FALL 1992

FOCUS NTID

National Technical Institute for the Deaf • A College of Rochester Institute of Technology

The breakfast club

President Albert Simone follows attentively as Sam Holcomb, foreground, teaches how to sign "minute." Holcomb, sign communication specialist in the Center for Sign Language and Interpreting Education, tutors Simone, his wife, Carolie, and their 22-year-old daughter, Laura, at home twice a week. Class begins at (yawn) 7 a.m.

Photography by A. Sue Weisler

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FEATURES

DEPARTMENTS

ABOUT THE COVER

Together, educators and the latest technological tools can empower deaf students. At a national conference held at NTID this spring, educators shared what is hot technologically in their classrooms. See related story, "The Tools of Empowerment," page 16.

Cover illustration by Colleen Collins and Lynette Thelen (RIT Communications).

FOCUS
NTID

NTID FOCUS is published by the Division of Public Affairs at the National Technical Institute for the Deaf, a college of Rochester Institute of Technology, Rochester, New York.

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

FROM THE DIRECTOR'S DESK

The issues confronted by educational institutions often reflect the concerns of larger society. Many would advocate, though, that institutions of higher education should do more than mirror society; they should lead the way in addressing the thoughts and ideals of society.

The stories in this issue of *FOCUS* do indeed reflect two themes currently high on the American agenda: valuing diverse cultures and enhancing collaborative efforts. These stories also demonstrate that the Institute is not merely content to "jump on the bandwagon," but is taking a leadership role in promoting the appreciation of diverse cultures and in working with others nationally to confront challenges.

As you will read in "The Black Deaf Experience," which begins on page 12, several NTID staff members worked with other educators from throughout the country to successfully stage "Excellence and Equity: The Black Deaf Experience," a national conference at which participants addressed the concerns of the black deaf community, particularly as they relate to education.

Through participation in such efforts and within its own "house," NTID will continue to address issues such as providing appropriate role models for students of varying cultural backgrounds.

Indeed, the theme of collaboration is one with which NTID community members are altogether familiar. The Institute stakes much of its reputation on its success in collaborating with the nation's employers to train and place a pool of technically savvy employees in jobs commensurate with their education. "Co-Opportunity," on page 24, explores one aspect—cooperative work experiences for students seeking hands-on, real-world training—of NTID's mutually beneficial relationship with business and industry.

In addition, "The Tools of Empowerment," beginning on page 16, explores how the Institute collaborated with the Rochester School for the Deaf and the U.S. Department of Education to co-host in May "National Symposium: Educational Applications of Technology for Deaf Students." As the world's largest technological college for people who are deaf, NTID serves as a global leader in the application of technologies that provide parity to deaf people as they pursue educational opportunities, challenging careers, and rewarding lives.

Collaboration will continue to be an important theme at NTID as we implement the changes resulting from our strategic planning process. I encourage all of you to read "NTID Reconsidered, NTID Reshaped," an important story on page 9 that outlines the major strategic planning decisions and themes.

As society becomes more complex with a diversity of cultural norms as well as increased opportunities for global communication, the need to pool our resources and work together becomes critical. NTID recognizes the need for such collaborative efforts and is proud to be a leader in this regard.

William E. Castle

Dr. William E. Castle

AROUND THE QUAD

Aloha to RIT's new chief

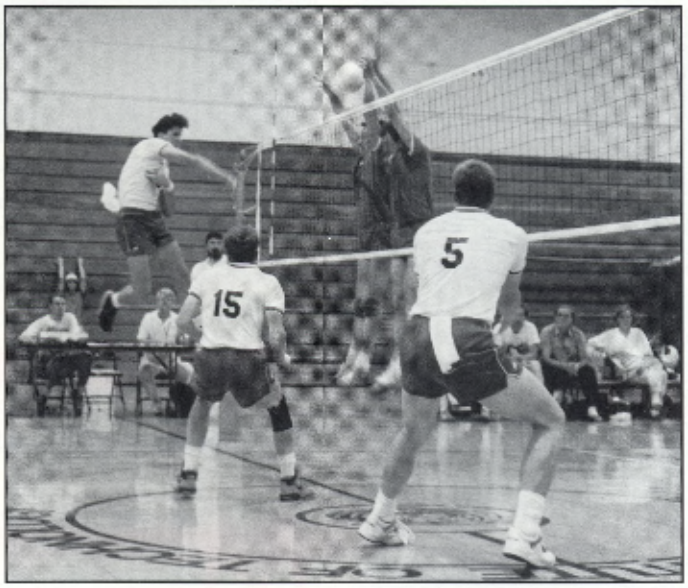
Dr. Albert J. Simone, former president of the University of Hawaii System and chancellor of the University of Hawaii at Manoa, was selected in May as RIT's eighth president. He assumed his new duties September 1.

"One of my first goals as president is to build an internal cohesiveness through strategic planning that is based on trust and appreciation," he says. "We must bring students, faculty and staff members, alumni, and friends together in a common understanding of and appreciation for one another."

The 56-year-old Boston native plans to lead RIT toward greater academic excellence and to enhance its reputation nationally and internationally. He also wants to share RIT's ideals and uniqueness with the world.

"NTID is a unique part of RIT," says Simone. "It is a leading example of affirmative action whose concept and realization must be shared worldwide."

NTID sponsors international tourney



Barcelona, Spain, wasn't the only locale that saw international sporting competition this summer. The top deaf men's and women's volleyball teams from the United States, Canada, and Russia competed July 27-31 during a tournament in RIT's George H. Clark Gymnasium.

The Russian teams swept the competition—the women in a four-game series and the men in a three-game series.

NTID, in cooperation with the American Athletic Association for the Deaf, the Western Empire Volleyball Association, and the USA Volleyball Association, sponsored the event, a prelude to next summer's World Games for the Deaf in Sofia, Bulgaria.

The World Games for the Deaf were established in 1924 and are held every four years in various countries throughout the world. Each country's top deaf athletes are selected to participate.

"Deaf people have the same goals and dreams as hearing people," says Farley Warshaw, president of the American Deaf Volleyball Association and former assistant professor in NTID's department of human development. "The World Games provide opportunities for participation on an international level and also promote friendship, understanding, and pride in representing participants' countries."

Among the U.S. players was Kristine Gray, third-year student in NTID's applied art and computer graphics program and member of the RIT women's volleyball team. A top-ranked player in NCAA Division III, Gray is a two-time All-American. Two NTID graduates, Terry Dahlgran and John Macko, competed with the men's national team.

Alumni to rekindle memories and friendships

NTID alumni, along with their friends and families, will gather at NTID's 1993 Alumni Reunion July 7-11 to, as the reunion theme suggests, "Rekindle Memories and Friendships."

Events being planned for the gathering, which will celebrate NTID's 25th anniversary, include visits to local museums and Niagara Falls as well as workshops, social events, and parties.

For more information about the reunion, contact NTID's office of alumni relations at (716) 475-6408 (TDD) or (716) 475-6433 (voice).

NEWSMAKERS

Several NTID faculty and staff members recently received doctoral degrees. **Dr. Stephen Aldersley**, acting chairperson of the English department, received an Ed.D. in May from the University of Rochester. **Dr. Ann Areson**, manager of the department of instructional design and evaluation, received a Ph.D. in May from Syracuse University. Dr. **James Cox**, coordinator of instructional development in the department of instructional design and evaluation, received a Ph.D. in August, also from Syracuse University. **Dr. Raymond Grosshans**, assistant professor in the department of industrial technologies, received a Ph.D. in May from the University of Rochester. **Dr. Jonona Young**, associate professor in the applied science/allied health department, received a Ph.D. in May from Syracuse University.

Dr. Susan Foster, research associate in the Center for Postsecondary Career Studies in Deafness, is author of the recently released *Working with Deaf People: Accessibility and Accommodation in the Workplace*. The book, published by Charles C Thomas of Springfield, Illinois, details the experiences of hearing supervisors who work with deaf employees.

The International Center for Hearing and Speech Research, a joint program of RIT through NTID and the University of Rochester Medical Center, has received a $4.1 million grant from the National Institute on Aging. The grant will fund a research project designed to investigate facets of hearing loss as people become older.

Dr. Bonnie Meath-Lang, chairperson of NTID's technical and integrative communication studies department, received the Outstanding Service Award in May from NTID's National Advisory Group. Meath-Lang, a 20-year NTID veteran, was recognized for her teaching, mentoring, and administrative skills. The 15 members of NTID's Strategic Planning Committee, which Meath-Lang chaired, also were recognized by NAG for their work on behalf of the Institute.

Aristotle Ogoke and **John Sweeney**, assistant professors in the applied computer technology department, last spring received a $1,000 Dodge Grant, given annually by the Institute to support faculty development projects. Ogoke and Sweeney will visit Brown University during the academic year to investigate the accessibility of the university's computer resource center to deaf people.

Dr. John-Allen Payne, assistant professor in the English department, has been awarded a second Fulbright Scholar Program grant. For the second consecutive year, the grant will allow Payne to teach English at the University of Veliko Turnovo in Bulgaria.

FOCUS magazine was awarded a silver medal for the cover photo of the winter/spring 1992 issue by the Council for Advancement and Support of Education. The photograph of **Richard Waterman**, fourth-year medical laboratory technology student, was taken by **A. Sue Weisler**, photographer in RIT's department of communications.

Back to school Brian Northcutt, right, from Marietta, Georgia, gets a helping hand from his dad, Ed, as he moves in for his second year at NTID. The 1992-93 academic year began September 3.

A professional boost

More than 200 NTID faculty members got a year-end professional boost at "Working with Students: Teaching and Learning," a daylong conference held at the Institute in June to celebrate education and share new teaching skills for the classroom.

Workshop topics included "Learning by Role Reversal: Turning Students Into the Teacher," "The Ideal Method of Evaluation," "Collaborative Teaching, Collaborative Learning," and "From Surface to Substance in Writing: Brainstorming Critical Thinking."

Linda Bement, assistant professor in the department of audiology, couldn't wait to return to the classroom in September to incorporate some suggested techniques for getting students more involved in group discussions.

"I learned how to ask the right questions and *wait* for a response," says Bement, who teaches "Practicing Communication Strategies" and "Communication for the Job Interview."

Organizers of the professional development day, including faculty development committees of each of NTID's schools and divisions as well as the office of faculty development and office of the dean, hope to make the conference an annual event.

NTID's High Technology Center becomes a reality

A melding of academics and industry has made NTID's dream of a high technology center a reality. Nearly 40 businesses donated state-of-the-art computer equipment, including hardware and software, for the 1,500-square-foot facility housed in RIT's Gannett Building. Donations totaled more than $750,000.

"This is tangible evidence of industry's readiness to invest in the future of young deaf people preparing for careers in imaging technology," says Dr. Thomas Raco, assistant dean and director of the School of Visual Communications. "This collaboration between industry and education is critical to our ability to provide the field with highly qualified employees."

The High Technology Center for Electronic Publishing and Imaging, which opened earlier this fall, brings together all the disciplines associated with NTID's School of Visual Communications, including desktop publishing, media production, and graphic design.

The center allows faculty members to explore the range of applications of electronic and imaging technologies and enhance curricula and services offered to students.

Equipment in the new center includes personal computers and workstations; peripheral devices, such as scanners and high capacity storage units; document production software; and medium- to high-resolution printers.

One key piece of equipment, donated by Xerox Corporation, is a DocuTech Network Publisher, which accepts electronic documents prepared with desktop publishing tools and quickly turns them into high-quality finished publications.

Through the provision of such equipment, NTID can offer training that will properly serve the publishing needs of business and industry.

Staging a classic NTID's performing arts department brought to stage this fall *The Grapes of Wrath*, John Steinbeck's deeply affecting story about the Joad family during the Great Depression. Performers included NTID students Matt Daigle and Greg Randall, above; Joan Corley, Melissa Westlake, and Billy Baker, below.

NYNEX support helps NTID reach out

NTID presented three outreach programs this summer: Explore Your Future, Teaching Mathematics and Science to Deaf Students in Mainstream Environments, and English Language Teaching.

