

FALL 1999

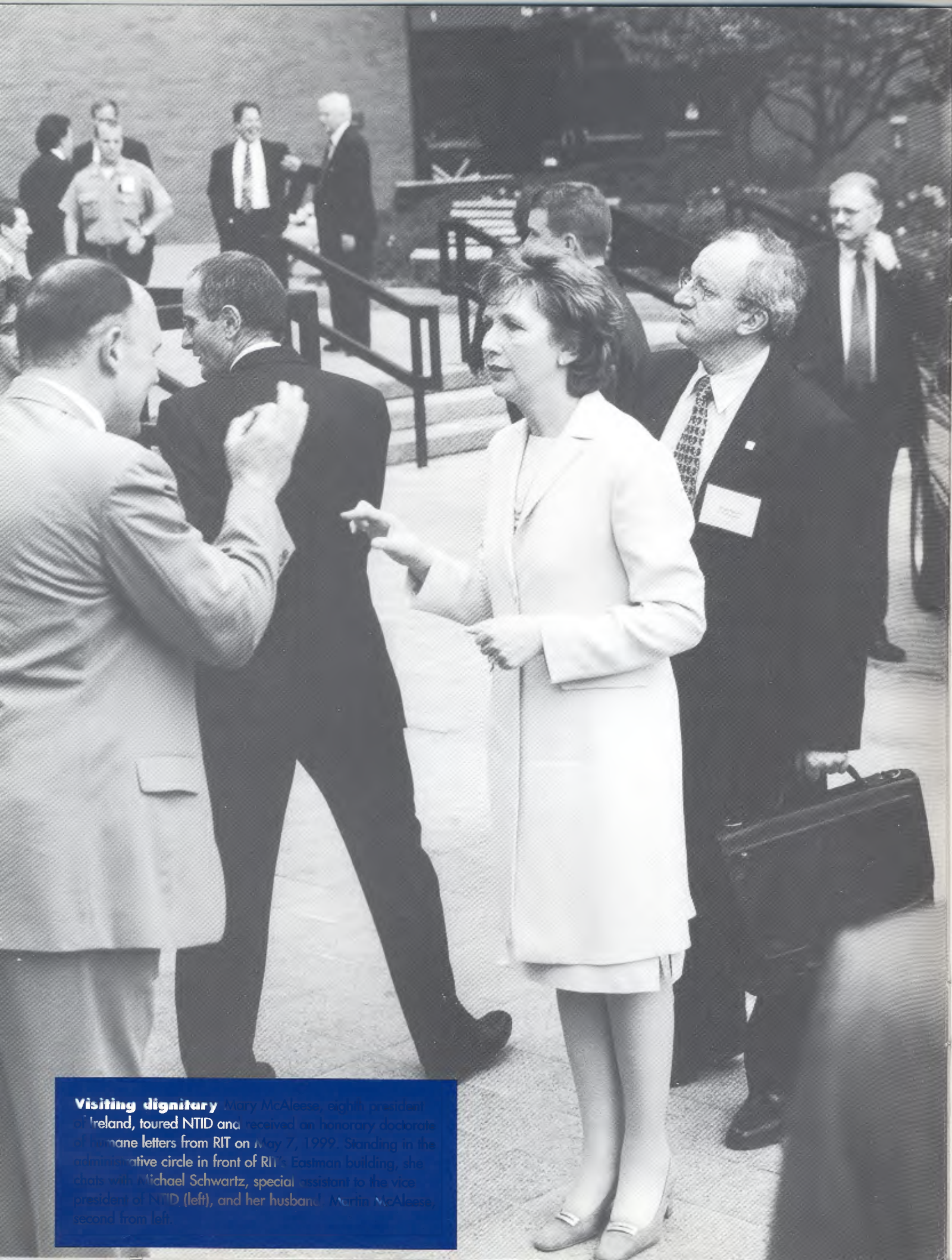
FOCUS

NTID

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



Best of All Worlds



Visiting dignitary Mary McAleese, eighth president of Ireland, toured NTID and received an honorary doctorate of humane letters from RIT on May 7, 1999. Standing in the administrative circle in front of RIT's Eastman building, she chats with Michael Schwartz, special assistant to the vice president of NTID (left), and her husband, Martin McAleese, second from left.

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ABOUT THE COVER

Best of all worlds

From left to right, Rocco Saccente, information technology student from Valley Stream, New York; Rosa Lee Gallimore, social work student from Indianapolis, Indiana; Todd Furlong, information technology student from Barrington, Rhode Island; Kevin Rittenhouse, information technology student from Douglasville, Pennsylvania; and Norma Moran, professional and technical studies student from Reno, Nevada, are all students who enjoy the benefits of NTID support while studying in one of the other six colleges of RIT. Read about more cross-registered students in the article on page 14.

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FOCUS

NTID

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FOCUS is published by the Marketing Communications Department at the National Technical Institute for the Deaf, a college of Rochester Institute of Technology, Rochester, New York. The views expressed in guest columns do not necessarily reflect the position of NTID or FOCUS magazine.

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BOB'S BULLETIN

NTID's Blueprint for the Future

In 1992 NTID developed a Strategic Plan for a shared vision of the Institute's future based on several months of review, analysis, and recommendations by faculty and staff members. I'm pleased to report that we have implemented many, if not most, of the recommendations contained within that document.

However, we continue to evaluate our effectiveness and future opportunities at NTID. We formalized this process recently by forming a Strategic Plan Update/Review Task Force last year. This task force reviewed and refined existing strategic objectives, identifying those most critical to the institutional effectiveness of NTID over the next five years.

The review was based on NTID's 1992 Strategic Plan and was shaped by evolving changes in both external forces and the internal strengths and weaknesses of the college. The results of this review have been used to develop a blueprint for the college over the next five years.

