, NY

#### Candidates for Associate in Applied Science Degree

Richard Allen Carrus Dunkirk, NY
James Ray DeBee Industry, PA
William Michael Kenneth Hudson
Ashland, NH
'Raymond J LaFerriere, Jr Springfield, MA
Antonio Jose Neves Rochester, NY
Kerry Anne O'Rahilly Tappan. NY
Jacob Jonathan Schlosser Miramar, FL

Cindy Lynn Whitney . . . . . Longview. WA

Paul Robert Brooks ..... Burlington, MA

#### Degrees for NTID Students Awarded Through RIT Colleges

#### College of Business

School of Business Administration Candidates for Bachelor of Science Degree

James A	Clement		(0)(0)(0-		Ilion.	NY
Thomas J	Ricetti.	15		. Bro	oklyn.	NY

#### Candidates for Bachelor of Fine Arts Degree

James S	Baera	. San Francisco	CA
Allan H	Balston	Wentzville.	MO

Dana Ray Edmondson Lexington, KY	1
Michael James Matter Racine. W	1
Yvonne Vuksich San Jose CA	4

#### School for American Craftsmen Candidate for Bachelor of Fine Arts Degree

'Ronald A Trumble, Jr

Jacksonville Beach, FL

#### College of General Studies

Department of Social Work
Candidate for Bachelor of Science
Degree

John T. Reid ..... Cincinnati. OH

## College of Graphic Arts and Photography

School of Photographic Arts and Sciences

Candidate for Associate in Applied Science Degree

Perry Lee Conley. Jr. ...... Lutherville. MD

Candidate for Bachelor of Science Degree

Thomas Edward Coughlan

New Hyde Park, NY

#### Candidates for Bachelor of Technology Degree

John Henry Loo	S	Scappose.	OR
Margaret Mary N	AcCullough .	Wellesley.	MA

#### Candidate for Master of Science Degree

Andrea Beth Kurs ..... New Rochelle, NY

School of Applied Science Candidates for Bachelor of Technology Degree (Electrical Engineering Technology)

Timothy Joseph Kenney .... Rochester NY John H. Shaver ..... Hockesson DE

#### College of Science

Candidates for Associate in Applied Science Degree

Brent W. Chandler	 Waverly, NY
Dorothy H Wynne	Atlanta GA

#### Candidates for Bachelor of Science Degree

'Andrew D Baker	Westborough.	MA
Nancy J Menefee	Garland	TX
Bichard S Skyer Jr	Park Forest	- 11

#### Institute College

Department of Computer Science and Technology Candidates for Associate in Applied Science Degree

Alexander Pao Chou Hsu Wappingers Falls, NY Stanley C. Chee ....... San Francisco CA

#### Candidate for Bachelor of Science Degree

Diana Pryntz ..... Bronx. NY



Vern Davis, career development counselor, was named Outstanding Staff Member by NTID students



Natalie Gayshun of South River, N.J. is congratulated by NSC President Ray Conrad for being named Miss NTID

## Awards

he 1979 NTID Student Congress Tenth Annual Banquet celebrated the achievements of NTID students, faculty, and staff.

Ralph H. White, president of the National Association of the Deaf (NAD) was the main speaker of the evening. Dr. M. Richard Rose. RIT president. was a guest of honor at the banquet.

Miss and Mr. NTID were Natalie Gayshun of South River, N.J. and Keith Cagle of Portland, Ore They were chosen by their peers as representing the best qualities of NTID students.

Taking top honors as Outstanding Male Athlete of the Year was John Rush of Buffalo. NY for his performance on the RIT golf team. The Outstanding Female Athlete of the Year was Pamela Walker of Kenosha, WISC., a member of RIT's volleyball team.

Outstanding Staff Award recipient was Vernon Davis, career developmental counselor in NTID's Department of Engineering and Computational Technology.

Rick Owen of Hamburg, N.Y. and Aaron Gorelick, Rochester, N.Y., professional interpreter, were named Alice Beardsley Student Interpreter and Alice Beardsley Professional Interpreter respectively.

Ronald Trumble of Jacksonville, Fla., was presented the Roland Vollmer Award in Contract Design. The woodworking major in RIT's School for American Craftsmen was chosen by the faculty citing his outstanding work in woodcrafts.

Frank Duchini of Erie, Pa., and Jim Orr. professional interpreter, were named Best Community Volunteer Award recipients. The Humanitarian Award for staff went to Dr. Harry Lang and Mrs. Bonnie Meath-Lang.



Bonnie Meath-Lang, English specialist, says "Thank you" to the students who voted for her and her husband, Dr. Harry Lang, Allied Health Applied Science Department instructor, to receive the NTID Staff Humanitarian Award.

## Business Careers



s computer technology tucks the financial community further under its wing, the demand for accountants with data processing experience will soar," says a recent article in Computerworld, a weekly newspaper for computer professionals.

NTID's applied accounting program is being modified to respond to this new business trend by focusing on the practical aspects of accounting with an emphasis on data entry skills—skills enabling students to communicate with a computer through a terminal.

This fall more than 70 students began a five-quarter (50 week) core curriculum in the Business Occupations area at NTID.

#### Accommodating the Learner

Modifications in the Business Occupations careers program—accounting and office practice and procedures—came about when studies showed that a number of the students who started the accounting technologies program exited before receiving any form of accounting degree. The original program offered more theory than practical hands-on experience. Current modifications will accommodate individual learner differences and focus on practical accounting skills while incorporating data entry and typing skills into the curriculum.

#### **Employer Sensitivity**

NTID's placement team was instrumental in bringing about current business program changes. According to research they did with NTID graduates in the accounting field, starting salaries of graduates were lower than other career programs, competition for entry level accounting positions was coming from other community college graduates, and the length of time needed to place NTID's graduates was much greater than for other business programs.

"Employers are interested in hiring an accounting graduate who also has general clerical and computer-related skills," says NTID Coordinator of Employment Opportunities
Deborah Veatch. "This option broadens the fields of entry of deaf persons into business occupations."

One study illustrated that when comparing two graduates—one who had data entry skills and accounting skills with another who had only accounting skills—the first was more easily placed and at a higher salary than the graduate who had only accounting. (Both were seeking employment in the same geographic area at the same time.)

#### Job Titles

All students who complete the firstyear core certificate program should get jobs in general clerical fields. Diploma students qualify for jobs as accounting clerks, bookkeepers, and cost clerks. Students who receive an associate's degree can get jobs as accounting technicians and audit clerks.

#### A System Based on Progressive Success

Students who demonstrate competence at the certificate level will enter the Office Practice and Procedures or Applied Accounting diploma programs. After successufly completing the diploma level, the student can move toward the associate's degree.