Explore Your Future is a weeklong program for deaf students about to enter their senior year in high school. The program introduces students to the challenges and requirements of a technical college education. This year, 111 students participated in classes and hands-on activities in business, computer science, engineering, science, and visual communications. The upcoming seniors also enjoyed after-class activities, such as a scavenger hunt and opportunities to meet deaf adults in Rochester.

Teaching Mathematics and Science to Deaf Students in Mainstream Environments is a weeklong program for secondary school mathematics and science teachers and others who work with deaf students. Thirty-nine educators from 11 states came to NTID for guidance on language, communication, and writing in mathematics and science; problem-solving activities and strategies; a review of research on mainstreaming; and suggestions for support services (interpreting, tutoring, notetaking, and resource rooms).

Both the math/science workshop and Explore Your Future were supported by a grant from the NYNEX Foundation.

The English Language Teaching program provided 33 educators with techniques for teaching English to deaf students. The weeklong series of workshops included "Natural Language Computer Programs for Reading and Language Interaction," "Reading Journals: Co-Creating a Text," "Survival Strategies in Spoken and Written English Interactions," and "World Knowledge and Inference in Language Learning."

A taste of the Orient

by Lynne Bohlman

Trinkets and treasures Sin-Yi Ko, third-year graphic design student in the College of Imaging Arts and Sciences, displays items from her homeland during Asian Deaf Club Exhibit Week.

NTID's Asian Deaf Club has a reputation for "tasteful" fund-raising activities. Rather than sell boxes of plain and peanut M&Ms as do many student organizations, the Asian Deaf Club opted last year to market a product that's a bit more distinctive: sushi.

Sushi, club members reasoned, was more representative of their culture. The fact that they made more money in about three hours of selling rice and raw fish cakes than they could have in three weeks of selling boxes of candy-coated chocolate was an additional bonus.

The students' sushi success reflects the club's purpose as well as the spirit that led the Asian Deaf Club to be named 1991-92 Outstanding Club of the Year by the NTID Student Congress (NSC).

"One of the guiding criteria for our selection of an outstanding organization is the level of visibility that a particular club has achieved within the RIT community," says Anthony DiGiovanni III, 1991-92 NSC president and third-year accounting student in RIT's College of Business. "Throughout the year, the Asian Deaf Club engaged in various activities that brought greater awareness of the fine flavors that Asia has to offer."

The club indeed offered the

RIT community a variety of tasty flavors last year as several of its fund-raising activities involved selling homemade Asian delicacies, including egg rolls as well as sushi. Other fund-raisers included the sale of handmade Oriental Valentine's Day cards and Chinese, Korean, and Vietnamese New Year's cards.

One of three NTID student groups organized around a specific ethnic culture—the other two are the Ebony Club and Hispanic Club—the Asian Deaf Club has a dual purpose. Not only do the club's approximately 20 members share their cultural backgrounds with the RIT community, they also learn more about various Asian cultures from one another and develop relationships with fellow students who share similar backgrounds and experiences.

"The club helped me to cherish more of my own values—my values as a deaf person and as an Asian," says Young Hae Park, who graduated in May with an associate degree in medical laboratory technology. "Before I joined the club, I never understood myself totally. Entering the club enriched my life.

"In high school," she adds, "I never interacted with deaf students. I mostly hung out with hearing students. I'd never met an Asian deaf person before. When I joined the Asian Deaf Club, I realized that we all have common values and experiences."

The opportunity for students to learn from one another in a relaxed atmosphere is a primary benefit of extracurricular organizations such as the Asian Deaf Club.

"It's important for students to learn from their peers and not just in the classroom," says Yun Chou, an adjunct Chinese and Spanish instructor in RIT's College of Liberal Arts and one of three staff advisors to the Asian Deaf Club. "Club activities, such as barbecues, picnics, exhibits, and car washes, give students a chance to sit down and talk about their differences and similarities as well as their experiences and expectations. Students don't have these conversations in the classroom or during the club's weekly general meetings; they happen during activities."

One activity that the group sponsored in February was Asian Deaf Club Exhibit Week.

Students set up in the residence halls displays of books, clothing, foods, and other cultural objects that represent the countries from which their families come—including China, India, Japan, Korea, the Philippines, and Vietnam. Other activities included a leadership training session, a trip to Toronto's Chinatown and Koreatown, showing of a movie made in Hong Kong, and a semiformal banquet attended by nearly 100 members and guests.

In the spring, club members served as hosts for deaf students visiting from Japan and earlier in the year met with educators visiting from Shanghai.

"The educators were so impressed," says club advisor Mary Ann Erickson, coordinator in the division of educational support service programs. "The students asked them questions about deaf people in mainland China—how they're treated, about their rights, and the educational opportunities available. They practically grilled the visitors. I was told later that the Chinese educators felt that meeting with the students was one of the highlights of their weeklong trip."

Club members not only are interested in deaf people in Asia, they also are concerned about the individuals who attend NTID.

"The members are very concerned about the feelings of the people in the group," notes Erickson. "They'll address issues rather than avoid them. If certain members don't feel happy or have left the group because they had a conflict with someone, they'll try to work it out."

Sin-Yi Ko, third-year graphic design student in the College of Imaging Arts and Sciences and president of the Asian Deaf Club last year, agrees that the spirit of togetherness is a defining aspect of the club.

"What is important to me is that we have support and understanding from one another because not many people understand our Asian values," she says, alluding to her culture's emphasis on family, education, and placing the group's needs over those of an individual. "Everyone works together to achieve our goals."

An interest in such unification was a large part of the reason why Ricky Tom, fourth-year marketing student in the College of Business, helped establish the club three years ago.

"I wanted to find a way to encourage Asian deaf students to develop friendships with one another and to share their experiences with club members and others in the RIT community," says Tom, this year's club president.

In 1989, the Asian Deaf Club started with a small piggy bank that functioned as the club's budget and 10 members who knew little about running an organization.

Today, says Erickson, it's evident that Asian deaf students have accepted more responsibility for their club.

"They're taking charge and owning it now," she says. "The emphasis is on leadership training, adopting Robert's Rules [of Order for conducting meetings], and celebrating and being proud of their culture."

The Asian Deaf Club offers an important connection to students' heritage, rooted in countries scattered throughout the Asian-Pacific region. Such is the case for Ko, who moved to the United States from her native Hong Kong when she was 7.

"I consider myself American," she says, "but I have Chinese heritage inside of me. I need to recognize and celebrate that."

When she returned to campus this fall, Ko once again found a familiar haven that recognizes and celebrates her cultural heritage—both Asian and deaf: the Asian Deaf Club.

Follow the leader Asian Deaf Club members participate in a leadership training workshop in RIT's Red Barn.

Perseverance is key ingredient

by Susan Cergol

Karen Turcsany can teach others a thing or two about setting goals and accomplishing them.

Now pursuing a master's degree in deaf education at Lamar University in Beaumont, Texas, Turcsany is the only deaf graduate of RIT's general dietetics and nutritional care program. In order to complete the program and later become certified in the field, she had to draw on remarkable inner strength and determination.

"Being a dietician involves a lot of oral communication," says Turcsany, 27. "But there's more than one way to communicate, and I wanted to prove that I could do the job despite the challenges."

Soon after she completed her bachelor's degree at RIT in 1989, Turcsany landed a job in the health care division of Marriott Corporation in Watertown, New York, where she worked as a nutritional advisor and health teacher for patients at Mercy Hospital as well as supervisor of the hospital's food service staff. She held that position until August 1990, when she was dismissed because she was unable to pass the registered dietician exam.

Determined to repeat the test until she passed, Turcsany turned to her former RIT teachers for help in convincing the testing bureau of the American Dietetics Association that she needed specific accommodations to succeed.

"English is a second language for many deaf people," explains Fred Hamil, chairperson of NTID's applied science/allied health department, who wrote a letter to the bureau on Turcsany's behalf. "The exam was difficult for Karen only because some of the vocabulary was confusing, and she didn't have enough time to analyze the questions."

The American Dietetics Association reviewed Turcsany's petition and agreed to grant some of her requests, including doubling the amount of time allotted to complete the exam and allowing her to take the exam in privacy to avoid possible distractions. Her request to have a sign language interpreter available to clarify ambiguous wording on the test was denied; however, an interpreter was available to answer basic questions about the exam procedure.

After three previous attempts and endless hours of private tutoring and preparation, Turcsany passed the exam last fall and earned her certification.

"I know that I had to work harder than my hearing counterparts," she says, "but I realized that I wouldn't go far if I gave up."

Turcsany plans to take her message of perseverance to young deaf students following her graduation from Lamar University in the spring of 1994. Eventually she hopes to teach nutrition and health and perhaps work part time as a dietician.

"I will tell my students that if they want to do something such as become a doctor or lawyer, they need to know that it is hard work," she says. "But anything is possible if they set realistic goals and apply themselves." ■

NTID Reconsidered, NTID Reshaped

by Kathleen S. Smith

Stranger things have happened, but the appearance of a large yellow butterfly fluttering around the room, just as NTID Director William Castle began to share the Institute's final strategic planning decisions with faculty and staff members in June, certainly was fitting.

A metamorphosis indeed is taking place at NTID—one that will make the Institute stronger, wiser, and more effective and efficient.

Castle's announcement ended more than a year of intense work by the Institute community, most notably by the 15 members of NTID's Strategic Planning Committee (SPC) who reviewed, reflected on, developed, interpreted, and documented ideas on how to lead NTID into the next century.

The committee began its enormous task in March 1991, six months after nationally known strategic planning consultant Dr. Robert Shirley first visited NTID and laid the groundwork for the process.

When the group finished its task this past May, members were—if nothing else—tired. They had spent thousands of hours together, often laboring into the night, holed up in Institute and hotel conference rooms.

If they were tired, SPC members also were proud and satisfied.

As Dr. Bonnie Meath-Lang, chairperson of NTID's technical and integrative communication studies department and SPC chairperson, reflects, "Every one of us on the SPC and associated task forces was aware of the enormous opportunity that strategic planning presented to the community. We were creating a future together. We were making sense of our experience as a college. And those very acts are what education is to me."

The committee focused its attention on six major areas of importance to the Institute: mission, clientele, comparative advantage (NTID's distinguishing features), strategic objectives, programs and services, and organization.

Ninety-five percent of the SPC's recommendations, shared with NTID's executive directors in May, were accepted without change.

Here's a glimpse of the final decisions that will be implemented during the next several years.

Mission

The Institute's new mission statement emphasizes the importance of "Institutional, programmatic, and professional excellence, integrity, and credibility."

To that end, programs will be maintained, enhanced, reduced, or eliminated in order to fulfill NTID's primary mission, which is "to provide deaf students with outstanding state-of-the-art technical and professional education programs, complemented by a strong arts and sciences curriculum, that prepare them to live and work in the mainstream of a rapidly changing global community and enhance their lifelong learning."

With regard to communication methods, the Institute will emphasize inclusiveness. English (spoken, written, and signed forms) and American Sign Language (ASL) will be the languages used at the Institute.

English proficiency will be necessary

for students to succeed in a changing world, says Castle, and ASL will enhance students' leadership capabilities in the international deaf community as well as deepen their understanding of language in general.

Clientele

NTID has made a renewed commitment to maintain its current enrollment of 1,100 students, which includes international students. Particular attention will be paid to minority, female, transfer, baccalaureate, and underprepared

students as well as alumni, who will be encouraged to return for further education.

As resources permit, NTID will continue to serve several secondary audiences, including school personnel, potential employers and employees, deaf adults, vocational rehabilitators, secondary school-age students, parents, educational and advocacy organizations, and interns.

Comparative advantage

As the world's largest technical postsecondary education program for deaf students, NTID will continue to capitalize on its affiliation with RIT, offering deaf students quality career choices in a major university setting as well as opportunities for educational and social interaction with hearing students.

The Institute also will continue to emphasize its successful cooperative education program, strong ties to local and national employers, and research efforts that increase the body of knowledge to enhance educational and career opportunities for deaf students.

Strategic objectives

Strategic objectives, truly the heart of the entire planning process, were identified in eight areas.

These objectives, designed to "set the context for moving from vision to action," address the themes of collaboration, language and culture, human resources, leadership, access, curriculum, research, and technology.