Based on the recommendations of the Strategic Plan Update/Review Task Force, I have determined, with Dean T. Alan Hurwitz, that with the faculty and staff members of NTID we will address the following priority strategic objectives:

1. Enhanced Institutional Image:

NTID will define its institutional identity. It will aggressively market its identity with respect to the diversity of its culture, language, and demographics; its range of programs; and its comparative advantage over alternative colleges and educational opportunities.

2. Curricular Flexibility and

Innovation: NTID will establish procedures to monitor changing job markets and emergent careers in order

to anticipate and plan for changes in technical disciplines. These programs should represent unique "best in the field" career opportunities that will lead to global awareness, economic viability, and ongoing career mobility for graduates. Ultimately, all NTID curriculum needs to be dynamic and flexible to be able to meet the challenges of rapid changes in the world of work.

3. Improved Access for Students:

NTID, in collaboration with other RIT colleges and units, will provide leadership to ensure optimal access (as resources permit) for deaf and hard-of-hearing students throughout the educational community. Areas of highest priority include: articulation agreements which maximize transfer of credit between NTID-based programs and related programs throughout the other colleges of RIT, and academic support for all cross-registered students.

4. Enhanced Student Success:

NTID's primary mission is to prepare students for successful careers in state-of-the-art technical and professional fields. NTID will refocus its curricular and co-curricular efforts to enhance student success on our campus.

NTID's commitment to enhancing student retention rates will be tied directly to the overall objective of enhancing our graduation rates via this effort. NTID will continue to implement effective strategies for "college success" support systems in order to support, retain, and graduate enrolled students. One particular area of emphasis will be improved acquisition of English language skills through infusion of English teaching principles throughout the college curriculum. Student participation in

all aspects of college life will be promoted. In addition to the four major goals we've set, we also must address several strategic organizational and budgetary resolutions if we are to continue to do our work well.

NTID's finite resources for supporting student needs in the other colleges of RIT continue to be a challenge. In 1998 the student ratio between the Center for Technical Studies/Center for Arts and Sciences programs and the Center for Baccalaureate and Graduate Studies program was 59 percent/41 percent; it was 85 percent/15 percent in the 1980s.

NTID's original Strategic Plan called for a concerted effort to share resources across Centers, departments, and programs in a collaborative fashion. Many faculty and staff members believe that NTID should increase flexibility for creating opportunities to share resources, faculty/staff exchanges, and/or joint appointments in similar academic disciplines between the Centers for Technical Studies and Arts and Sciences and the Center for Baccalaureate and Graduate Studies.

I have determined that NTID must act decisively to meet the above-mentioned challenges and opportunities. We are considering the implementation of the following action steps:

Streamline cross-utilization of resources across curriculum and academic support centers thus:

A. The Center Directors of Arts and Sciences, Technical Studies, and Baccalaureate and Graduate Studies, and the Associate Dean for Academic Affairs will develop principles, policies, procedures, and guidelines for meeting critical student needs and programmatic requirements by clustering career and discipline areas that would allow students to progress vertically or enter and exit at different degree levels, ranging from AAS to BS and MS degrees in similar discipline areas utilizing the following possible strategies:

- Faculty and staff exchanges between centers and departments



Catching up with students Dr. Robert Davila, vice president for NTID (center), discusses current events with Kim Hayth, applied accounting student from Tampa, Florida (left), and Daniel Millikin, criminal justice student from Flourtown, Pennsylvania, in the College Grind coffee bar, located in RIT's Shumway Dining Commons.

- Joint appointments
- Interdisciplinary course offerings
- Transferability of credits.

B. We must carefully plan, evaluate, and manage our faculty resources to assure that the resources necessary for the establishment of new and continuing programs are readily available. Given the special requirements on our faculty with respect to changing technology and special communication competencies, it is even more important for NTID to plan ahead to assure sufficient time and resources are available for training. Therefore, a representative working group will be given the responsibility to develop and recommend strategies to the Dean and VP that will allow us to better plan our human resources requirements for the future.

NTID's Leadership Team will evaluate the effectiveness of the strategies for improving and maximizing collaborative ventures in similar academic disciplines and career clusters between the Centers for Technical Studies and Arts and Sciences and the Center for Baccalaureate and Graduate Studies on a quarterly basis and modify as necessary.

As NTID reaches each milestone of 3 percent increase in the number of cross-registered students beyond the current 41 percent distribution in the other colleges of RIT, I will revisit, with the dean of NTID, our decision to

determine our ability to provide adequate resources. When and if we reach 50 percent/50 percent between the NTID-based technical programs and the cross-registration programs, we will analyze budget and resources and reallocate on an appropriate basis.

A five-year review of NTID's communication policies will be conducted by a task force to be appointed by the Dean in consultation with the Middle States Association Steering Committee on Communication, Leadership Team, and NTID Faculty Council.

At NTID, our goal 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 prepares them to live and work in the mainstream of a rapidly changing global community and enhances their lifelong learning. To achieve this goal, we must address and resolve not only these issues, but also others that no doubt will come up in the future. I am confident that we will do so now and for the future.

Learning to Lead

by Susan L. Murad

*"Blessed is the leader who considers leadership an opportunity for service."
– Unknown*

Former First Lady Abigail Adams said, "Great necessities call forth great leaders." But where do great leaders come from? How do individuals develop into leaders with the drive, heart, and vision necessary to create change? For more than 30 years at NTID, student leadership opportunities have helped develop the qualities that mold young deaf and hard-of-hearing students into the campus leaders of today and society's leaders of tomorrow.