This system develops a pyramid of skills so students move from a very general base of skills to a more specific concentration. (Students who already are enrolled in NTID's accounting program can opt to complete the original program or enter the revised curriculum.)

Dr. James DeCaro, then acting chairperson of Business Careers, says. "The new program is a competency based program. Everyone moves up progressively passing their way through the program. It's a philosophy of progressive success instead of progressive failure."

#### Student Impact

"The overall influence of the program should be positive since the new approach will give learners the opportunity to develop a wide range of skills in accounting, data processing and typing," adds Dr. DeCaro.

It also will alleviate the problems of credit loss when a student changes majors because the student has sufficient time to make a career decision while working through the core courses.

#### Transfer Options

How will the new career options affect a student's chance to transfer to other RIT colleges for advanced degrees?

Dr. DeCaro feels that students probably will lose some credit when transferring to the accounting program of the College of Business; however, they have a good chance of transferring more credit into the College's business adminstration major.

"These program changes will strengthen the overall Business Careers Department by bringing this section of the department much closer to the data processing section since the more automated aspects (computer and data entry) are being emphasized in the modification." adds Dr. William Hinkle, associate dean for Technical and Professional Education.



Eisenhower College

## RI's New College

isenhower College, founded in Seneca Falls, N.Y. in 1965 to honor former President Dwight D. Eisenhower, has become the 10th college of RIT

Located on 286 acres about an hour's drive from Rochester, Eisenhower has been an independent, coeducational liberal arts college offering programs toward a bachelor's degree. Its fall enrollment is about 600 students.

The core of its academic program is World Studies, a survey of Eastern and Western culture from ancient to modern times. Eisenhower offers concentrations in anthropology, art. biology, chemistry, economics, Spanish, French, German, history. literature, mathematics, music, philosophy, political science, psychology. and sociology.

RIT President M. Richard Rose pointed out that the Eisenhower College campus will enable RIT to selectively expand programs that it cannot expand on its present suburban Rochester Campus.

"Eisenhower also complements RIT's national and international activities in science and technology with its World Studies orientation," Dr. Rose added.

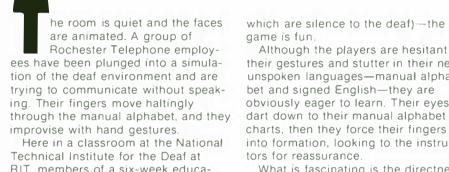
RIT is nationally and internationally renowned for its programs in the arts. graphic arts, and photography, as well as the education of more than 950 hearing-impaired students through NTID.

#### Sharing The Resources

To deal with the long-term future of Eisenhower as part of RIT, a special planning group was established. The academic planning committee is made up of 10 members of Eisenhower's faculty and staff, 10 members of other RIT colleges, and project director Dr. Thomas Plough, who is the associate vice president of Student Affairs at RIT. NTID's representative is Dr. Lee Murphy, coordinator of NTID Continuing Education.

"Imaginative program ideas can help to assure that the future of Eisenhower as a college of RIT is characterized by genuinely distinctive academic offerings which neither institution would likely consider in isolation from the other," said Dr. Todd H. Bullard, provost and vice president for Academic Affairs at RIT.

# Telephone Pioneers



RIT. members of a six-week educational opportunities program (EDOP) course—sponsored by the Genesee Chapter Telephone Pioneers—are gathered for their second meeting. "It's a Deaf, Deaf World" is a game created by NTID to introduce people who can hear to the world of those who can't

The setting is a simple one: two rooms of formica-topped tables and chairs. Student instructors and aides all but one of them are deaf-are seated at various situations: Information Desk, Registration, Hotel, Airport, Job Placement, Social Supplement Income, Hospital Admission and Classroom. The object of the game is to visit all the stations and successfully communicate with the instructor or aide at each. At the end of each session, points are awarded to the

The situation is not a comfortable one. As one Rochester Telephone player put it just before he crossed the threshold. "It's kind of scary." But once players are immersed in the game and become accustomed to the stillness of the room—to the shuffling of feet, the sound of chairs being pulled in and out, the rustling of paper and the institutional hum of fans, lights and generators, all punctuated by sighs, giggles and groans (and all of

which are silence to the deaf)—the

Although the players are hesitant in their gestures and stutter in their new unspoken languages-manual alphabet and signed English—they are obviously eager to learn. Their eyes charts, then they force their fingers into formation, looking to the instructors for reassurance.

What is fascinating is the directness of the communication. Players are compelled to look into the eyes of the person with whom they are conversing, maintaining constant eye contact to see if the intended message has gotten across.

Faces become more expressive and alive: the players are really reaching out to make themselves understood. Even while waiting for places at the different stations—there are 15 places and about 25 participants—the players seem to smile more at one another, and they experiment among themselves in their new mode of communications.

The Rochester Telephone employees drawn to this program have a wide range of jobs within the corporation. Among the areas represented are accounting, customer services, engineering, computer operations, special services, toll investigation, and traffic, Several employees have brought along their children, and one spouse is

The motivations for joining the project vary as well. In answering a questionnaire prepared by Barbara Czarnecki, some participants expressed the desire to understand and relate to deaf customers. Some wanted to be able to communicate more effectively with the deaf

Praising the participants. Myra Wein of the division of general education says, "They've been absolutely great enthusiastic and genuinely interested. It's been terrific working with them."

The NTID coordinator remarks that "It's a Deaf, Deaf World" is often frustrating for groups new to the deaf environment. "But there wasn't that kind of frustration for the Rochester Telephone people," she says. "They worked at it and were very appreciative afterwards.

The student instructors and aides have also commented on the spirit of the Rochester Telephone group. After the simulation, one student told Barbara Czarnecki that the group has been the friendliest they'd encountered.

And Ms. Wein adds that the deaf students also gain from the interaction. The underwriting of the project. Ms. Wein says, "is part of our job in a way. We want the greater community to understand the deaf.

To express their gratitude to NTID for the program, the Pioneer EDOP Committee is planning a grand tour of Rochester Telephone for their instructors and aides at the close of the six weeks. There will also be a social hour for all NTID and Rochester Telephone people involved in the project,

When the course comes to an end in early May, participants will be encouraged to continue their studies on their own and in other local programs. The student-run NTID Free University, for one, provides the public with sign classes three terms a year, in the fall, winter and spring, And next year, Alex Volta says, the course may even be accredited.