NTID hopes to position itself as a national model of a working and learning environment, with collaboration taking place in decision making, program planning, resource sharing, and curricular and classroom practices.

"The best research shows that collaboration requires consistent, open dialogue and individual competence of the collaborators," says Meath-Lang. "It combines the interesting contradiction of being both team player and challenging voice. The SPC wasn't being romantic or idealistic—we know that this is a call for hard work."

"The strategic planning process itself promoted and defined what collaboration will mean for NTID," says SPC member Gary Mowl, chairperson of the Center for Sign Language and Interpreting Education. "As we moved through the process, the SPC learned that each person at NTID has an educational role regardless of status or rank. The promotion of this spirit will ultimately enhance greater learning opportunities for deaf people as we enter the 21st century."

The SPC final report mandates learning and using ASL both inside and outside the classroom as a responsibility of all faculty and staff members. Additionally, the entire RIT community is encouraged to increase its knowledge of and sensitivity to deafness, sign language, and Deaf culture.

In an effort to make RIT more accessible to all of its students, the report suggests strategies to ensure that support services and teaching methods are the best possible. Strategies include expanding the use of communication technologies, emphasizing the use of ASL by all members of the RIT community, and developing an "academically challenging...technical curriculum for students in their first year."

A department of access services will be established next year to coordinate interpreting and notetaking services.

Perhaps the most significant change taking place in the area of curriculum is the establishment of a Center for Arts and Sciences, which will offer interdisciplinary studies, humanities, language, mathematics, and science courses.

"This comprehensive area...will offer a rich array of courses to a broad-based population of NTID students, including those who are underprepared, undecided, undeclared, or pre-baccalaureate," according to the report.

Since research at NTID directly applies to teaching, learning, curriculum, and programming, the Institute will create a Center for Research, Teaching, and Learning. Research developed at NTID will be communicated more uniformly and frequently with external audiences.

Programs and services

In order to provide students with the most comprehensive, up-to-date educational opportunities, the Institute has reviewed and evaluated current courses, and in some cases, suggested the creation of new academic program offerings.

Programs in electronic publishing and imaging, ophthalmic optical finishing technology (adding a surfacing technology component to the existing program), and electronic drafting as well as modifications in the construction technologies program will be developed over the next three years.

Because of low enrollment and

certification rates for the medical laboratory technology and medical record technology programs, these programs will be eliminated after all current students have been served.

However, given the demand for professionals in the allied health, applied sciences, environmental, and related fields, investigations into possible new curricular offerings will take place.

The Joint Educational Specialist Program, a master's degree program sponsored jointly with the University of Rochester that prepares graduates to teach deaf students, also will be discontinued. However, NTID will investigate a new program designed to prepare teachers to work at the junior high and high school levels.

Organization

Collaboration is the element that ultimately will determine the success or failure of NTID's strategic planning efforts. Without the desire to work together, accept change, and move forward, the Institute would be destined to become complacent.

To that end, the Institute has created a new organizational structure designed to encourage students and staff and faculty members to work equally and collaboratively on projects.

"Collaboration will be an invaluable lesson for our students," says SPC member Rose Marie Toscano, associate professor in the liberal arts support department. "It allows for a different way of working, one that is people-based, not power-based. It's difficult and will take a great deal of effort, but in the end it will be beneficial for everyone. I'm so pleased to see the Institute committed to the idea."

Seven "centers" will house the various academic and administrative areas of the Institute: Technical Studies; Arts and Sciences; Baccalaureate and Graduate Studies; Student Resources; Research, Teaching, and Learning; Institutional Services; and Outreach.

"The SPC was emphatic in stating that we didn't want reorganization without a fundamental change in work culture," says Meath-Lang. "The centers are functional groupings, but they're not to be viewed as autonomous. The strategic objectives engage the centers in ongoing joint work, and the committee envisions the centers as regularly communicating with one another.

"This will enable staff and faculty members to be much more knowledgeable in program design and helpful in advising students and external audiences," she adds.

Where do we go from here?

This fall, the Institute began implementing changes developed through the strategic planning process.

An Organizational Transition Planning Committee was established in the fall to clarify the roles and responsibilities of center directors, chairpersons, managers, and staff members.

Seven national search committees were established during fall quarter to recommend final candidates for each center's director. Center leaders will be in place by next fall.

Finally, an Action Agenda Steering Committee, composed of SPC members and other members of NTID's faculty and staff, began in August to analyze the actions and initiatives of the strategic plan and recommend a multi-year agenda for implementing changes.

The next few years promise to bring change, innovation, and an energetic redirection to the Institute.

Like the butterfly that announced a time for change, the Institute is ready to spread its wings and fly.

If you are interested in a complete copy of the 90-page strategic plan, write to NTID's Division of Public Affairs, Box SP, at the address on the back of this publication.

The Black Deaf Experience

striving for excellence and equity in education

by Pamela Seabon

Dianne Brooks' teenage years were saturated with the confusion and frustration that typically accompany the experience of discrimination.

Growing up in Washington, D.C., she was no stranger to the prejudices often encountered by black people. And at 12 years old, she became familiar with another form of intolerance.

Sitting in her sixth-grade class one spring afternoon, Brooks realized that for several minutes she had not heard her teacher's voice. She looked up from her book to see if the teacher read silently to herself or had stepped out of the classroom. What Brooks discovered sent chills throughout her body.

"The entire class sat watching, listening to the teacher read," explains NTID's manager of career outreach and enrollment services, "while I could not hear one word."

Brooks had entered the world of deafness.

Being both black and deaf creates special challenges not necessarily faced by either white deaf or hearing black youth.

"Black deaf people often must deal not only with society's attitudes and misconceptions about race," says Brooks, "but also with misconceptions about deafness that may be pervasive even within their own cultural group.

"Deaf people, particularly black deaf people, often feel frustrated because of how we're viewed and treated by others," she adds. "But instead of simply complaining about our situation, we're doing something about it."

Brooks, along with a number of other NTID faculty and staff members as well as individuals from throughout the nation's black deaf community, met in Atlanta last March to discuss educational and sociological concerns of the black deaf community.

An attentive audience More than 350 people interested in the education of black deaf students attended concurrent sessions and panel discussions—including one led by keynote speaker Asa Hilliard (inset), educational psychologist at Georgia State University—during "Excellence and Equity: The Black Deaf Experience," held in Atlanta in March.

More than 350 hearing and deaf professionals working in the field of education of deaf people as well as black deaf community members, family, and friends gathered at the Decatur Conference Plaza Holiday Inn for "Excellence and Equity: The Black Deaf Experience," a meeting that Brooks describes as "a milestone" for the black deaf community.

"It was a long-awaited assemblage," agrees Dr. Shirley Allen, associate professor in NTID's department of general education instruction. "People didn't just take off from work and go on vacation. They went to the conference for a reason, and that was to educate themselves and others."

Throughout the three-day conference, attendees discussed information that provided promising ideas for addressing concerns of the black deaf community, specifically in academic environments.

Many of these concerns are shared by the deaf population in general as well as by the black community, according to Reginald Redding, co-chairperson of the conference and assistant superintendent for curriculum and instruction at the Minnesota State Academy for the Deaf. However, because black deaf people are a minority within a minority, he says, they often feel the slights of the country's academic and political systems to a greater degree.

"It's tough being black and deaf in a world where the majority of people don't always understand you," says Allen. "Because people don't understand and are not always comfortable with cultures other then their own, they put up barriers and begin to stereotype others."

Traditionally, Allen says, black deaf

I Didn't Hear That Color A theatrical troupe of black deaf actors from Gallaudet University performed *I Didn't Hear That Color*, a dramatization that illustrates prejudices and stereotypes that deaf people of color often encounter, as part of NTID's Black History Month events in February.

individuals have experienced social and cultural barriers in the classroom as well as in society. They often have felt uncomfortable with and unaccepted by classmates, teachers, and administrators; faced low expectations from hearing and white deaf people; and believed that they are not encouraged and supported in ways equal to their hearing and white deaf peers.

Such were the concerns addressed during the conference's more than 20 concurrent sessions. Some topics related to academia included "Black Deaf People in Higher Education," "Today's Students, Tomorrow's Leaders: Mentoring for Minority Students," and "Diversity and the American Dream: Educational Policy and the Black Deaf American."

Other topics related to black deaf culture included "Broadening the Perspective of Deaf Culture: Black Deaf Children in America" as well as "Strengths and Weaknesses of the Black Deaf Community."

During a discussion about "Black Deaf People in Higher Education," six panelists—three from Gallaudet University and three from NTID—shared their personal experiences.

Brooks gave a sentimental account of her discovery of deafness and Deaf culture.

"I had difficulty identifying with both hearing and Deaf culture," she explained. "Hearing people no longer seemed to accept me because of my deafness, and deaf people often rejected me because I didn't know sign language."

It wasn't until she was in her 20s that Brooks began to appreciate her cultural identity as a black deaf woman.

While attending Gallaudet, she learned sign language and became more involved with Deaf culture. She later received a bachelor's degree from Howard University and obtained a job teaching at a school for deaf and blind students in North Carolina. It was there—at the all-black, segregated school—that Brooks began to realize the need for mentors to share and understand the black deaf cultural experience.

"Most of the students at the school were the only deaf people in their families, and the families themselves knew very little about deafness or about services and educational opportunities for deaf people," says Brooks. "As a result, feelings of uncertainty and low self-esteem were common among those students.

"As a professional black deaf person who encountered similar experiences while growing up," Brooks says, "I wanted the students to see that someone who shares their cultural background and understands them was there to encourage and help them."

Educators at the conference offered some suggestions for increasing black deaf students' success in the academic environment: Educators must attend workshops and seminars on black deaf culture, offer curricula that reflect an emphasis on cultural diversity, and create academic environments that include more black and deaf individuals as well

"We want the Institute to be a cultural learning ground for the entire community."

as people of other minority groups.

Black educators of deaf people are significantly underrepresented in educational environments, where their presence could enhance the success of black deaf students, say educators and researchers in the field of deaf education. Black instructors serve as role models and mentors with whom students can identify; confide in; and share their beliefs, values, and traditions.

A 1989-90 study conducted by the Conference of Educational Administrators Serving the Deaf (CEASD) found that fewer than 5 percent of educators of deaf students throughout the country are black—either hearing or deaf.

Stefan Middleton, fourth-year student in NTID's photo/media technologies program, who attended the Atlanta conference, can vouch for that.

"I don't remember having seen any black deaf teachers until I came to NTID in 1988," says Middleton. "By being able to interact with and talk to them, I gained a greater self-confidence and understanding about myself."

Dr. T. Alan Hurwitz, NTID's associate vice president for outreach and external affairs, who also attended the conference, says, "It is important that the faculty reflect the student makeup in any educational system. Successful black deaf and hearing people must be available to serve as mentors and role models for young people."

Asa Hilliard, keynote speaker at the conference and educational psychologist at Georgia State University, agrees. He noted that all educators of minority students must become familiar with and understand the students' needs.

"The instructor must know the student, be able to understand and assess his or her needs, and implement learning strategies based on those assessments," he said.

In addition to receiving support from teachers and role models, students can learn from and support one another. This is what NTID's Ebony Club has been doing for more than five years.

"We get together to share ideas and concerns," says club president Tracey Washington, third-year applied accounting student. "We understand one another, and the atmosphere always is comfortable for expressing anything."

The Ebony Club's 20 members—most of them black deaf students—meet every Tuesday evening during the academic year to discuss "everything under the sun," says Washington, and to show their support for one another. They also develop ideas for helping to increase understanding of their cultural backgrounds throughout NTID.

"We want the Institute to be a cultural learning ground for the entire community," says Washington.

Club members sponsor displays and theatrical performances intended to dispel misconceptions and make others aware of the richness of their culture.

In February, as part of NTID's Black History Month celebration, the club co-sponsored a play about black deaf culture as well as a panel discussion that explored and identified solutions for addressing racism.