"Our student leaders challenge all of us at NTID to live up to our ideals and the intended mission of the college," says Dr. Gerard Buckley, associate dean for NTID student affairs. "The student leaders are the 'keepers of the NTID flame' and remind us if or when we ever

fall short in meeting the high standards that were established at the beginning of NTID's history."

Buckley, a 1978 RIT social work graduate, knows this role quite well. As an NTID student leader, he was, as he describes "vocal, visual, and rambunctious.

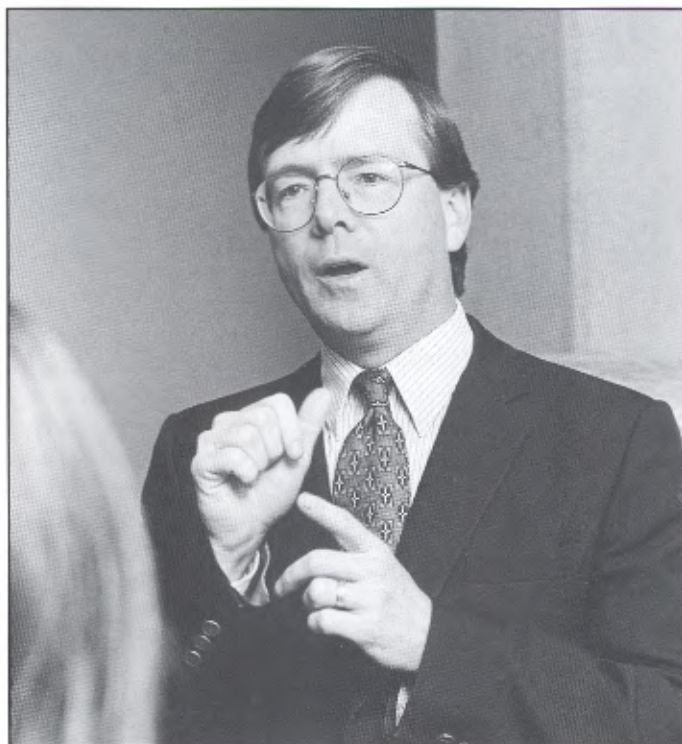
"It's ironic that I am now an administrator," he adds, smiling. "I remember being the same age as these students and feeling like I had all the answers to all the problems. But my perspective was only one perspective, and I learned to open my mind to what others were saying.

"Students often ask me how my own experiences as a student leader prepared me for real life. I tell them that I learned a lot about negotiation of conflict,

building a sense of community, fundraising, and building a common base among a diverse group of people, which has helped me tremendously in my career and volunteer work as well as in my family life. Planning meetings and rallies and influencing change taught me invaluable lessons about rights and responsibilities."

Buckley uses his experiences and current leadership position to help bring about even greater opportunities for today's students.

"I'm fortunate to see the growth that occurs in these students," Buckley says. "Their academic success as well as the creation of a socially conscious, well-rounded individual is what we're all about, actually."



Then and now Student Gerard Buckley, left, addressing his fellow classmates at a presentation in 1976, and Associate Dean Buckley, right, talking to students in 1999.



Leadership gathering Taking time out from program planning for a few laughs are, left to right, Vicki Hurwitz, June Park, Ann Davis, and Erin Esposito.

Buckley proposes to add a community service component to the NTID curriculum to encourage more students to take a leadership role in the outside community. Other goals include increased involvement by faculty and staff in on-campus activities.

Saying 'no' to apathy

While many college campuses are noticing a decrease in the number of students involved in advocacy and leadership activities, NTID students have continued to be a part of a vibrant college community. These student leaders find themselves involved in a number of activities such as members of the Student Life Team, resident advisors (RA), peer counselors, and student development educators (SDE).

"We have the good fortune to work with a wide variety of students—both current and emerging leaders," says Erin Esposito, leadership development coordinator for the NTID Student Life Team and 1996 RIT technical and professional communications graduate.

"The Student Life Team works to help students achieve their own leadership goals by providing a wide range of programming opportunities and several paraprofessional positions, which students hold. These paraprofessional positions enable student to grow in a number of areas—public speaking, networking, public relations, small group communication, diplomacy, and role modeling."

Esposito has set up leadership retreats

and a leadership program series as initiatives to discuss issues ranging from credibility to collaborative leadership to communication and teambuilding. These programs are designed to develop crucial leadership skills, which are necessary to operate an effective and successful organization.

"These are skills that are useful throughout life," says Esposito.

Students who are participating in these programs are reaping the benefits of the efforts of people like Esposito and other members of the NTID Student Life Team.