The deaf will continue to inhabit the silence of room 2185—"It's a Deaf. Deaf World." But now that a few

Rochester Telephone employees have visited that world and learned the elements of manual communication, perhaps a lasting dialogue between Rochester Telephone and the deaf community can follow,

The EDOP course had its beginnings in the late fall, when the Pioneers approached Barbara Czarnecki, special accounts representative-marketing, to investigate possibilities for a sign language course. Barbara had been enrolled in NTID's Free University, a student-run evening program of sign instruction,

In January and February—chiefly through the joint efforts of Barbara Czarnecki and Myra Wein, assistant to Dr. Bruce Peterson, the NTID associate dean of general education—the Pioneers' project was born.

EDOP Committee Chairman Alex Volta, assistant manager of special accounts, handled much of the background organization for the Pioneers. Larry Arthur, chairperson of NTID's manual simultaneous communication department, and Helen McCabe, NTID community services coordinator. played major roles in the development of the course.

Originally, NTID's representatives had received the Pioneers' proposal with polite interest and a certain skepticism. A similar program had been instituted upon the initiation of the Southtown Plaza Merchant's Association, and it had been quite successful. But the motivation was clear—NTID students came often to shop at Southtown, and the shopkeepers were unable to communicate with these customers.

There was no clear-cut connection. however, between the Telephone Pioneers and NTID other than the

common work in communication. But in time NTID became convinced of the seriousness of the Pioneers' interest and offered to underwrite the entire program.

It was felt, too, that the Pioneers were a special case—there is a standing Pioneer task force serving the deaf, which Dr. Peterson co-chairs with Pioneer Past President Dick Stoetzel. manager of special services.

Arrangements for the six-week program began to solidify. An outside limit of 30 participants was set, a number that NTID could accommodate comfortably. The first three weeks would be spent in introduction to the deaf environment: Orientation. "It's a Deaf, Deaf World," and a discussion session with deaf students, each Monday meeting lasting three hours at

After this, four weeks would be devoted to instruction in sign language, with two meetings of one and a half hours per week, to be held at Rochester Telephone. At this point, the class would be broken up into three smaller groups of no more than 10 participants in each, so that instructors would be able to give personal attention to all the students. Signed English—which translates word for word—and the manual alphabet—which is letter for letter—comprise the curriculum. The more advanced American Sign Language (AMSLAN), which is idiomatic and conceptual—and more universal—is a topic for later study.

Reprinted from "Tieline," Rochester Telephone Corp. newspaper, May 1979

## Numerical Control

ince World War II, many national, regional and local surveys have shown that when the American economy is strong, there's a shortage of skilled labor, especially in the machining areas of manufacturing. And, despite today's inflationary problems, that's still true.

One of the first programs developed by NTID to help train qualified deaf people for skilled technical jobs was our Manufacturing Processes Program. As a result, we have many qualified graduates, including those in the field of numerical control technology.

#### High Placement Rate

Today, our career placement program continues to enjoy one of the highest success rates of any college in the nation. Of all NTID graduates entering the job market, 97 percent have been placed in jobs—93 percent in jobs commensurate with their educational levels. Many of them, such as our numerical control graduates, are now working in jobs never before held by deaf people. At least three graduates in the Class of '78 are working in numerical control jobs:

- David Heyman is employed at United Pumps, San Jose, Calif.
- Robert Rehbeck works for Luebke Auto Screw Machine Corp. in Brookfield, Wisc.
- Hal Simard works for Varian Industries, in Walnut Creek, Calif.

At NTID we firmly believe that our hearing-disabled young men and women are perfectly capable—in areas of intelligence, concentration, curiosity, and ability—to learn technical skills so that employers can now tap what was previously an underpaid, overlooked and underemployed wealth of talent.

By placing in our manufacturing process lab machines and processes not usually found in traditional school shops, we're able to provide paths to satisfying careers to our NTID students. Our automatic screw machine, plastics machines, welding and sheet metal machines, a 3D Pantograph, a complete modern N/C machining center, an electrical discharge ma-

chine, and a punch press, in addition to the usual traditional machines. help us teach skills which have lead to more job options for our students.

#### Nature of the Program

The Manufacturing Processes Program is designed to provide NTID graduates with machine skills that will let them function productively in a typical manufacturing environment. Graduates from this program can operate and set up all the basic machine tools used in the manufacturing process. They also have had hands-on experiences with advanced non-traditional types of machines.

#### Length and Scope of the Program

The Manufacturing Process Program is divided into two separate phases, each of which lasts 270 hours, or three academic quarters.

In Phase I, students attain skills on traditional machine tools and complete three course levels in algebra and blueprint reading, geometry and trigonometry.

Phase II is devoted to advanced skills and experiences with the non-traditional types of machine tools. Students learn to work with electrical discharge machines, thermoforming plastics, automatic screw machine, a 3D Pantograph, and the bench turret lathe. Heat treatment, some numerical control programming and machining, welding, advanced precision measurement, manufacturing analysis, and metallurgy courses are also included. Many field trips also are scheduled in this phase.

Successful completion of these courses, plus basic drafting and two trigonometry courses qualifies the student for a diploma in manufacturing processes. Once a student completes the diploma requirements, he/she may enter a two-quarter sequence of advanced numerical control programming, set-up, and operation. Completion of these courses qualifies the student for a diploma in numerical control.

Once a student begins the concentration on numerical control, the class assignments get increasingly specific and intensive.

The heart of numerical control training for NTID students is the Moog Hydro Point Model 2000 milling and drilling machine. The unit has these features, among others:

- Automatic tape punch integrated into the control for student preparation or editing of programs
- 300 ipm rapid traverse in all three axes
- Repeatability of +.003" (+.008mm) on all axes
- Fixed machining cycles for drilling, boring, tapping and linear and circular milling
- Random selection 24-tool automatic tool changer
- Full hydraulic feeds, assuring zero backlash

#### On-The-Job Success

The quality of tooling NTID students have available is part of the reason for their on-the-job success. Comments from employers of recent graduates bear this out:

- Robert Rehbeck works on a Warner-Swayze numerical control machine at Luebke Automatic Screw Machine Corp. in Brookfield, Wisc. He helps make servo-sleeves, and handles advanced work with hydraulic pistons with .001 in. diameter tolerances. His supervisor, Glenn Wallschlaeger, says he learns fast and reads lips well. "Robert has a good attitude, is very quality-conscious, and likes the challenge. He caught on fast during the training program we set up for him and even does work on another NC machine. It's clear to us that he had a good background in the skills we need. During his initial training we asked for help from an interpreter from an agency, but after the first week the interpreter wasn't needed."
- Dave Heymann works at United Pumps in San Jose, Calif. His supervisor, Kenneth Clarkson, says he doesn't make many mistakes and is very conscientious. "We don't have to hound him that he's not on his job," Mr. Clarkson says. "He's not working on numerical control right now because it's our policy to have every employee work at a variety of

Jobs to see how mechanically inclined they are, then consider them for our apprentice program. But he's working on a radial drill, and is performing some very complicated operations on the equipment such as drilling angles. In fact, Dave is able to help communicate with the lead man on that machine, who is totally deaf but who can't read lips as well as Dave can."