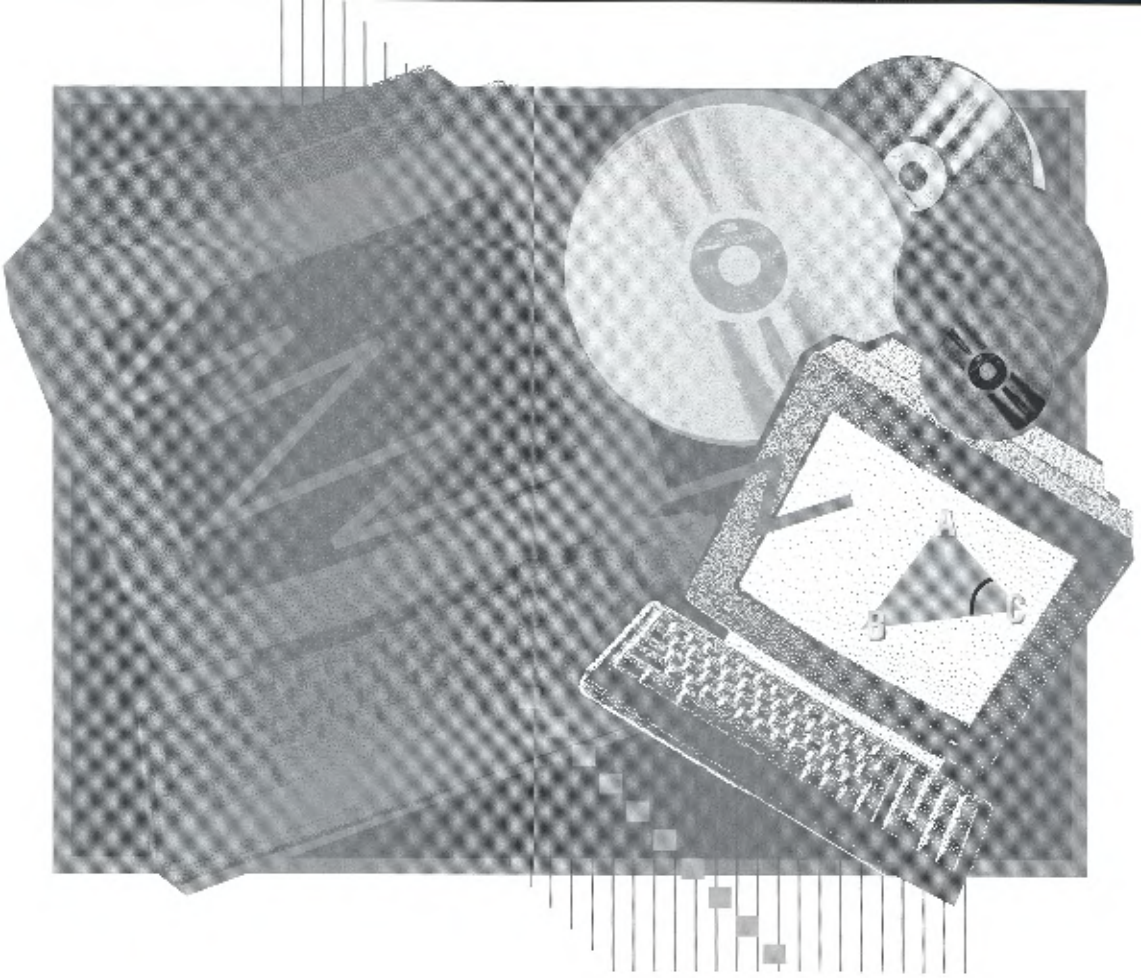
I Didn't Hear That Color, a play performed by a six-member theatrical troupe of black deaf actors, was written two years ago by Robert Daniels, former public relations assistant for media services at Gallaudet, who was interested in learning more about and sharing in the experiences of the black deaf community.

"He asked for ideas about the black deaf experience and did a lot of research on the culture before putting the play together," says NTID graduate Fred Beam, theater instructor at Gallaudet's Model Secondary School for the Deaf, who served as assistant director and choreographer of the play. "Bob [Daniels] incorporated works by African-American and deaf writers to give the play authenticity and to show that there is talent in the community."

The performance related well to the panel discussion, as Brooks, who served as moderator, successfully guided the audience and panel members through an informative exchange of ideas.

"Everyone in the workplace should identify and confront discrimination, prejudice, and racism head on," says Brooks. "We must do this if we are serious about our commitment to providing an accessible, supportive, and nurturing multicultural environment."

Together we stand Members of NTID's Ebony Club, including Stefan Middleton, standing, and Tracey Washington, meet weekly to discuss shared concerns as well as to serve as a system of support for one another.



The Tools of Empowerment

From captions to computers, technology provides educational parity

by Kathryn Schmitz

Imagine taking a history class with fellow students attending another college 400 miles away. You meet your classmates and teacher via a computer screen, where you hold discussions and learn about course material as well as one another. No interpreters are involved, yet all students, deaf and hearing, have equal access to information.

Imagine working on another computer screen, this one filled with text and graphics boxes laid over one another and with icons at the top of the screen offering you the power to do whatever you need: use word processing, transfer files, copy videotapes, send electronic mail, draw graphics, create spreadsheets, and more. You can stop in the middle of one activity and use your computer's "mouse" to jump to another.

These technologies aren't imaginary; they're available in classrooms around the world and were demonstrated last May in Rochester, New York, during "National Symposium: Educational Applications of Technology for Deaf Students," attended by 230 educators, administrators, technical experts, students, and others.

Sponsored by NTID and the Rochester School for the Deaf with support from the Office of Special Education and Rehabilitative Services (OSERS) of the U.S. Department of Education, the three-day conference focused on the development and application of various technologies to advance educational opportunities for deaf people.

The 1992 National Symposium had its roots in the Lincoln Symposia, a series of annual technology symposia staged for 16 years at the University of Nebraska in Lincoln and last held in 1983. Dr. Robert E. Stepp Jr., director of the Lincoln Symposia, suggested

reviving the technology symposium at NTID, according to Dr. E. Ross Stuckless, NTID's director of integrative research and co-chairperson of the National Symposium's program committee.

"We felt that as the world's largest technical educational program for deaf students, NTID was a logical choice as co-host of the symposium," says Stuckless.

Dr. James Carroll, director of NTID's division of instructional design and technical services and chairperson of the symposium steering committee, agrees, remarking on the timeliness and priorities of the conference.

"In the nine years since the last Lincoln Symposium, many different technologies had been developed," says Carroll. "Before planning the program for this conference, we surveyed 3,000 people across the United States, including administrators, teachers, and technicians as well as deaf students, and asked them to prioritize possible topics. This is the first time that a technology conference has been developed in response to participants' preferences."

Participants attended plenary, formal, and poster sessions covering six major topics: instructional applications of computers, instructional applications of television, media development and utilization, telecommunications, administrative applications of technology, and special considerations for mainstreamed deaf students.

Eighteen exhibitors displayed their products in NTID's Lyndon Baines Johnson Building, taking advantage of this first-ever opportunity to exhibit at a technology symposium. One exhibitor, Motorola, not only donated $3,500 toward the symposium and hosted a reception but also donated 25 Advisor pagers for RIT resident advisors to use on campus. These alphanumeric pagers receive and display TDD messages.

At exhibits and presentations, conference participants learned about new technologies being developed as well as how new applications of "old" technologies are being used in classrooms around the United States.

In his keynote address, Dr. Robert Davila, assistant secretary for special education and rehabilitative services in the U.S. Department of Education, identified educational parity as a goal of technology in the classroom.

"[We're] taking a close look at [the educational] playing field so that as we approach the end of this century, we can ensure that individuals who are deaf have the tools they need to learn, to be productive, and to maintain the equality of opportunity that is their right," said Davila.

Such technological tools include captioning, computer networks and data bases, interactive videodiscs, and speech recognition.

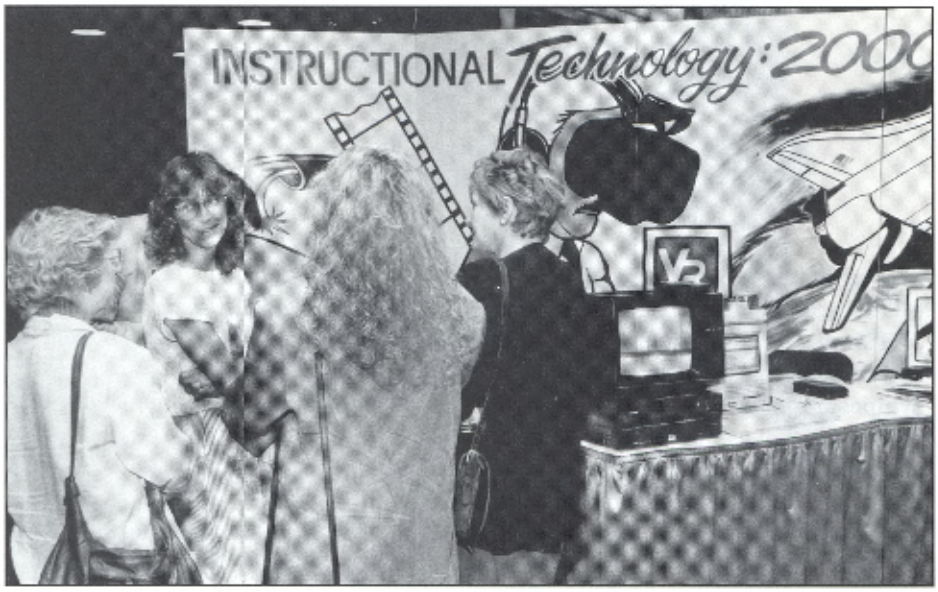
Captioning: A first step to parity in learning

Captioning visual media, including television, is one means of providing equal educational opportunities to deaf individuals, according to Dr. Frank Withrow, team leader of the technology applications group in the Office of Educational Research and Improvement of the U.S. Department of Education and one of eight plenary speakers at the symposium.

"In the late 1960s, there were few [learning] options for deaf pupils and their parents," said Withrow. "Today, captions bring a new world of knowledge and information to all deaf people. Captions and caption-related communication devices may be the trumpets that cause the walls between deaf people and hearing people to come tumbling down."

One new application of captioning demonstrated at the symposium was CC School, a collaborative effort

Let's level the playing field Dr. Robert Davila, assistant secretary for special education and rehabilitative services in the U.S. Department of Education, introduces the theme for "National Symposium: Educational Applications of Technology for Deaf Students" in his opening keynote address.



Showing their wares Exhibitors at the symposium demonstrated a variety of new approaches to some common communication challenges.

supported by a $150,000 grant from OSERS. CC School employs research methods developed at NTID and captioning technology from the Caption Center in Boston to help deaf children at the TRIPOD school in Burbank, California, develop English skills.

TRIPOD is a "reverse mainstream" school that integrates hearing children into a classroom of deaf children. The class is taught by a team of teachers in the Burbank public schools. According to Cindy Murphy, TRIPOD principal, the school was begun as an effort to apply new educational ideas from research in the classroom.

In the CC School project, students view 40 short stories selected by the NTID research team and performed in American Sign Language (ASL). The students, using equipment and software developed and provided by the Caption Center, then write their own English captions for each story.

The project, which will conclude in March, allows NTID researchers to document the effects of deaf students' participation with captioning materials on development of their English skills. It also gives Caption Center technicians an opportunity to investigate other uses of captioning while allowing deaf children to experiment with an alternative learning experience.

"We see some effects on students' English skills," says Murphy. "We think the project is promising, but for us to know how it really works, we need to go beyond anecdotal evidence and utilize research strategies to isolate the factors that contribute to students' skill development."

Another project sponsored by OSERS using video cameras and captioning software takes place at the Marie Katzenbach School for the Deaf in Trenton, New Jersey, in collaboration with Gallaudet University's Technology Assessment Program (TAP). There, elementary schoolteachers of deaf children are trained to produce and use in their classrooms videos aimed at vocabulary improvement.

According to Dr. Judith Harkins, TAP director, a system for shooting, editing, and captioning videos can be purchased by schools for less than $6,000, making this an affordable technology for many school districts.

Computer data bases and networks: Key(board)s to learning equity

Other traditional technologies demonstrated at the symposium that help provide information and parity in learning to deaf people are computer data bases and networks.