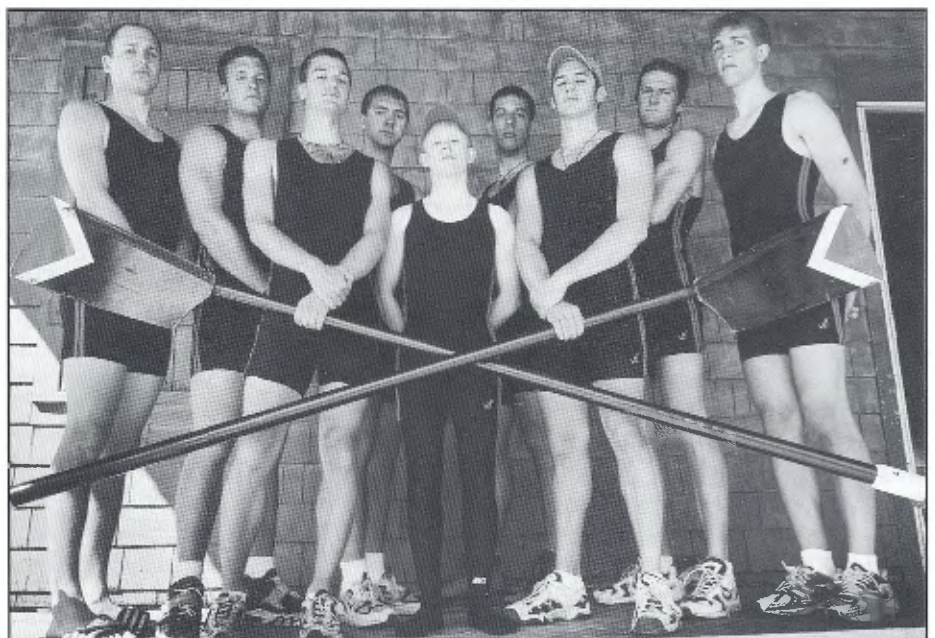
"I find that I am able to both

contribute and benefit from each of my experiences in different leadership positions at NTID/RIT," says Aimee Whyte, a second-year professional and technical communications student from St. Catharines, Ontario, Canada. "I have been involved with the NTID Student Congress (NSC) as community service director, joined the Alpha Sigma Theta sorority, been an RA, and am currently an SDE on the Student Life Team.

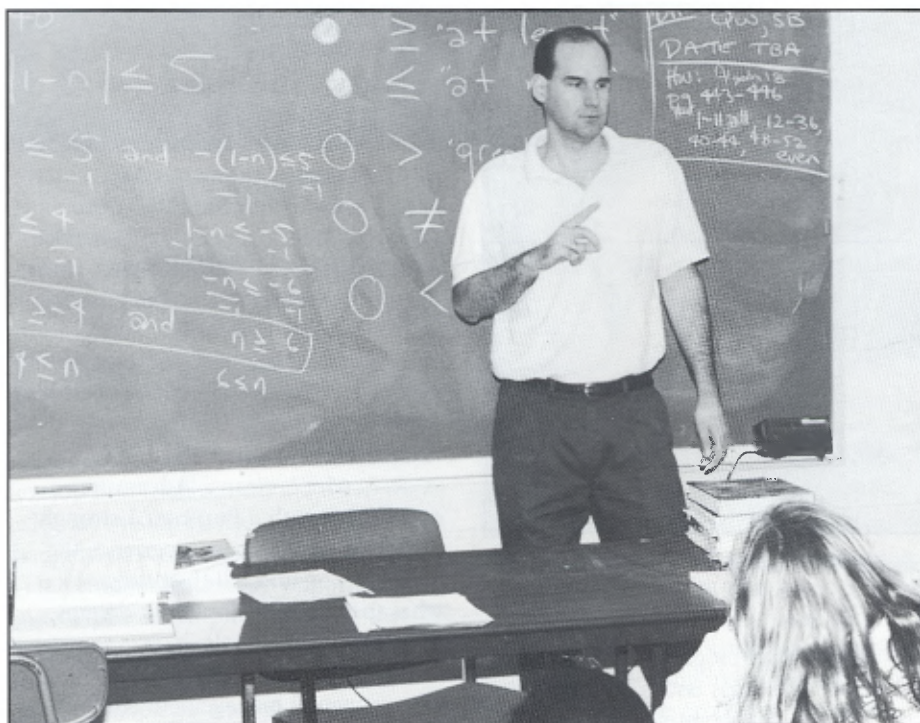
"Being involved has been a wonderful experience for me—one that is both enriching and enlightening," she adds. "I have a formula that I like to follow, 'A=R+P,' which means, 'Adventure equals Risk with a Purpose.' I strongly encourage students to experience the SDE position and tell them to go for what they want, follow their dreams, and pursue their goals."

Others, such as third-year environmental management student Matthew Huray from Binghamton, New York, are involved with a variety of activities both on and off campus.

"I worked as an RA on campus during the Explore Your Future and Summer Vestibule Programs," he says. "I am also a student athlete in my third year on the RIT crew team. Back home, I volunteer at the deaf preschool that I attended by talking to parents about the kinds of problems that I faced growing up. I also go back to be the 'Sign Santa Claus,' which is so much fun!



Team effort Matt Huray, far left, poses with fellow members of the 1998-99 RIT Crew team.



Teaching the next generation to lead Martin Price combines leadership with learning at the Florida School for the Deaf and Blind.

"All of these experiences have made my time at NTID/RIT richer. I have learned better ways to work with all kinds of people, the value of teamwork, and the importance of being a key player."

Lessons that last a lifetime

These positive leadership experiences and those who helped along the way remain with students long after graduation, according to Martin Price, a 1986 computational mathematics graduate of RIT's College of Science. Price, a high school mathematics teacher at the Florida School for the Deaf and Blind, is coordinator of the Teacher Tutoring Program and head sponsor of the Junior NAD (National Association of the Deaf) chapter hosting the upcoming Eastern Regional Conference of Junior NAD in the fall of 1999.

"As I look back, I can honestly say that if it weren't for the examples of upperclassmen like Fred Hartman ('84), who once served as vice president of the NTID Alumni Association, and many others along with the faculty and staff at NTID and RIT, I wouldn't have learned so much and would not continue being the leader I am now," he says.

"When I first became involved in leadership activities there was a lack of communication between many hearing RIT organizations and NTID. I became a liaison between these organizations, which helped each group develop a better understanding. At the first few meetings, I would just sit there and watch—I was too nervous to speak up!

"Eventually I became president of NSC and worked on the proposal to get funding for NSC leaders' salaries. I was the last NSC president to work on a volunteer basis. During this time, many people such as Tom Holcomb ('84), former assistant professor at NTID, and Vernon Davis, associate professor in NTID's Counseling Services department, gave me plenty of encouragement and the wisdom of their experiences."