 Hal Simard works on a Moog numerical control drilling machine for Varian Industries in Walnut Creek, Calif. His supervisor, Chuck Goodson, says he's very alert and careful about his work. "You rarely have to check Hal's work," he says. "He's very methodical about doing the setup and similar work. We're very happy with him."

Numerical Control Firmly Established Several years ago, numerical control was a relatively new manufacturing concept in the machining industry that came about as a result of the great technological advances in our spaceage industries. Numerical control was developed to solve the problems discovered in making increasingly complex machine tools for the aerospace industries. Today, NC machining is firmly established in industry.

Most students graduating from NTID's Numerical Control course will not simply walk into an advanced programming job after graduation. The degree of sophisticated knowledge needed for such a job requires most NC programmers to go through an extensive apprenticeship.

As we see it, the most important thing NTID provides its students is "the climate for learning."

We give our students the chance to work on sophisticated equipment using the latest techniques so that when they enter the job market they are at least aware of these factors and are not overwhelmed when they report to their first jobs.

Co-op Work Experience Required Another reason NTID students do well on the job is the co-op work experience required as part of their college program. Though not formalized in the Manufacturing Process Diploma Program, each student must spend at least one semester or summer working in a job related to his major. One numerical control student who did this recently is James Farmer. He worked at the Naval Surface Weapons Center in Silver Spring, Md., during his summer vacation, and won the company's Summer Aide Award."

In recommending Jim for the award, his supervisor said:

"James has demonstrated outstanding performance in accomplishing all the tasks assigned him. These have included cataloging, inventory, cleaning and storage of precision tools normal to a machine shop. In addition, he has manufactured hardware to conform to drawing specifications supplied by the engineering staff. This has included converting raw stock to the finished product by using lathes, mills, drill presses, grinders, etc. James has always been punctual and his attendance record is perfect. He has cooperated fully with both co-workers and supervisors, worked industriously and has at all times been pleasant and courteous.'

The decision NTID made a few years ago to include a numerical control program continues to pay off. The benefactors: deaf students and their families, employers and, to be sure, the people of America.

by Charles Barron, Associate Professor NTID Engineering Technologies Dept.



Associate Professor Charles Barron (right) instructs a student on the finer points of the Moog Hydro Point Machining Center.



NTID graduate Hal Simard on the job at Varian Industries in Walnut Creek. Calif



NTID graduates share their on-the-job experiences during one of the workshops at the fourth annual Mini-Convention.



## Convention

TID held its fourth annual Mini-Convention in April. "The content and direction of the convention changed this year," notes Dr. Ross Stuckless, director of the office for Integrative Research and co-chair-person of the Mini-Convention.

"This year our intent was to provide a forum for people to share ideas, issues and concerns rather than formal presentations of papers," he explains. "We added discussion sessions which focus on problems raised by individual staff members. These sessions afforded people with similar concerns the opportunity to come together and, in some cases, to continue their dialogue beyond the Mini-Convention."

NTID's Mini-Convention has become an annual tradition. Its purpose is to enable faculty and staff to share information and exchange ideas about deaf students at RIT. The convention also is an occasion for staff to prepare and present information to an audience of friends and colleagues.

The 1979 program featured three plenary sessions and seven general sessions, each of which contained four or more concurrent activities. General sessions included panel discussions, demonstrations, workshops, presentation of papers, and topical discussion groups.

The three plenary speakers included Dr. George Propp, associate director, media development project for the hearing-impaired at the University of Nebraska at Lincoln; Dr. William E. Castle, NTID director; and Dr. Barry Griffing, associate state superintendent for public instruction, Sacramento, Calif.

Members of NTID's National Advisory Group also attended the Mini-Convention. The National Advisory Group serves in an advisory capacity to the director of NTID in all matters of growth and development of the Institute.

Steve Dingman

## Outstanding Teacher

ulie Cammeron, an NTID associate educational specialist on the General Education Support Team, is one of three RIT faculty members who received the Eisenhart Award for Outstanding Teaching this past year.

The purpose of the Eisenhart awards is to encourage the professional growth and development of RIT faculty and to specifically recognize those members of the academic body who contribute most to enhance student learning.

The highest honor RIT can give for faculty achievement is named for the late M. Herbert Eisenhart, former president and board chairman of Bausch & Lomb. Inc., and a member of RIT's Board of Trustees for more than 50 years. The Eisenhart award includes a \$1,000 cash prize.

At 32, Julie is one of the youngest professors ever to receive the coveted award. A strong proponent of experiential education, she has developed a multi-media course called "Introduction to Sociology" that has involved more than 1.000 deaf students in experiential learning activities.

"It's a non-traditional approach." Julie says. "Students vote on what they're interested in examining. It's very democratic."

Her spring quarter, 1979 class chose to take a close look at how people cope with death and dying. Julie and her class traveled to Buffalo, N.Y., for an all-day session with Compassionate Friends, a group of parents who have lost one or more of their children either through accidents or illness. Students learned how these people dealt with and adjusted to the death of a loved one.

Julie says one NTID student during that session shared a recent traumatic experience. He had watched a friend of his—who he had been walking alongside—be struck and killed by a car.

"It was an incredibly intense moment." Julie adds. "He told the group he had been searching for a purpose for her death. He asked. 'Is there a purpose to death?' He was able to talk his feelings out and the group helped him find a purpose for her death—that because she was such a good person, he would remember her and try to emulate her in his own life."

"There's a bond that's created in the field that is much harder to duplicate in the classroom," she says. "My class is often gone from campus for 12-14 hours on one of these trips."

The Great Falls, Mont, native's involvement with students is unprecedented at NTID. She is the only faculty member to have lived in the NTID residence halls for four years.

Julie recalls. "At Gallaudet College I'd gone through two years with people saying 'This is how deaf people learn. This is how deaf people are." (She joined NTID in 1972 after completing a master's degree in the education of the deaf at Gallaudet College.)

"I moved into the dorms because I felt experience was the best teacher."

During 1972-1974, Julie was responsible for all crisis intervention at NTID including medical, legal, and social problems. In addition, she designed and implemented a speaker series in 1978 that now brings newsmakers to NTID. She also established the General Education Learning Center in the dorm residence, a much-used tutorial service for students in general studies courses.