Applications of data-base technology can motivate deaf learners. For example, the simplicity of the Mac Library System, used at the New Mexico School for the Deaf to coordinate its cataloging, circulation, acquisitions, and serial publications, "encourages students as well as staff members to use the library," says teacher Miguel Romero. "It also prepares students to use larger library systems when they move on to higher education programs."

Computer networks linked via telecommunications can be utilized at all educational levels. Such networks can connect individual computer terminals with others in the same room or building as well as with those across the country and around the world, often enhancing communication among students and teachers and eliminating the need for sign language interpreters.

In Anthony Naturale's English writing class at NTID, students spend time on computer terminals using Electronic Networks for Interaction (ENFI), a computer network and software that allow real-time written interaction in the classroom. Students watch videotaped ASL literature and then discuss the material through ENFI as well as in sign language and through additional written assignments.

"ENFI allows students to share their thoughts and feelings in a more natural setting of dialogue by bringing in the dimension of written English as the primary form of communication," explained Naturale, visiting instructor in the English department, during his presentation at the symposium. "Within this kind of dialogue, I can use questions and answers to help students clarify their statements. Furthermore, ENFI can be used as a tool to sharpen critical thinking skills necessary for academic assignments in reading and writing."

Students at Gallaudet's Kendall Demonstration Elementary School have used ENFI for the past three years. ENFI is used in a variety of classes ranging from language arts to math and social studies with students aged 7-13 whose reading and writing skills vary considerably.

"Deaf students can engage in purposeful, spontaneous communication in English with immediate feedback," explains Joy Kreeft Peyton, director of research at Gallaudet.

Another computer-linked classroom experiment demonstrated at the symposium was a computer-delivered history class to students at RIT and Gallaudet. Last fall students attended one brief orientation class and then completed the course interacting with their teacher and one another through an electronic mail system and VAX computer bulletin board conference.

The long-distance learning experiment was coordinated by Dr. Norman Coombs, professor of history at RIT, and Dr. Joseph Kinner and Dr. John Schuchman, professors of history at Gallaudet.

The RIT/Gallaudet telecourse was not the only application of computer networks that extend beyond individual classrooms discussed at the symposium.

While participating in a long-distance learning project called Learning Network, students in Marie Hadiaris' class learned about cultures around the world. The AT&T-sponsored project provides teachers with a wide range of computer-assisted curriculum materials. Hadiaris, teacher at the Marquette School in Muskegon, Michigan, chose the "Places and Perspectives" curriculum during the 1990-91 school year.

"I wanted my students to learn more about other places in the United States and the world," says Hadiaris. "We were matched with seven other schools throughout the world, and we communicated with one another two or three times a week via our computers and the software provided by AT&T.

"Mine was the only classroom with deaf students, so I proposed that the other schools research hearing-impaired children in their areas, focusing on how they are being educated."

Some of the other "Places and Perspectives" projects involved learning about each school's local history, doing research on local animals and habitats, finding information on local tourist attractions, learning about local Native American customs, and doing research on environmental problems.

"My students thoroughly enjoyed the project, which helped them develop their vocabularies and understanding of language," says Hadiaris.

Links in the chain of communication Anthony Naturale, visiting instructor in NTID's English department, right, teaches a student how to use Electronic Networks for Interaction (ENFI).

Hypermedia: Making a different mousetrap

In addition to seeing presentations on the more well-known technologies, such as captioning and computer networks, symposium participants were able to learn about applications of new computer technologies in the classroom.

A particularly flexible newcomer is hypermedia, interactive computer software that can function in different ways and directions, expanding the traditionally linear usages of older database and word processing softwares.

One example of hypermedia is Tutor Tech, written for the Apple II family of computers, which is equipped with extensive text and graphics capabilities as well as the ability to import high-quality digitized speech, color, video, and animation. Speech/language pathologists can "stack" or organize these functions and clusters of information in formats suited to their

Signs of technology June Reeves, visiting assistant professor in NTID's Center for Sign Language and Interpreting Education, demonstrates interactive videodiscs.

diagnostic and therapeutic strategies or their clients' needs.

Students at the American School for the Deaf (ASD) in West Hartford, Connecticut, also use hypermedia to create classroom presentations on large-screen computer monitors. Teachers and students replace the traditional chalk and blackboard with a mouse, keyboard, and large-screen monitor to extract graphics and text from other disks or videotapes. This sort of interactive application has many advantages, according to John Silva, ASD teacher.

"An unlimited number of lesson pages or screens with text and graphics can be created and saved for use in other classes," he explains. "Teachers instantly can type students' responses on screen and save them. The presentations are attractive because of their color, graphics, near-photo-quality pictures, and excerpts from videotapes or videodiscs."

Videodiscs: Interacting at the right pace

A less flexible but no less educational technology used in some classrooms is interactive videodiscs, which enable viewers to learn at their own pace.

June Reeves, visiting assistant professor in NTID's Center for Sign Language and Interpreting Education, uses interactive videodiscs as an innovative approach to developing sign language instructional materials.

"Current videodiscs used to develop receptive sign skills are limited to retrieval of individual signs from vocabulary lists," explains Reeves. "There's no access to sign vocabulary or sign language principles as they're used in the context of a signed dialogue. Also, typical sign language models show highly skilled adult signers signing a rehearsed vocabulary list.

"I'm developing a videodisc program that incorporates deaf students' spontaneous sign language communication so that adult sign language learners can see more typical ASL usage."

Looking toward the future

Still more technologies, such as computer-aided speech-to-text captioning systems and interactive computer learning programs, were demonstrated at the symposium; others, such as true speech recognition systems, were discussed in theory, but are not yet ready or sophisticated enough for use in the field of education of deaf people.

At Davila's request, participants gathered in work groups at the symposium's conclusion to develop priority lists of areas and technologies needed to enhance deaf people's educational opportunities.

"As developers and users of technology, each and every one of you will play a pivotal role in contributing to the inclusion of people who are deaf in all aspects of the community," said Davila. "We must always keep at the forefront of our minds the true purpose for utilizing our skills—creating an environment in which deaf individuals can make informed decisions for themselves, communicate for themselves, project themselves, and relate effectively with hearing individuals.

"We must never forget that this process is a means to an end, and that end is the empowerment of deaf people." ■

These teachers earn an 'A' for

Academics, Attitude, & Access

by Kathleen S. Smith

A teacher like Deborah Beardslee is a mainstreamed deaf student's dream.

Beardslee, who teaches graphic design in RIT's College of Imaging Arts and Sciences, often has deaf students in her classes. What sets her and some other RIT professors apart is the extraordinary sensitivity that they demonstrate toward deaf students and Deaf culture, both in and out of the classroom.

These are the teachers who adapt their methods for deaf students; willingly spend extra time to make coursework understood by all; and work to create classrooms that are true places of learning, sharing, and collaboration.

Their efforts are not only encouraging but essential, as the percentage of deaf students enrolled in RIT colleges other than NTID has increased steadily over the past several years.

In academic year 1991-92, 27 percent of the Institute's deaf students were enrolled in bachelor's and master's degree programs through RIT's other seven colleges, a 40 percent increase since the mid-1980s.

Those students receive the support of a sophisticated cadre of services, including interpreting, tutoring, notetaking, and counseling. The most crucial elements in their success, however, are their teachers.

Most RIT teachers are open-minded about having deaf students in their classes, but a few genuinely enjoy the challenge of finding new ways to improve the teaching and learning process.

Integrating deaf and hearing students in the classroom isn't always simple. Rules sometimes have to be changed. Special attention to learning styles must occur.

Deborah Beardslee

As Mark Rosica, chairperson of NTID's visual communications support department, says, "Faculty members who teach hearing students usually assume that everyone has the same access to information. When a deaf student joins that group, it becomes obvious that there are significant differences in how information gets transmitted as well as received.

"NTID's support departments [business/computer science, liberal arts, science/engineering, and visual communications] exist to bridge that information gap."

Crossing that bridge does not faze Patricia Clark, College of Science professor.

"In the abstract, I guess you expect something different with deaf students," she says. "In reality, they're not different at all."

John Kirsh, RIT graduate and now visiting instructor in NTID's physics and technical mathematics department, remembers Clark fondly.

"She was a wonderful teacher," he says. "She always wrote everything on the board and explained it as she went along. She also was willing to spend as much time with students outside of class as was needed."

Clark, who has taught math at RIT for 15 years, makes the "standard" adjustments when deaf students are in class: She faces them when she speaks, gives a pre-class weekly outline, and writes on the board a great deal. Although she does not know sign language, she believes that students in her classes "aren't afraid to come to me individually with their problems. If necessary, we deal with the communication issue by writing back and forth."

Clark is not atypical in her lack of sign language skills. Very few non-NTID hearing teachers know enough sign language to conduct their classes without interpreters.

Patricia Sorce

Salvatore Mondello, who has taught history at RIT since 1967, uses interpreters, but says that his students are "very observant of both my speech and my gestures."

Most of Mondello's classes, particularly at the upper levels, involve very little lecturing, relying instead on panel discussions and captioned videotapes.

Mondello's quarter-century of teaching experience gives him a unique vantage point from which to view today's deaf students, of whom he says, "They have a great global perspective because of Deaf culture and bilingualism," he says. "They're smart... they're well-prepared...and their grades are among the highest in my classes."

Patricia Sorce, College of Business associate professor, concurs.

"Deaf students' performance levels are much higher today than in the past," she says. "I guess it's due to better early preparation."

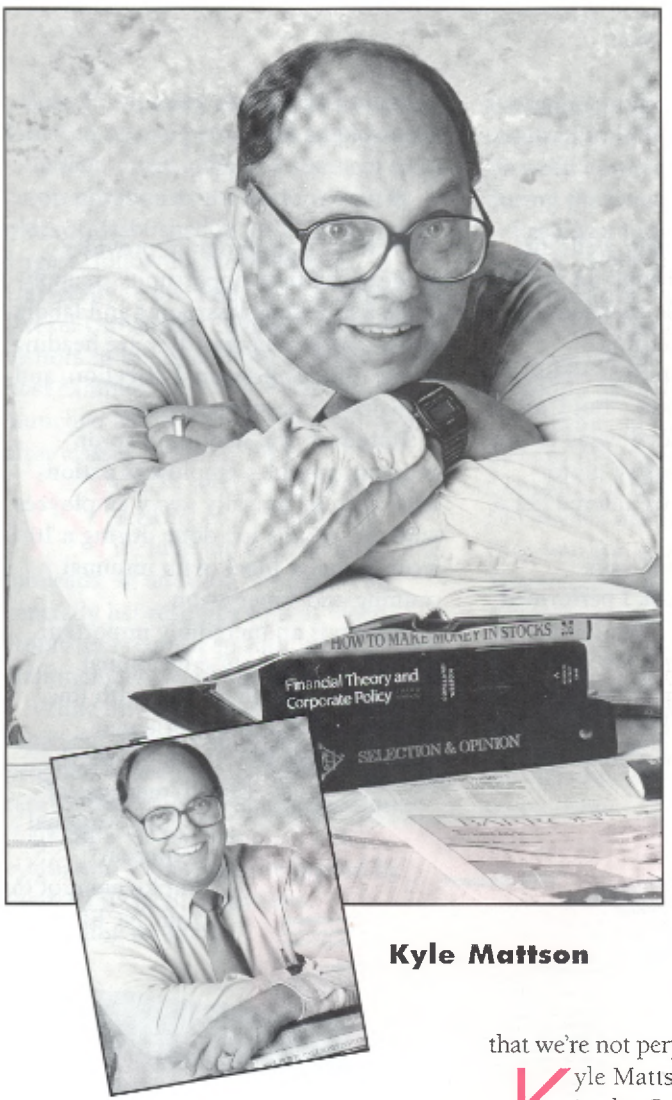
While teachers may be seeing more sophisticated students in today's classes, they also are getting some savvy support from NTID's support service network of professionals who interact with both teachers and students.

Beardslee, who began teaching at RIT two years ago, feels fortunate to be the beneficiary of interest and support from the visual communications support department.