For 24-year-old Ann Davis, an imaging systems management student from Wausau, Wisconsin, leadership has developed during the course of her years at RIT from first joining the Sigma Sigma Sigma (Tri-Sigma) sorority to chairing events to eventually becoming a student development educator on the Student Life Team.

"My experiences with Tri-Sigma gave

me the courage to try out for the SDE position," she says. "I'm so glad I'm a part of the Student Life Team, which has helped me become involved in other activities on campus.

"I could write a book on all of the benefits of becoming a leader on campus. I have improved my presentation and time management skills, and I've met so many wonderful people. I have also met many deaf role models, such as my boss Vicki Hurwitz, Dean Alan Hurwitz, and Dr. Robert Davila, our first deaf vice president at NTID. I am proud to say that Vicki Hurwitz is my mentor! And after meeting Libby Pollard, president of the National Association of the Deaf, I decided I'd like to be part of deaf clubs and organizations even after I graduate."

June Park, an SDE and professional and technical communication student from Brampton, Ontario, Canada, agrees with Davis.

"I would love to maintain my leadership role after I leave college," she says. "I can't predict where my path will lead, but I will always want to be involved in these types of activities. It really enriches my life!"

According to Esposito, the desire to become a leader requires a great deal of passion and discipline.

"I tell the students that anyone can become a leader," she says, "but it's the amount of time you invest in yourself and your skills that will determine the kind of leader you will become."

Taking their place in the world

"We have over 1,100 of the brightest, most capable deaf people in the world right here," Dr. Robert Davila, vice president for NTID, says. "Many of these students were mainstreamed with hearing students and may not have had access to leadership and service opportunities. We can bring these experiences to their lives and give them a sense of responsibility to the community around them. If we can show our students that they can take their place among the great leaders in this world, then they will know that there is nothing they can't do!"

Celebrating Promise and Opportunity

by Pamela L. Carmichael and Susan L. Murad

With the same pioneering spirit and can-do attitude that guided the college's founding in 1968, members of the NTID community set a goal, just a few years ago, of raising \$10 million to augment the institute's ability to pursue its mission and remain on the cutting edge of education for deaf and hard-of-hearing individuals. This became the first comprehensive campaign in NTID's history.

In May 1999, with \$11.5 million raised, the world's largest technological college for people who are deaf and hard of hearing celebrated the resounding success of Fulfilling the Promise: The Campaign for NTID.

"The impact of this campaign cannot be measured adequately by a simple review of the money raised," says Dr. Robert Davila, vice president for NTID. "Certainly, we exceeded our financial goal, but the true success of the campaign is in the possibilities we've created for current and future students."

As a result of the campaign, NTID has laid the groundwork for future fundraising efforts and has established new partnerships with donors, focusing on opportunities to enhance scholarships, technology and facilities, instruction and outreach programs, and research.

Scholarships—"a profound depth of generosity"

Throughout the campaign, scholarship support stood out as the most critical area of giving, according to Davila. Creating opportunities for students with financial need to attend and remain at NTID until graduation as well as recognizing and honoring academic achievement are the two main objectives behind the scholarship endowments, which have grown to 50 and are valued at over \$18 million. Since the campaign



A time to celebrate Friends of the NTID Foundation react with applause to Dr. Robert Davila's report on the campaign's success.

began, more than 1,700 students from across the country and throughout the world have received assistance through the establishment of endowed or annual scholarships by individuals, corporations, and foundations, among them the Xerox Corporation and The Henry Luce Foundation.

The Xerox Corporation has committed to helping young deaf and hard-of-hearing students advance their skills in science and technology by establishing the David T. Kearns Technical Excellence Scholarship Award. Kearns, the former Chairman and CEO of Xerox, is an honorary member of The NTID Foundation Board of Directors.

The purpose of the award is to recognize students who demonstrate exceptional technical achievement and who demonstrate a commitment to the exploration and advancement of the technology of their discipline.

"We are pleased to partner with Xerox for this scholarship honoring David

Kearns," Davila says. "His ideals of educational excellence continue to benefit deaf and hard-of-hearing students who aspire to those same goals."

Honoring the accomplishments of women students who embody the "Renaissance spirit" of the late journalist, diplomat, and politician Clare Boothe Luce, The Henry Luce Foundation of New York City awarded NTID three Clare Boothe Luce Scholarships with a \$93,500 gift. The awards are intended "to encourage women to enter, study, graduate, and teach" in fields where there have been obstacles to their advancement.

Katherine Hoheusle of Bethel, New York, a fourth-year imaging science student in RIT's College of Science, was the first Clare Boothe Luce Scholar at RIT in 1998. The 1999 Scholars are Dawn Denny of Alliance, Ohio, a third-year biomedical computing student in the College of Science, and Sara Gould of Binghamton, New York, a



Renaissance women Katherine Hoheusle, center, expresses her happiness as she presents plaques to the 1999 Clare Booth Luce Scholars, Dawn Denny, left, and Sara Gould, right.

second-year mechanical engineering student in RIT's College of Engineering.

Technologies and facilities – providing equipment and a place to learn

One of the top priorities at the outset of the campaign was to create a state-of-the-art learning center with the technology, equipment, and staff training to benefit student learning outcomes. With the help of \$3.4 million in campaign donations for technology and equipment, the NTID Learning Center is a reality and is now in its fourth year of operation.

An added benefit of the campaign has been the expanded commitment of individuals, corporations, and foundations who have been donors in the past. In 1998, The Ralph M. Parsons Foundation of Los Angeles, California, extended its partnership with NTID with a commitment to create four new smart classrooms. The foundation began its relationship with NTID in 1988 with the establishment of the Ralph M. Parsons Emergency Loan Fund and continued its support by joining forces with other benefactors to help create the NTID Learning Center in 1996.