Julie was nominated as Outstanding Staff Member at NTID three years in a row and was named Outstanding Staff Member in 1974. She used her Eisenhart prize to "shoot the Colorado River rapids in the Grand Canyon, Ariz."

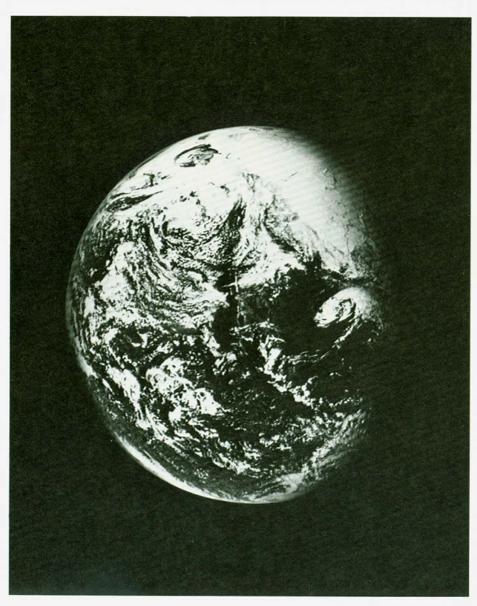
"We traveled 225 miles and went over 200 rapids in 12 days of river rafting." Julie says. "The trip was a life-time dream."

Steve Dingman



Julie Cammeron, RIT Outstanding Teacher, always finds time to talk with students

## World Congress of the Deaf



ive professionals from NTID attended the Eighth World Congress of the World Federation of the Deaf June 19-28 in Varna, Bulgaria, on the Black Sea coast. These were Dr. William E. Castle, director; Dr. Diane Castle, telecommunications specialist; T. Alan Hurwitz, associate dean, Educational Support Services; Jane Bolduc, business careers counselor and Loy Golliday, General Studies Language and Literature professor, Including a number of participants from Gallaudet College, the U.S.A. was well represented with a total of about 40 Americans.

The World Federation of the Deaf is like a "little United Nations of the deaf," although its objectives are limited to influencing and advancing the welfare of the deaf all over the world. These include exchange of information on programs of and for the deaf, new technology, and general enhancement of the socio-economiccultural status of those with hearing impairments. Membership representation is by one national organization per country, other organizations within a country may affiliate through the nation-wide organization. For example, the National Association of the Deaf represents all American groups, and organizations like NTID, Gallaudet College and so on can affiliate through the NAD. About 70 delegates attended the WFD Assembly.

The World Congress of the Deaf, sponsored by the WFD, is comprised of nine commissions, including Arts and Culture, Communication, Medi-

cine and Audiology, Pedagogics, Psychology, Social Aspects of Deafness, Spiritual Care, Technical Assistance to Developing Countries, and Vocational Rehabilition. Each section has an international president and secretary. The Pedagogy Section. with 100 papers presented, has Dr. Mervin Garretson of Gallaudet College as international president. More than 4,000 persons were registered for the combined WFD and World Congress. Most sessions were held at the Palace of Sports and Culture and the Higher Institute of Economics, about six miles from our hotel in Varna.

Dr. William Castle presented a paper on current trends in technical and educational programs in America. Dr. Diane Castle gave an illustrated lecture on telecommunication devices. T. Alan Hurwitz presented a paper by Dr. Milo Bishop on "NTID's Approach in Developing Personal and Social Skills of Deaf Students." Miss Bolduc's paper was entitled "Using the Decision-Making Model to Choose a Career." Mr. Golladay spoke at the Art and Cultural section on drama and status of sign language in America. the TV caption decoding device due in 1980, and several related matters, besides being asked to read one of his poems which honors interpreters for the deaf. All NTID presentations were well received and led to many questions and discussion.

An international sign language called Gestuno, with selections from many regional systems, is being developed. Since vocabulary is so different in spoken languages, and since finger spelling is different too among deaf persons in different countries, finger spelling has not been practical as a part of Gestuno. For this reason, users of American sign systems were able to have things "spelled out" in detail much more completely than almost any other group. Some other nationals who know English as a second language and some American signs, were often seen using our interpreters.

World Federation President
Dragoljub Vukotic, who is well known
in American deaf circles, was reelected,
as was Dr. Cesare Magarotto of Italy
as secretary. Vukotic, a Yugoslavian, is
rounding out 25 years as head of the
WFD.

Bulgaria is a sort of crossroads between southeast Europe and the mysterious East. Reactions to the Bulgars among our visitors were mixed. A few found them rather grim and uncommunicative. Some, espe-

cially the deaf, did not find them so in general. With so many different languages spoken by the tourists from all over Europe and the near East, gestures and a few standardized signs seem to be a sort of *lingua franca*. even among hearing people, for communication of simple wants. When only one key was allowed each deaf couple at the Varna Hotel on registering. someone put on a vivid act to show how anyone locked out would pound on the door and wake up everyone else on the same floor. They got the extra key next morning!

Although Gestuno presented disadvantages compared to American signs at Assembly meetings of the WFD, it was relatively satisfactory for casual conversation among deaf people of different nationalities. In fact some Americans surprised themselves with their unexpected virtuosity with mime and impromptu signs, especially in describing absurd situations they found themselves in at different times. Laughter was common at informal meetings of people from different lands. There wasn't any cold war evident.

Outside of the tourist hotels, most restaurants seemed to serve only one meat dish-and most of the deaf Americans became thoroughly satiated with the pork served at the nearest place to the Sports and Culture Palace where we met. The Gestuno sign for pork is a twisting of an imaginary snout, like a pig. This was easily combined with a somewhat impolite American exclamation that is signed much the same, and which was seen occasionally at lunch time. White wine and Polish beer were excellent, but many of us were looking forward to drinking safe American water and milk on our return. We were a little wary of imbibing much of the tap water, which, however, we were assured is quite safe to drink.

Air conditioning seemed non-existent. One disappointment was that the theater reserved for drama and pantomime competitions held only about 300 persons and was sold out in advance the first day or so. The World Congress seemed a good excuse for a sort of national holiday week for the Bulgarian deaf, and they flocked into Varna as might be expected.

For the deaf at least, the changeover to a Communist government in 1944, with its highly programmed services, was an improvement over the previous situation. Formerly there was only one small school for the deaf in the whole country, but we were told there are now more than a dozen. There are thirteen establishments where deaf workers are concentrated in jobs in what might be termed sheltered workshops. One in Varna which we were able to visit, had deaf women and girls operating sewing machines at what seemed like very simple work. Bulgaria is proud to claim that there is no unemployment among its deaf, but Americans would consider such conditions as paternalistic and demeaning. As many as 40 percent of Bulgaria's deaf population work "outside" with the hearing.