She has received advice on how to make her classroom more accessible to deaf students, has had support department faculty members sit in on her classes to learn her material, and generally has felt "included and embraced" by her academic colleagues.

Additionally, she has enough sign

"We need to eliminate the 'us versus them' attitude about deaf and hearing students. We need to get to a place of empathy and understanding."



Kyle Mattson

language skills, gained during her college days at Syracuse University, to be able to communicate "comfortably" with her deaf students.

Beardslee felt amply rewarded for her efforts last year.

"One of my deaf students shyly approached me after class and asked if I wanted to buy tickets for her upcoming club banquet," she says. "I was really touched that she felt comfortable enough to invite me. I went and had a wonderful time."

That student, third-year graphic design student Sin-Yi Ko, says, "I invited her not as a teacher but as a friend because she seemed open-minded and interested in Deaf culture. She always tried hard in class to balance her time between the deaf and hearing students."

"I try to be conscious when setting up team projects in class to make people comfortable," says Beardslee. "Sometimes I might have deaf students work together in a group to make things easier for the interpreter. Other times, I like to mix up deaf and hearing students so that we're not perpetuating 'separateness.'"

Kyle Mattson, assistant professor in the College of Business, often adopts a similar strategy in his "Statistical Analysis" class.

"Sometimes I force the selection and group deaf and hearing students together for a project," says Mattson, who has taught at RIT for three years. "That's the way it is in the business world."

Mattson's other strategies include reviewing class plans beforehand, paying attention to where he stands when he writes on the blackboard, and encouraging students to interact with one another both inside and outside the classroom.

"I treat deaf and hearing students in my classes the same way," he says.

Fellow business professor Sorce has her own methods for working with deaf students in her classes. She faces them when she talks and strives to have regular face-to-face contact with them outside of class. Like many teachers, she has photocopies of her lecture notes available in the library for all students.

"Pat goes out of her way to adapt her teaching approach for deaf students in her classes," says James Biser, assistant professor in NTID's business/computer science support department. "She definitely makes an extra effort."

So does Elaine O'Neil, director of the School of Photographic Arts and Sciences, who had deaf students in an "Academic Seminar" course she co-taught last year.

"We need to eliminate the 'us versus them' attitude about deaf and hearing students," she says. "We need to get to a place of empathy and understanding."

Dr. Edward Cain, chemistry professor in the College of Science, has such an understanding. He began his RIT career in 1974 as NTID support department chairperson for the College of Science.

Although he no longer is affiliated with NTID, he retains his sign language skills and signs for himself in classes and laboratories. However, because his receptive skills, by his own admission, are weak, he continues to use an interpreter.

"Ed takes care of all his students," says Dr. Rosemary Saur, chairperson of NTID's science/engineering support department. "And that's the essence of mainstreaming."

Co-Opportunity

Students learn and earn while gaining real-world work experience

by Deborah R. Waltzer

While peering over her building estimator father's shoulder at blueprints spread across the kitchen table, 7-year-old Connie Rothenberger decided on a future career in drafting and construction technology.

Fifteen years later—thanks, in part, to good college grades and a successful cooperative work experience (co-op) at Eastman Kodak Company in Rochester, New York—the 1992 NTID architectural technology graduate achieved her goal, landing a full-time drafting technician position in the imaging giant's architectural and engineering services division.

"NTID is an excellent source for architectural designers," says Steven Dinin, Kodak's unit director of architectural and structural design and Rothenberger's co-op supervisor.

"Connie performed very well," he adds. "She followed through on projects and wasn't afraid to ask questions if she didn't understand something.

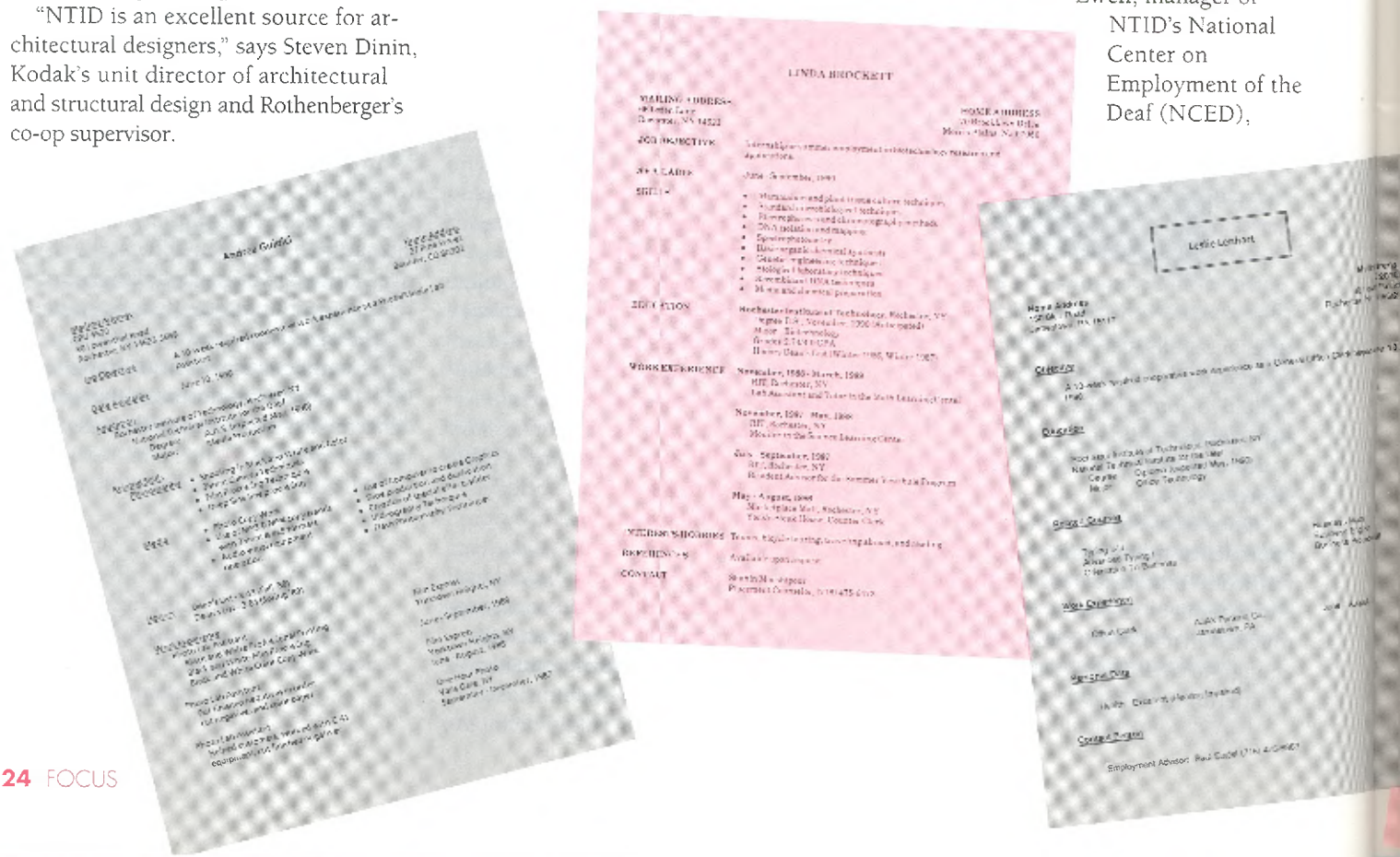
"Sometimes with a student employee, you break even," he notes. "But Connie was a real asset and added value to our department. Her impressive performance was the reason we offered her a permanent job."

"I loved my co-op job," says Rothenberger. "The work I performed related closely to what I had learned in school.... In today's tight job market, a person who has a co-op background probably has a better chance of getting a full-time job than one who doesn't."

NTID's co-op program provides students with an opportunity to apply skills learned in classrooms and laboratories, assess whether they are heading in the right professional direction, and network for permanent jobs.

Moreover, the Institute's co-op program provides employers nationwide with technically savvy employees who can get the job done during a 10-week summer block with minimal training and supervision.

"Co-op is an incredibly important part of our students' educational experience and fits in well with the philosophy of a career-oriented university like RIT," says Elizabeth Ewell, manager of NTID's National Center on Employment of the Deaf (NCED),



whose 15-member staff helps students locate co-op and permanent employment.

In fact, Ewell adds, the status of RIT's co-op program as the nation's fourth oldest (established in 1912) and fourth largest (following Northeastern University, University of Cincinnati, and Drexel University) helped convince site visitors in the mid-1960s to select RIT as host campus for NTID. NTID in turn launched its own co-op program soon after classes began in 1968.

NCED's services for students seeking co-op positions include job search classes and job leads. In addition, students can centrally list résumés so that when employers request specific skills, NCED staff members send appropriate résumés.

While on co-op, students—who represent all but one NTID academic program—keep on-the-job activity logs, receive performance appraisals from their supervisors, complete self-evaluation forms, and are graded by their NTID faculty advisors. Depending on their academic program, students are required to fulfill either one or two 10-week co-op assignments, usually during the summer quarter.

Early last June, NTID co-op students eager to tackle the "real world" descended upon work stations, conference rooms, and manufacturing plants at companies from Malden, Massachusetts, to Seattle, Washington.

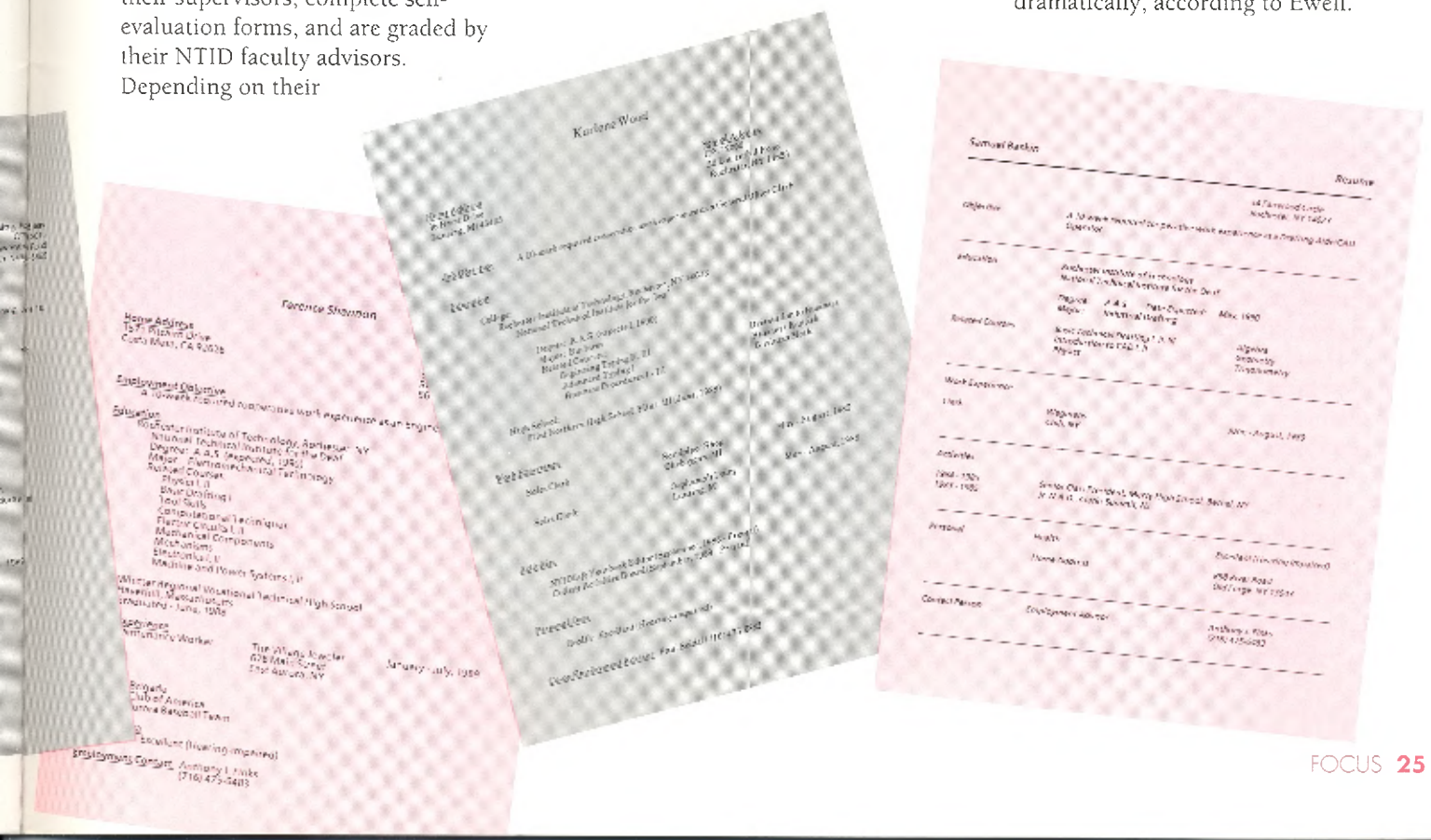
Working for such diverse organizations as American United Life Insurance Company in Indianapolis, Quantum Chemical Corporation in New York City, and the National Center on Toxicological Research in Jefferson, Arkansas, students earned hourly wages between $4.50-$12 while completing short-term projects and covering for vacationing employees, according to Paul Seidel, senior career opportunities advisor and coordinator of NCED's co-op team.