"NTID's goal related to technology is more than basic computer literacy for all graduates," Davila says. "It is the integration of computer and technology skills resulting in a level of competency that enables our graduates to 'hit the ground running' in their chosen careers."

Instruction and outreach programs: supporting deaf education worldwide

Fulfilling the Promise: The Campaign for NTID also garnered more than \$1 million designated for instruction and outreach. Funds raised are being used to support innovative programs at NTID and throughout the world. Contributions received for instruction and outreach include significant gifts from The Ford Foundation and the Open Society Institute (OSI), both headquartered in New York City.

A grant from The Ford Foundation is helping to advance NTID's strategic goal of increasing the institute's impact on teacher development through a pilot distance learning program offered by NTID's Master of Science in Secondary Education of Students Who are Deaf or Hard of Hearing (MSSE).

The grant is supporting the transformation of one of the core courses in the MSSE program, "Deaf Students: Educational and Cultural Diversity," into distance learning formats that can be delivered as in-service professional development for current teachers or as an additional course elective for students in teacher preparation programs.

"There is a national need for teachers at the secondary level who are capable of effectively teaching deaf and hard-of-hearing students in core subject areas such as math and science," says Davila. "The Ford Foundation grant makes it possible for us to present this very relevant course to teachers throughout the country."

A \$500,000 gift from OSI of New York, a philanthropic enterprise of renowned financier George Soros, is being used by NTID to bring Hungarian deaf students into the information age. The grant makes possible the training of Hungarian teachers in the use of information technology for educating deaf students and places state-of-the-art



High tech connections NTID students Mark Sullivan, Allison Rice, Alim Chandani, and Christine Kim answer questions posed by high school students in California as staff members look on in the Sprint Video Conferencing Center, made possible by a \$150,000 gift from the Sprint Foundation.

computers in all eight schools for the deaf in Hungary.

"This generous grant from OSI will allow NTID to use its expertise and highly qualified faculty and staff to collaborate with Hungarian educators to improve the educational circumstances of Hungarian deaf youngsters," says Davila.

Research: new knowledge changing lives

During the campaign, nearly \$3 million was raised for research aimed at enhancing the delivery of education, communication, and technological initiatives for individuals who are deaf or hard of hearing.

A significant contributor in the area of research was the Spencer Foundation, whose gift is being used to support a two-year project that adapts new speech recognition technology to provide real-time speech-to-text transcription.

"Using speech recognition as a support service for deaf and hard-of-hearing students is a first step in a potentially wide variety of applications involving speech recognition," says Dr. Michael Stinson, professor in NTID's Department of Educational and Career Research. "We are honored by the

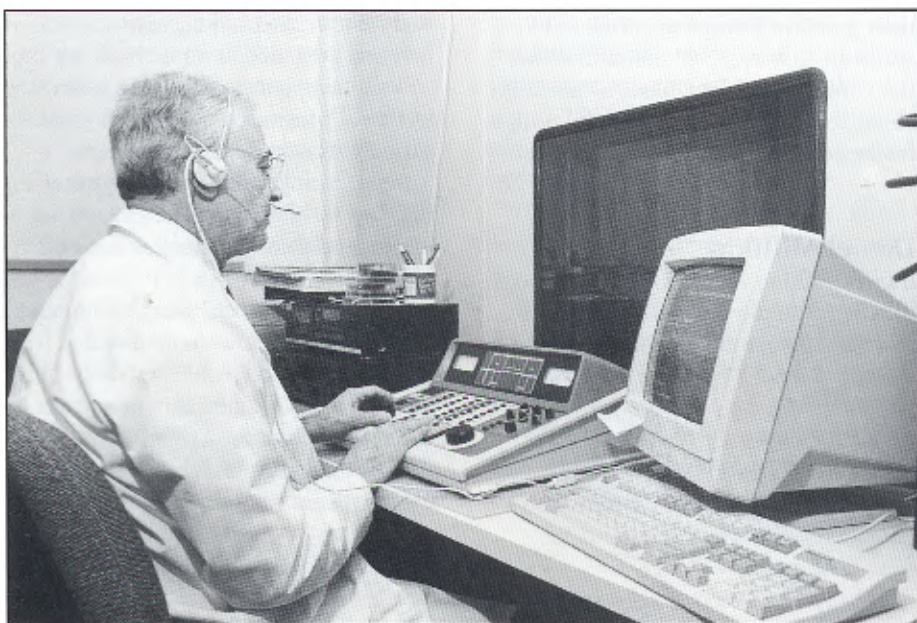
Spencer Foundation's award and hope these applications can make a dramatic difference in the education of many deaf and hard-of-hearing people."

A word of thanks...

Fulfilling the Promise: The Campaign for NTID has helped ensure that the college and the opportunities it offers remain available for deaf and hard-of-hearing students, giving them the skills they need to be successful in technical and professional employment in a rapidly changing global marketplace.

"NTID's impact represents an extraordinary contribution to the U.S. economy and to the quality of our society," says Davila. "Because of this campaign, NTID is positioned to achieve even greater success as we move into the next century and continue to deliver on our promise to provide opportunities for people who are deaf.

"As we celebrate the success of this campaign and the opportunities it has created, we applaud the donors who made it possible. These individuals, corporations, and foundations understand what NTID means to the lives of young deaf men and women everywhere."



Groundbreaking generosity Gifts from donors such as Mrs. Frank Lovejoy have enhanced the work of the International Center for Speech and Hearing Research at NTID, recognized as one of the nation's foremost research programs on age-related hearing loss. Above, Dr. D. Robert Frisina, director, conducts tests in the center's lab.

The following are only a few of the many individuals, corporations, and foundations who made opportunities for advancement possible with significant gifts to Fulfilling the Promise: The Campaign for NTID.