For the average deaf person, advancement is very unlikely, several of them said, but there are some exceptions.

Organized sports, such as soccer, basketball and volleyball, swimming, wrestling, track and field, and chess, are popular. Hiking and "tourism" also help to bring deaf persons out of any tendency to isolate themselves. Folk dancing is extremely popular, and is promoted in every possible way. There is a national reverence for Russia, and we saw at least half a dozen monuments to the Russian army.

Only recently have the Bulgarian deaf been able to obtain licenses to drive motor vehicles. We saw very few automobiles, and those were mostly cheaper Russian models. Many were parked and covered with heavy canvas, tailored to fit the car contours. Long two-section buses, with a swivel connection in the middle, were standard for transportation.

Throughout the week I was mystified by things happening on the buses which I usually took to meetings. One day I offered my seat to a woman carrying a small child. She refused my offer, but accepted a seat from the man behind me. Six or seven other times people insisted on offering me their seats-both men and women. At least once a middle-aged woman was so insistent that, to preserve the peace and tranquillity of the international situation, I sat down. Later someone told me that white-haired older people are highly respected in Bulgaria. (Besides the yogurt diet, this is probably another reason there are so many Bulgarians aged up in the nineties, if the reports on gerontology are correct. But Bulgaria has drawbacks for retirement—at least for this elderly Yank.)

by Loy Golladay Associate Professor NTID Academic Dept. for General Education



pproximately 140 leading specialists in deaf education, speech pathology, audiology, and language met in Rochester this past June to share their perspective on speech assessment and speech training for deaf students.

The three-day Institute on Speech Assessment and Improvement was sponsored by the NTID Communication Division and was jointly coordinated by Dr. Joanne Subtelny, NTID professor of speech pathology, and Dr. Lee Murphy, coordinator of NTID's Continuing Education program. (Dr. Murphy formerly directed the teacher preparation program in the Education of the Deaf at the University of Tennessee.)

"The objectives of the meetings," explained Dr. Subtelny, "were to review techniques in speech training for hearing-impaired people; to critique current programs designed to educate speech/language pathologists and teachers of the deaf; and to formulate recommendations to improve training of these professionals."

The participants placed special emphasis on the need to revise existing programs designed for professionals who are now being trained to teach speech to deaf children and adults. Present teachers of speech also need to have their skills and competencies updated to keep abreast of new teaching strategies.

Highlights of the sessions included presentations on current diagnostic procedures, videotape demonstrations of strategies used for teaching speech at the elementary through post-secondary levels; and presentations on the relationships between audition, speech, and language development in the deaf child.

The closing session chaired by Dr. Milo E, Bishop, NTID dean, focused on a panel discussion of recommendations to improve personnel preparation. The panel included noted professionals from the Clarke School for the Deaf. (Mass.); Central Institute for the Deaf. (Mo.); University of Oklahoma Health/Science Center, Columbia University, (N.Y.); Fontbonne College, (Mo.); and the John Tracy Clinic, (Calif.).

The panel addressed three major areas: the recruitment of competent individuals into the profession, the preparation of personnel, and the establishment of high-level professional standards.

Proceedings from the Institute will provide an extensive resource of background information on the topic, a summary of current research, presentations of new techniques, and a call for new standards for certification of these professionals.

The proceedings will be published within the year and copies will be available from the Alexander Graham Bell Association for the Deaf, Inc., 3417 Volta Place, N.W., Washington, D.C. 20007.

# Romeo (S) Juliet

he NTID players made a rare entry into classical theatre with the NTID Theatre production of William Shakespeare's Romeo and Juliet performed on consecutive weekends in May.

One of the world's favorite plays, Romeo and Juliet tells a story of two passionate, young lovers who are caught in the middle of an ancient hatred between their respective families, the Capulets and Montagues, with tragic consequences.

The fate of Romeo and Juliet is not their fault, but their misfortune, "For never was a story of more woe, than this of Juliet and her Romeo," wrote Shakespeare at the play's ending.

The actors wore stunning 15th century period costumes secured from the

same firm that outfits the Royal Canadian Ballet Company for Shakespearean productions.

The two lead roles—Romeo and Juliet—were played by NTID students. Keith Cagle, Portland, Ore., and Mary Beth Barber, Schenectady, N.Y.

The performances of Kevin Nolan Sr., Career Opportunities Specialist, playing Lord Capulet, father of Juliet, Kathy Buechel, NTID interpreter, playing the nurse, friend of Juliet; and Matthew Moore, Indianapolis, Ind., playing Mercutio, Romeo's close friend; were particularly impressive.

Other NTID performers included Timothy Clark, Palatine. III., Paulette Ann Price, Brooklyn, N.Y.; Audrey Kramer, Springfield, Mo.; Mitch Mahar, Rochester, N.Y.; Duane Jackson, Riverside, Calif.; Pamela Lloyd. New York, N.Y.; Michael O'Connor, Topeka, Kan.; Mary Vreeland, Elkhart, Ind.; Sheila Griffin, Houston, Texas; Harry Woosley Jr., Louisville, Ky.; and Juan A. Martinez Jr., N. Hollywood, Calif.

Hearing actors from the RIT and Rochester communities were Ed Alletto, Robert Sutherland, Douglas DeJohn, Virgil McCullough, Mark Restey, Tim Steinhausser, Rod Reilly, David Leite, Judy Conway, Katie Oberlies, Bette Kober and Peter Nicolois. They acted in the play and provided voices for deaf actors.

Steve Dingman



Keith Cagle and Mary Beth Barber as Romeo and Julie



# Jeff& Jerry Cohen

t's not every day that twins attend college together—especially if they're both hearing-impaired and attend an unusual college like NTID.

But that's the case with Jeff and Jerry Cohen, Lincolnwood, III., both of whom are majoring in the Social Work program of RIT's College of General Studies. Both are about as active as students can be. One has helped inmates at the Monroe County Jail qualify for high school equivalency tests. The other has taught maple sugaring and gourmet cooking. And that's just a sample of outside activities they engage in.

Jeff plans to direct his career in social work through a combination of administration, counseling and people contact, probably starting by working with juvenile delinquents, the elderly, or the deaf, at an agency. His major interests lie in working with people and designing programs. His General Studies service courses have given him plenty of help in understanding people better: Sociology from a Pan-African Perspective; Religions in Society; The Italian-American Experience; and Psychology of Human Adjustment. He's also trying to learn to play the guitar, under a new program NTID just developed—teaching deaf persons to play musical instruments.