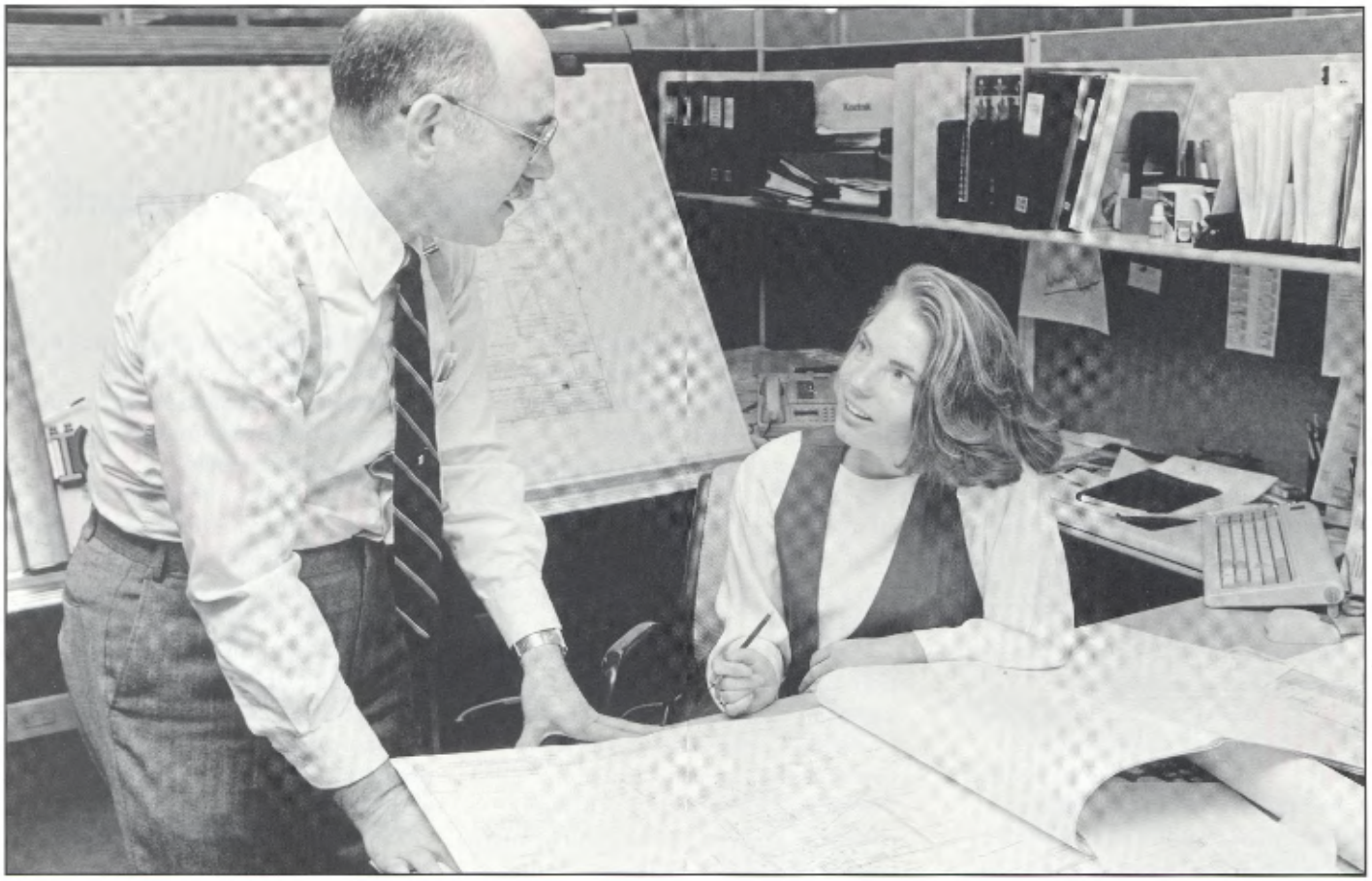
Seidel adds that roughly 15 percent of students perform co-ops in Rochester, while the rest either return to their hometowns or move to new locales for the summer.

While some corporations hired fewer co-op students this summer because of the slow national economy, others came on board with NTID for the first time. Ewell says that in addition to appreciating students' skills, these new employers may have been motivated to hire more deaf personnel because of a desire to comply with the Americans with Disabilities Act.

"Employers want to do a better job of hiring disabled people," she says. "NTID students can help employers accomplish that goal as well as provide the skills they need."

Employers' interest in accommodating deaf employees is increasing dramatically, according to Ewell.





Blueprint for a career Connie Rothenberger, 1992 architectural technology graduate, worked with supervisor Steven Dinin during her cooperative work experience at Eastman Kodak Company. The two continue to work together now as Rothenberger is a full-time Kodak employee.

"During the past week alone, we have responded to 14 employer requests for 350 copies of *Tips for Communicating with Deaf Employees* [an informational publication produced by NTID]," she says.

"We are most interested in preparing employers for the advent of a deaf employee," she continues. "As such, we are available to employers before, during, and after the hire."

NCED supports employers through deaf awareness training sessions to help orient supervisors to work with deaf employees; loaned telecommunication devices for the deaf (TDDs), funded by Mitsubishi Corporation and the Parsons Project Foundation; site visits by faculty members and employment advisors; and provision of an NCED contact person who serves as a resource during the co-op placement.

One of NCED's "satisfied customers" is Penny Biedermann, manager of personnel services for Interstate Power Company in Dubuque, Iowa, who in late May was enthusiastic about welcoming Michelle Gaul, second-year applied accounting student and the utility company's first deaf co-op student.

As an accountant trainee, Gaul's summer duties included financial data analysis using spreadsheets, report preparation, and computer data entry.

In preparation for Gaul's arrival, four employees—Biedermann and her secretary along with the company's controller and manager of taxes—enrolled in a community sign language class "so that we would at least be able to say 'hello,'" says Biedermann.

Despite arrangements for the sign language teacher to be present during Gaul's first few mornings on the job as well as the controller's plan to take morning and afternoon breaks with Gaul, Biedermann was concerned that Gaul and the company's hearing employees might not interact with one another.

"I knew there was a possibility that Michelle would be sitting alone at one end of the lunch table while hearing employees sat together at the other end," she says. "But we did what we could to make her feel part of the team."

A few weeks into the co-op, Biedermann reported that Gaul and other employees chatted amiably every day at lunchtime through use of a notepad. Gaul, who was recruited to play substitute outfielder for the company's softball team, concurred that the work experience was satisfying both professionally and personally.

"Interstate Power Company is a

"When students first come to us for help in preparing for a job search, they need a lot of mentoring.... By the time they're ready to graduate, they know how to go about finding a job."

great place to work," says Gaul. "I had never worked in an office before or had a paying job.... I might not have had this experience if NTID didn't have a co-op program."

Like Biedermann, Patrick Hughes, director of operations for the computing division of Cray Research Incorporated in Eagan, Minnesota, looked forward to hosting his company's first five NTID co-op students this past summer.

"Fran Richardson [NCED senior career opportunities advisor] did a nice job of selling the NTID program to me," says Hughes. "I interviewed all of the co-op candidates on campus and was very impressed with them.

"I think hiring NTID students is going to be good for us."

Hughes, whose employer is the world's largest manufacturer of high-performance supercomputers, explains that the summer months are a heavy vacation period for full-time employees, and co-op students help fill in the gaps.

"Students begin by performing entry-level computer operator functions," he says. "Once their initial training is complete, they are able to work independently."

Corporate managers who have previously hired NTID co-op students offer the program's best endorsement.

As manager of product support for Paychex, Inc., a Rochester-based payroll processing and human resource services company, Jeanette Logue's positive experience supervising NTID co-op student Donald Reamsnyder during the summer of 1991 motivated her to offer him a permanent computer specialist position the following fall.

"Don is self-sufficient and needs little supervision on a regular basis," she says. "In fact, he did such a great job during his co-op that when a permanent position opened up, we offered it to him without interviewing anyone else."

Paychex has taken measures to accommodate Reamsnyder. After borrowing TDDs from NCED during Reamsnyder's co-op, the firm has rented a machine so that Reamsnyder can communicate independently by telephone.

To further bridge communication, Reamsnyder, 30, has taught some sign language to his co-workers. He also appreciates that Paychex gives him a few hours of release time each week so that he can complete his associate degree through NTID's applied computer technology program.

"I am very happy with my position at Paychex and grateful to NCED staff members who helped arrange my co-op, which led to a permanent job," says Reamsnyder.

Ewell and her staff members witness considerable changes in students like Gaul, Reamsnyder, and Rothenberger as they progress through the co-op process.

"When students first come to us for help in preparing for a job search, they need a lot of mentoring," Ewell says. "When they go out on a second co-op, they need less help from us. They're more mature, and they understand more about the cultural milieu of the workplace. By the time they're ready to graduate, they know how to go about finding a job."

Kodak's Dinin offers the best evidence of employer satisfaction with the co-op program. This summer Dinin hired a second NTID co-op student to follow Rothenberger.

"I hired Dana Hoover [third-year architectural technology student] as a direct result of my positive experience with Connie," he says. "You don't argue with success."

Earning his "Paychex" Donald Reamsnyder turned his cooperative work experience at Paychex, Inc., into a full-time position.

At home with Deaf culture

by Beth M. Pessin

Farley Warshaw grew up in a deaf family, used American Sign Language (ASL) at home, and attended a residential school with a day program for deaf students. He never considered his deafness a "disability."

Dorothy Wilkins, the only deaf member of her family, used signed English at home and attended both mainstream schools and residential schools for deaf students. She says she was taught to act as though she were a hearing person.

Mindy Hopper, also the only deaf member of her family, used spoken English at home, attended mainstream schools, and had no ties to the deaf community until her adult years.

Although Warshaw, Wilkins, and Hopper had different experiences while growing up, they now have a common bond: Deaf culture.

Like other cultures, Deaf culture's foundation is its members' language, history, shared experiences and values, and heritage.

Life experiences, the time at which an individual is exposed to a culture, and interaction with other cultural groups all influence individual perceptions and contribute to the richness within a culture, as three presentations at NTID last spring clearly illustrated.

Something in common As in other cultures, family, friends, shared values, and a common language are important aspects of Deaf culture. Here, Mindy Hopper chats with a friend.

"We all are individuals and bring different experiences to the culture," said Warshaw, former assistant professor in NTID's department of human development, who shared his views during a panel discussion in May titled "Perspectives on Deafness."

For Warshaw, Deaf culture means acceptance of individual differences, support from peers, increased opportunities to develop a stronger self-identity, and the ability to communicate with others who share a common language.

"Deaf culture means being involved in the total core of the deaf community," said Wilkins, visiting instructor in the Center for Sign Language and Interpreting Education, during a panel discussion in April titled "Characteristics of Deaf Culture," sponsored by NTID's training and development department.

"It means deaf advocacy, deaf rights, and having a positive attitude toward ASL. It's important to respect others, to keep an open heart and mind. The more you become immersed in the culture, the more respect you get," she added.