Endowed and Annual Scholarship Funds
Citicorp Foundation
Mr. and Mrs. Joseph Dyer
Maurice and Maxine Forman Estate
Mr. and Mrs. Roland Garlinghouse
Mrs. Mildred E Hall
William Randolph Hearst Foundation
The Henry Luce Foundation
Mr. and Mrs. Milton Ohringer
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Spencer Foundation

Profiles In College



Anne Geary

Anne Geary is a second-year student in RIT's College of Imaging Arts and Sciences, majoring in illustration and fine art studio.

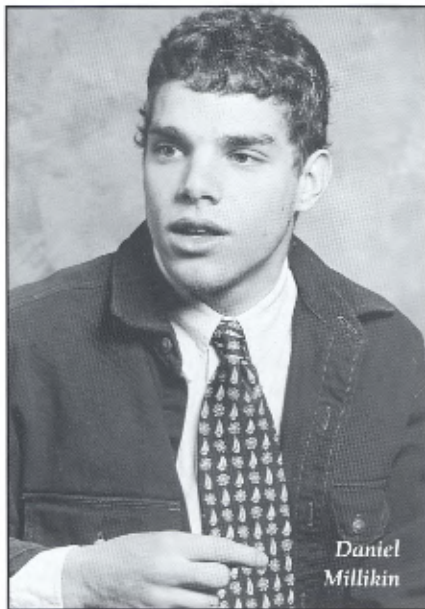
"I came to RIT because of the outstanding art program," says the 20-year-old from St. Louis, Missouri. "I enjoy all types of art and want to learn as much as I can about all aspects of it."

But the art program isn't the only reason she chose RIT.

"Students have a unique opportunity here," she explains, "because we get the best of both worlds—hearing and deaf. NTID provides wonderful support and encouragement for deaf students to enter RIT and be successful."

Guided by her philosophy, "You never know until you try," Anne is involved in a number of activities. She serves as a public relations assistant for both the NTID Student Congress and the Sequential Art Guild. She's also a member of the National Honor Art Society and was selected Miss Deaf Missouri 1997–1999.

Anne's goal is to graduate from RIT with a master of fine arts degree and then go on to Europe to travel and study art history. After she returns to the United States, she plans a career as an art teacher at the college level or as a freelance artist.

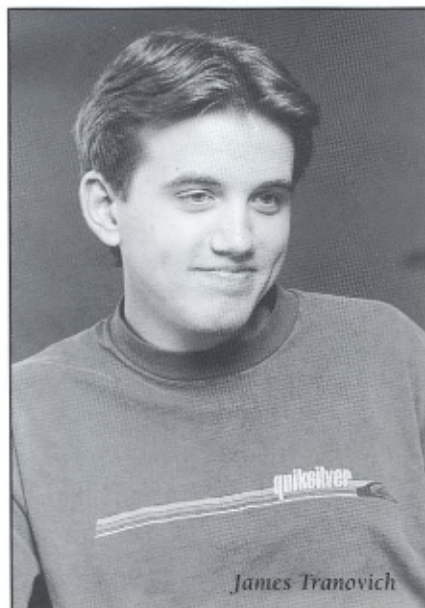


Daniel Millikin

Daniel Millikin knew from an early age that he wanted to go to college. Now that the 19-year-old is at RIT, he's making the most of his experience.

"I've had more personal growth opportunities here than I've ever had before," says Daniel. "RIT has a great academic reputation, but it also has excellent services and programs for deaf students."

"All my life, I was mainstreamed and had few chances to be around other deaf people. It's a nice change to be here with so many people like myself," he says.



The third-year criminal justice student from Flourtown, Pennsylvania, is a member of Kappa Phi Theta fraternity. He works with the Student Life Team and helped to establish a peer-mentoring program on campus. He has also been involved with the NTID Student Congress, planning events for Deaf Awareness Week.

Daniel was one of four deaf students on the NTID College Bowl team, which beat out 15 other teams for the chance to represent RIT in the regional competition held at Cornell University last February.

"If you really want something in life, you have to go for it," says Daniel.

James Tranovich

The only surfing James Tranovich gets to do these days is on the Internet, but that suits him just fine. A passion for computers led the 18-year-old to leave his hometown of Camarillo, California, and come to Rochester, New York, to pursue a degree in computer science.

"I came to NTID's Explore Your Future (EYF) program while I was in high school, and I liked what I saw here, so I decided to come back for college," says James. "RIT has a strong technical program, and it offers great support services for deaf students."

James is only in his second year at RIT, but he already has his eye on the future, and thinking small is not part of his plan.

"I want to be the CEO of a computer conglomerate," he says, confident that his education at RIT will help him turn his love of computers into a successful career.

For now, James is enjoying the independence of college life. When he's not in class or on the computer, he likes to play football and read. He also makes time to write short stories and poems.

Does he miss California?

"A little," James admits, "but I like the campus, the people, the weather—I'm really enjoying the whole experience here."

Jessica and Jeremy Gelb

Siblings can be many things to each other—best friend, cheerleader, motivator, dream keeper. For Fairport, New York, natives Jessica and Jeremy Gelb, being siblings is also about having fun.

As deaf children of hearing parents and educated in a mainstream environment, Jessica and Jeremy were each other's confidants. Their parents have learned American Sign Language (ASL) and are motivated to keep improving their skills.

"We are very lucky to have parents so committed to learning ASL," says Jessica, 22, a fourth-year transfer student studying nuclear medicine in RIT's College of Science.

Jeremy, 19, a second-year diagnostic medical sonography student in RIT's College of Science, agrees. "Our parents have always encouraged us to do our best and be our best," he says.