#### Tutoring Inmates

Jeff has tutored prison inmates in math English and General Studies. He used to work with "non-sentenced" inmates—those in jail awaiting trial because they can't afford to meet the bail. "Some of the men have been there nine months—even a year-and-a-half, waiting for court time," he says. "But they keep getting postponements." He then began tutoring sentenced people. "I usually worked with one person mainly on math and basic English. This

person has skipped classes since high school. People like him have gotten little bits of everything, but they've rarely understood anything really well."

Jeff likes to work with the inmates for a variety of reasons—but most important because it helps him learn how they feel. He says his experiences with the inmates have helped in his courses, especially in psychology and the field work study required of social work majors.

Difficulty Understanding Teachers

He chose NTID at the suggestion of his twin brother, Jerry. Jeff had gone to a two-year community college in a Chicago suburb, but was having some difficulty in understanding a few of the teachers because they had accents, which made it difficult to read lips. Other teachers were too softspoken to be easily understood. Eventually Jeff was forced to drop a few of the courses and was even considering dropping college altogether. But his brother was already attending NTID and convinced Jeff to try it in the summer of 1977.

For recreation Jeff likes volleyball and basketball intramurals. He also handles the job of editor of the student paper, *The Observing Eye*, which takes about 15 to 25 hours a week.

Jeff likes the support services provided by NTID but would like to see more development and remedial work done so that more NTID students could attend more classes in the other colleges of RIT. He'd also like to see more courses designed so the students "could understand themselves a little better, rather than just take the courses to complete the requirements."

New Theatre Experience Planned Jeff's brother, Jerry, has worked with the RIT Student Association—as senator—in his spare time. He took the

assignment because he likes talking with the students about their needs and then trying trying to do something to help—such as helping secure a TTY for the College Alumni Union, While Jerry has enjoyed his work as a student senator, he fees he needs a change of pace. So, he plans to get involved with NTID's Experimental Educational Theatre programs. "I've never done anything in the theatre before," he says, "so I'm looking forward to a new experience. It's always appealed to me. but I never had the time before now. I always had to work or do something else. But my friends have encouraged me to try the theatre so I'm going to see what it's like. I want to see if I have the talent."

Like his brother, Jerry is also a social work major. He chose this major because he likes working with people. He especially likes the counseling, referral, case work and planning aspects of social work.

He's also involved as Director of NTID Programs in SOS '79—Student Orientation 'Seventy-Nine—an orientation program for all incoming freshmen to help them adjust to the entire RIT campus.

Maple Sugaring... Gourmet Cooking
As if that weren't enough to keep him
busy, Jerry taught two courses
maple sugaring and gourmet cooking.
Two or three years ago, he took a
course in maple sugaring at the Wild
Winds Organic Farms in Naples. "Hike
the idea of being outdoors in the winter
during Rochester weekends," he explains, "learning about sugaring, cutting down trees, tobogganing, and
cross-country skiing."

Since the time he was a Boy Scout. Jerry has always had an interest in the outdoors, learning about it from his father, who was a scoutmaster. As part of his agreement with Wild Wind

Farms to help teach sugaring, they also said he could assist in a gourmet cooking class to NTID students in the Alpha Epsilon Pi fraternity house.

The idea behind the classes. Jerry explains, is to get students to appreciate the various kinds of natural foods and to be able to create their own recipes by adding or subtracting from the ingredients

Jerry coordinated the Workshops on Deafness program for almost two years. These workshops feature students who volunteer to go out into the community to talk about deafness. They discuss the physical aspects of deafness, talk about the problems they have coping in a hearing world and generally share their experiences.

"It's an awareness program that is very much in demand. During the past quarter more than 30 workshops were given," Jerry said...

Sharing Car, Classes, Parents

Jerry likes the idea of having a brother on campus, because they can share things. "We can go to each other for help when we need it." he says. "and we share things. like a car. classes, and the same set of parents." Last quarter, they both shared one social work class—the first time this has happened in 10 years.

More recently, Jerry discovered they both signed up for two more classes—statistics and conference techniques. And neither one had talked to the other about it previously.

Bill Repp

# Graduates

#### Simeon Ferraro

he Erie County Medical Center, Buffalo, N.Y., is one of the most functional and efficient hospitals in the nation. Fully operational in 1978, the 610-bed hospital is modern in design function and concept and enables well-trained personnel to do a more rapid and definitive diagnosis of diseases.

One member of the hospital's highly skilled team is NTID graduate Simeon Ferraro, senior lab assistant in the Hematology Laboratories.

One of NTID's first Medical Laboratory Technology graduates, Simeon did his cooperative work experience in the summer of 1972 and joined the medical center's full-time staff shortly after graduation. His six and one-half year work record at the center has been outstanding.

Simeon shares his laboratory responsibilities with 22 other lab assistants and medical technologists. He is one of the few staff members who can easily move from one area of the hematology lab to another because of his technical background and seniority.

On any given working day Simeon performs a variety of tasks. In the routine hematology section, he does complete blood counts, sedimentation rates (determining the severity of inflammatory diseases), and differentials (categorizing the white cells to check for leukemia).

Simeon also prepares a daily, weekly and monthly report to be fed into the computer for hospital inquiries and state aid requirements.

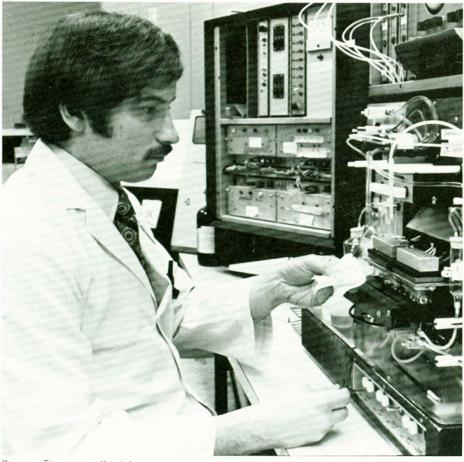
He also executes a reticulocyte count (index of bone marrow activity) and if he finds anything serious, he notifies the director.

"By doing this count, we can get a good idea of the presence of anemia or hemoglobin disorders or determine if someone has suffered septic shock or has an acute infection," explains Simeon.

Chief Hematologist Ms. Rita Rose Palmer has supervised Simeon since he began work at the lab. "Simeon has a keen sense of what's going on and is willing to do any task assigned him," she says. "His performance level is high, and his concentration isn't broken by activities around him.

"Not only is he efficient and extremely neat, but Simeon has shown initiative by repairing some of the lab equipment whenever a breakdown occurs," she explains. An excellent speechreader, Simeon has worked on perfecting his pronunciation so that he can be understood by all of his co-workers. In fact, his speechreading skills are so good, he has often interpreted for his wife, who is also deaf.