"Deaf culture is home for me," said Colleen Pouliot, visiting instructor in the Center for Sign Language and Interpreting Education, who

Sharing a language and more Janice Smith Warshaw and Farley Warshaw converse in American Sign Language to catch up on the day's activities.

also participated in the "Characteristics of Deaf Culture" discussion. "There is a communication comfort level with other members of the group."

Although ASL is the predominant language of Deaf culture, other communication modes, such as signed English, now are influencing the culture.

"All cultures must have a language," said Warshaw, who is among the third generation of deaf individuals in his family. "ASL is the first language in Deaf culture, but we're now noticing a change. There is some blending of signed English. Although ASL is an important part of Deaf culture, it does not mean that deaf people who don't use ASL cannot be a part of the culture."

Carol Padden, a native ASL user and internationally known authority on issues related to Deaf culture, ASL linguistics, and deaf education, believes this transformation was inevitable.

"Because today's society is so complex, and different cultures interact regularly, it no longer is possible for a pure form of any culture to exist," she explained during a presentation in March titled "Moving Between Languages and Cultures: The Special Case of Deaf People," which was part of NTID's 1991-92 Cultural and Language Diversity in Education Colloquium Series.

"There's no unspoiled culture," added Padden, who also is co-author with Tom Humphries of the book *Deaf in America: Voices from a Culture*. "There are rich interactions and mutual influences among cultures."

For those deaf people who grow up without knowledge of Deaf culture, their first exposure can be both enlightening and startling.

"Deaf culture really didn't hit me until I was in my 20s," said Hopper, cross-cultural educator in NTID's student life department, who also participated in the "Characteristics of Deaf Culture" discussion.

Although Hopper knew a few other deaf people while she was growing up, she says that her initial experience with the culture occurred during a deaf racquetball tournament.

"There were hands flying all over the place.... Eventually I realized that was my world."

After their initial introduction to Deaf culture, some individuals choose to become more involved and say they feel that their identities change and become stronger.

Dr. Teena Wax, chairperson of NTID's psychological services department and a participant in the "Perspectives on Deafness" discussion, was 28 when she first met another deaf person and began to learn ASL. Because she attended mainstream schools, she had limited interaction with other deaf people.

"My parents thought I would lose a lot [by learning ASL], but I gained another language and another culture," said Wax, whose family members all are hearing. "I've come a long way since becoming involved with the deaf community."

Although Wilkins is in her early 30s, she said her deaf identity is really only four years old. It was four years ago, while working toward her master's degree in ASL and teaching, that Wilkins began analyzing her feelings and past experiences and began to accept Deaf culture.

"It feels good," she said. "I'm becoming a stronger and stronger person.... I've found myself."

PAULA GRCEVIC

by Deborah R. Waltzer

What do you do if you're the only deaf student in a college art history course and the professor lectures from the back of a dark classroom while flashing slides of artwork on an overhead screen? No lights, captions, or interpreters are available, and only a few seconds separate each of the dozens of pulsating images.

If you're Paula Grcevic, you feverishly sketch each image on a notepad. As soon as the lights come up, you dash to the library, grab an art history volume, and match your sketches to the book's prints to discover their identities.

Such was the strategy of the assistant professor in NTID's applied art and computer graphics department while studying graphic and communication design at Brooklyn's Pratt Institute in the mid-'70s.

Grcevic's cumbersome learning technique—born of necessity—sensitized her to the disparate learning styles among students and in May helped her earn one of RIT's four prestigious 1992 Eisenhart Awards for Outstanding Teaching.

"As a teacher, I am often faced with a variety of learning levels and styles among my students," says Grcevic. "I do not believe that a student with little experience in art should get more attention than a student with more experience, or vice versa.

"Also," she continues, "I do not underestimate any student's intelligence. Each of us has been exposed to a different upbringing, culture, school, society, and experience. Each of us has our own intelligence, which can be expressed in many different ways."

Surprisingly, the Youngstown, Ohio, native didn't start her career planning to teach.

Employed for four years as a textile and fabric designer for men's ties and women's dresses in Manhattan's garment district while earning a master's degree at Pratt, Grcevic thought she would "design forever."

But the stress of big city living began to take its toll on Grcevic, a self-proclaimed nature lover. In 1979, Grcevic turned for advice to a Pratt employment counselor, who told her about a faculty position teaching art at a college for deaf students in upstate New York.

Grcevic, deaf since birth, had an immediate reaction.

"I was terrified to come to NTID," she says. "I had never before really thought of myself as deaf, and I didn't know sign language. But my counselor encouraged me to be open-minded."

The fine art of teaching Award-winning teacher Paula Grcevic, right, supervises the work of student Wendy McCulley.

One visit to NTID was all it took to convince Grcevic to forever leave behind the world of silk and cotton cravats and enter academia.

It's a decision she has never regretted.

"I love to teach," says Grcevic. "I wouldn't give it up for a higher paying job or," she grins, "even if I won the lottery."

Grcevic's students and NTID colleagues are equally happy about the path she chose.

"Paula is a really tough teacher, but I'm learning a lot from her," says Khari Balogun, second-year applied art and computer graphics student, who last spring took Grcevic's "Basic Drawing" course. "When you finish a project in her class, she makes you work at it some more to make it look even better. I think that's a really good challenge."

Katherine Voelkl, assistant professor in the applied art and computer graphics department, sees her co-worker's dedication every day.

"Paula is a hard worker who's often in her office nights and weekends," says Voelkl. "While rewriting the curriculum of our department's art survey course, she came to work early each day to sit in on an art history course in RIT's College of Imaging Arts and Sciences to gather new ideas."

"Paula teaches in a very humanitarian way, not as a strict dictator," adds John Cox, department chairperson.

When notified of winning the Eisenhart Award during a faculty meeting, Grcevic was "floored," Cox adds.

"Paula is not the sort of person to go around congratulating herself for her successes," he explains. "She really was pleased and perhaps a trifle embarrassed."

Recognition of Grcevic's dedication and talent as an educator and artist not only resounds throughout RIT classrooms, studios, and offices, but extends beyond campus to Rochester, New York, corporations and community organizations as well.

When Annette Basinger, principal with Rochester's Pearce Basinger and Associates interior design firm, needed customized holiday gifts for her firm's clients, she turned to Grcevic, an avid papermaker. Expecting identical prints, Basinger was startled when Grcevic handed her 25 unique paper designs.

"The prints were beautiful and each a one-of-a-kind," she says. "Paula was great to work with and so eager to please us."

Thomas Willard, director of Deaf Artists of America (DAA) and 1988 RIT graduate who received a bachelor's degree in professional photography, recalls Grcevic's dedication in June 1988 when the organization was scrambling to open a new art gallery in Rochester.

"Paula helped us scrub and paint the walls and pick up pins from the cracks in the floor," says Willard, noting that the building once was a garment factory.

While president of DAA for a one-year term in 1989, Grcevic curated an exhibit of deaf women artists from around the country to commemorate National Women's Week.

"There are so many highly creative deaf women artists across the country, and I felt it was important for the Rochester community to view and recognize their exceptional skills," says Grcevic.

Her interest in deaf artists extended further this past year to performing artists. Grcevic volunteered as staff artist and set designer for LIGHTS ON! The new deaf theater company in Rochester staged its first production in May.

According to Patricia Durr, company artistic director and assistant professor in NTID's department of human development, Grcevic's role has been "instrumental."

"Paula is an outstanding member of the company," says Durr. "Not only does she contribute her artistic talent, time, energy, and expertise, but she has introduced us to other designers and photographers as well."

Grcevic's other outside activities include making paper in her townhouse basement studio and exhibiting her artwork as well as cycling, running, weightlifting, and traveling. She treasures pedaling through the Finger Lakes region countryside, sketchbook strapped to her 21-speed cruising bike.

Nonstop activity suits Grcevic well.

"I'm a restless person who doesn't like to sit still," she says. "There are so many things in life that I want to do."

Favorite childhood residence: Lake Como, Italy, where I lived from ages 7-13 while my father managed offices in northern Italy for Stanley Works Tools.

Favorite foods: Pistachio ice cream, pistachio madeleines (French sponge cake cookies), and poppyseed kolache (strudel filled with poppyseeds, farmer cheese, walnuts, and apples) from a recipe of my Austrian/Yugoslavian grandmother.

Favorite books: The dictionary and my sketchbook.

Last good book I read: *The Metheun Audition Book for Women*, a collection of 50 audition speeches for women selected from contemporary plays, compiled by Annika Bluhm.

Favorite art style: Wiener Werkstatte (Viennese Design), an artistic style of ornamental shapes, both organic and inorganic, established by early 1900s Austrian artists Josef Hoffmann, Koloman Moser, and Fritz Warndorfer.

What upsets me: Cruelty to animals, pollution, prejudice, war.

Favorite toys: Dominoes, jacks, marbles, wind-up toys.

Long-term dream: To own a second home in Europe so that I can live among deaf artists and bicycle through European villages.

Tracking leaves imprint worldwide

by Kathleen S. Smith

When NTID researcher Dr. Carol De Filippo and a colleague from the Central Institute for the Deaf in St. Louis invented a speechreading training technique called "tracking" 14 years ago, little did they suspect that its popularity would spread to all corners of the world.

More than a dozen countries, including Australia, England, Japan, and Holland, currently use the technique, which is hailed by The Ohio State University researcher Janet Weisenberger as "the closest approximation to measuring conversational speech that I've found."

Weisenberger is one of several U.S. researchers who use the technique.

Harry Levitt, of the Center for Research in Speech and Hearing Sciences at the City University of New York, also uses tracking to evaluate various kinds of sensory aids, including tactile and visual, as well as cochlear implants.

He terms the technique, "A significant contribution to training and evaluating communication skills."

What is tracking and what makes it so popular?

Most notably, tracking expands on traditional methods that evaluate speechreaders' skills based solely on accuracy. Traditionally, a speaker might recite a list of words and "score" a speechreader based on the number of words repeated correctly.

Tracking instead measures the *efficiency* of communication through the use of "connected discourse," which allows the speaker to use related sentences.

Here's how it works: A speaker reads aloud from a prepared text—a book or magazine article, for example—phrase by phrase to a speechreader. The speechreader repeats verbatim what was said.

If the speechreader doesn't repeat it verbatim, the speaker uses oral correction strategies—such as repeating the sentence, rephrasing the words, etc.—to correct the response.

Once the speechreader gives the right response, the speaker moves on to the next phrase. The speechreader is timed and scored based on the number of words of text received per minute.

In one study that De Filippo conducted with NTID students in the mid-1980s, the speaker read excerpts from an Alfred Hitchcock-style mystery novel.

"The students loved it," De Filippo recalls, "because many had never read a mystery before. They wanted to come back each week to find out what happened to the characters!

"Tracking provides a tremendous opportunity for teaching and learning," De Filippo continues. "Each encounter is a mini-lesson. You can teach the link between how speech looks on the face and what that sequence of sounds means."

"Tracking is a very useful and important tool for us," says Charlotte Reed, principal research scientist at the Research Laboratory of Electronics at Massachusetts Institute of Technology, where tracking has been used for the past 10 years with both deaf and deaf-blind people. "It's an important contribution to the realistic assessment of deaf people's communication abilities."

Tracking Strategies in Action

Speaker: The car careened around the corner, knocking Warner against the car door handle.

Speechreader: The car...

Speaker: The car careened around the corner. [Repetition and shortening of the segment.]

Speechreader: The car...weed...around...

Speaker: The car careened. It went fast. [Repetition; shortening; paraphrasing.]

Speechreader: It went fast.

Speaker: (Nod.) It went around the corner. [Confirmation; shortening; change in structure.]

Dr. Carol De Filippo

A look ahead To celebrate NTID's 25th anniversary, the upcoming winter/spring issue of *FOCUS* magazine will take a look at the Institute through the eyes (and lenses) of student photographers. Watch for it!

Photography by James Yevich

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ADDRESS CORRECTION REQUESTED

Michael Spencer

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Courtesy of the Asian Deaf Club

Dual cultures, p. 6