The only child of hearing parents, Simeon disagreed with their suggestion that he become a barber. Instead, he wanted "a highly skilled professional career." He decided to pursue a career in medicine "because in a small way I'm helping to find cures for diseases. And for me, that's an exciting, rewarding career."



Simeon Ferraro on the Job.

#### Judy Annis

he most important traits I look for in an employee are technical competence and reliability," says Medical Technologist Ann West.

And that's what most impresses her about NTID Medical Laboratory Technology (MLT) graduate Judy Annis. Judy performs tests and draws blood as a medical assistant at the Joseph Wilson Health Center, a health maintenance organization in Rochester, N.Y. Ms. West is the MLT Group leader who supervises Judy's daily performance.

Judy earned an associate's degree from NTID in 1976, and uses her skills in hematology, urinalysis, blood collecting, and clinical chemistry to "keep people well and diagnose illnesses," she says.

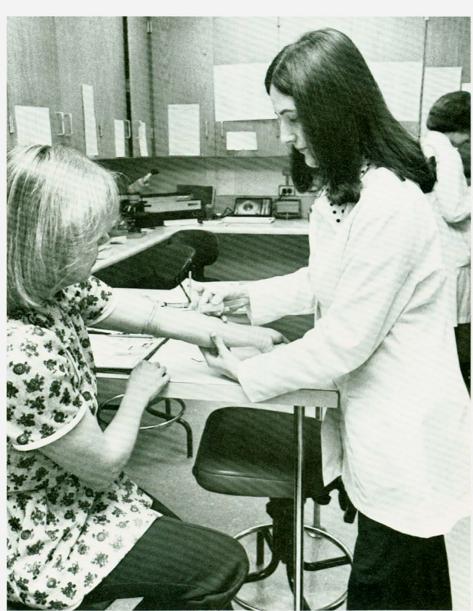
A typical work day for Judy involves doing CBC's (complete blood counts) on the Coulter counter, administering a glucose analysis, reading throat cultures for strep, and centrifuging blood. She also categorizes the blood and prepares these for use by a local hospital.

About 25 percent of her day is spent drawing blood from patients. Even though Judy rarely uses her voice, patients' reactions are generally favorable because Judy's outgoing personality has a way of putting a patient at ease. She communicates through gestures and by acting out what she expects the patients to do. "Almost everyone will respond to a smile," she says.

The seven-member lab consists of four medical technologists and three medical assistants. All of Judy's coworkers learned fingerspelling, and Judy taught one of the technologists basic sign language which enables them to carry on more in-depth conversations.

Ms. West has come to rely upon Judy during the last year and a half. "Judy is a very intelligent girl. Once she learns a new aspect of the job, I have no qualms about letting her proceed on her own because I know the results will be correct.

We're certainly pleased with Judy and have hired another NTID grad based on the success we've had with Judy. They're both excellent employees."



Judy Annis (right) takes a blood sample.

## Miscellaneous



NTID Director Named RIT Vice President

r. William Castle has been named vice president of Rochester Institute of Technology, the host institution for the National Technical Institute for the Deaf.

Dr. Castle, who has served as dean and director of NTID since 1977, has been at NTID since it opened its doors in 1968.

He will continue to administer the day-to-day operation of the federally funded NTID program as its director, and also will serve as chief Institutional liaison with the executive and legislative branches of the federal government, and with national and international constituencies related to deafness.

Dr. Milo Bishop, formerly the associate dean of NTID, will succeed Dr. Castle as NTID dean.

"Dr. Castle's long history of service to the traditions and programs that make RIT 's education programs unique, ideally suits him for this important, broadened role in developing and carrying out Institute policies," said RIT President M. Richard Rose, in making the announcement.

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 in speech pathology and audiology from the State 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 director of NTID's Division of Instructional Affairs.

He was named dean of NTID in 1969, and assumed the additional title of director in 1977.

#### New NAG Members Named

our new persons, including an NTID graduate, have been added to NTID's National Advisory Group (NAG).

They are Arthur B. Simon, a charter member of the Oral Deaf Adults Section (ODAS) of the Alexander Graham Bell Association and member of the Board of Directors for that same association; Beth Loehwing Bystrycki, a 1974 Visual Communications and Applied Art graduate who is currently a teacher aide for the deaf; T. M. Wendel, senior vice president for airline planning and administration with Pan American Airways, and W. Frank Blount, assistant vice president for training and education at the American Telephone and Telegraph Company.

"These four outstanding individuals bring added dimensions of expertise and insight to the NAG as it assists me in charting new directions for RIT through NTID in the 1980s," said Dr. William E. Castle, RIT's Vice President for and Director of NTID.

The NAG serves in an advisory capacity to NTID's director in all matters of growth and development. The four new members join 15 other persons representing a wide variety of professional and educational backgrounds in the advisory group.



#### New Miss NTID Wins State Honors

aryBeth Barber was crowned Miss NTID of 1979.

MaryBeth, a graduate of Linton High School in Schenectady, N.Y., is a social work major in the College of General Studies at Rochester Institute of Technology. She is cross-registered through NTID into the College of General Studies.

Mary Beth says her goal as Miss NTID is to encourage the deaf students of RIT and the hearing students to overcome any communication barriers they may have. "The people on this campus should be free to communicate with each other on an equal basis," she said.

As Miss NTID of 1979, MaryBeth Barber competed with other New York State pageant winners in the Empire State Association of the Deaf (ESAD) at the ESAD's Biennial Convention in August where she was also crowned Miss ESAD

Howard Mann



Michael J. Vadnais. NTID industrial design major, shows his award to (left to right)
Robert Morasse, instructor, Industrial Drafting Technology program, Dr. Edward Maruggi,
chairperson. Engineering Computational Technologies Department, and Dr. William E.
Castle, NTID director and RIT vice president.

#### Design Award Goes to Drafting Student

ichael J. Vadnais, an industrial design major in NTID's Engineering Technologies Department, won an Honorable Mention in the 1979 National Drafting Contest conducted by the American Institute for Design and Drafting (AIDD).

This certificate recognizes Vadnais' engineering design submitted to the AIDD National Drafting Contest Committee. His design was on the castings, cut in half, of a 35mm

filmstrip projector. He competed with other college-level students' drawings in this national awards competition.

The AIDD Honorable Mention Award is the first award ever given to a student at NTID. The AIDD is a national non-profit professional organization, with more than 2,000 members from industrial and educational institutions whose careers are in drafting, design, and engineering services management.

Howard Mann

For further information contact:



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