Both brother and sister share a love of science and are interested in helping people, which is why they chose their respective majors. Since their degree programs share many common core courses, the siblings have enjoyed being in a number of classes together and even became science lab partners. While they find the curriculum challenging and rewarding, the Gelbs also enjoy life outside of the RIT classroom.

"Jeremy is very involved at RIT," Jessica says. "I call him the 'movie critic'—he always has an opinion!"

"I want to experience everything," Jeremy says. "I'm involved in the NTID Student Congress and am committed to Deaf culture. That's why I came here."

Of his sister's activities, Jeremy adds, "Jessica is very athletic. I think she should join the RIT soccer team."

"I want to graduate, and that's what I'm concentrating on," Jessica says. "I do snowboard, and I love softball, soccer, basketball, and bowling. We

both volunteer at Monroe County BOCES #1 by participating in activities with deaf high school students."

What does the future hold for these close family members?

"I'd like to travel after graduation, then settle someplace near my parents and work at a small community hospital or doctor's office," says Jessica.

"I'm more of a 'city guy,' and Jessica is a 'country gal,'" Jeremy teases. "I want to live in a big city and work in a large medical center. She wants a house in the country with a husband and children—very traditional!"

"I know we'll have to live in the same state," says Jessica. "We want to always be a part of each others' lives."

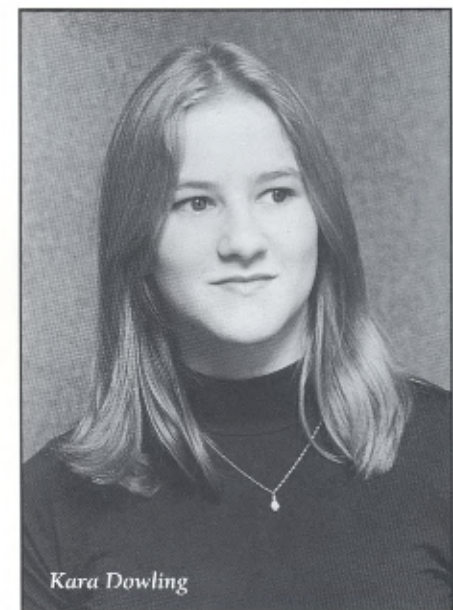
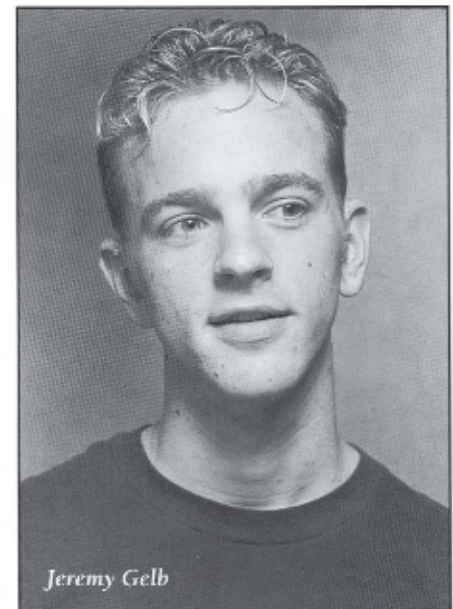
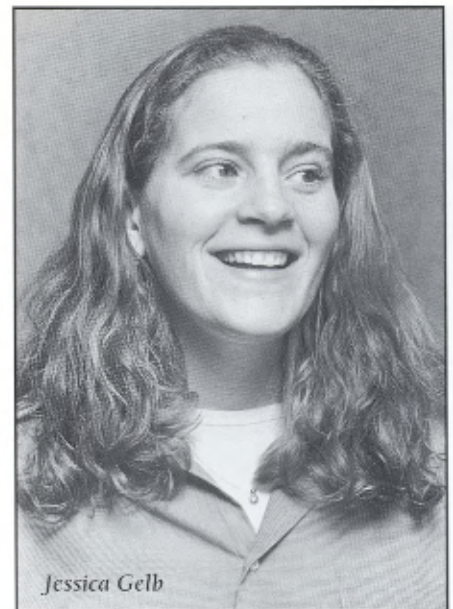
Kara Dowling

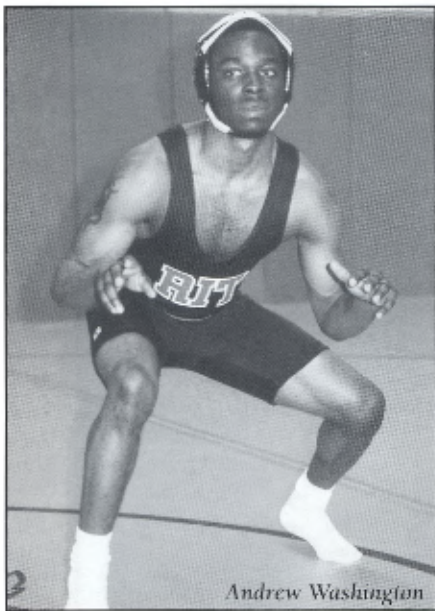
Like many other RIT first-year students, Kara Dowling, 18, has yet to decide on her major. Her background in art, design, and computers may lead Kara to RIT's graphic design program or the university's new media program, when it's approved as an undergraduate degree option.

"Right now, I'm busy completing required core classes," says Kara, a Fairfax, Virginia, native and second generation member of an all-deaf family. "RIT has a lot of majors. It's almost impossible not to find a program that suits you here."

Her decision on a major aside, Kara has found other things at RIT that suit her just fine.

"I love the deaf life," she says, "and yet, at RIT, I can still be a part of the hearing world—that's important to me. People here are intelligent and focused on their studies. They can loosen up also and be a blast to hang with! You can't beat it anywhere else."



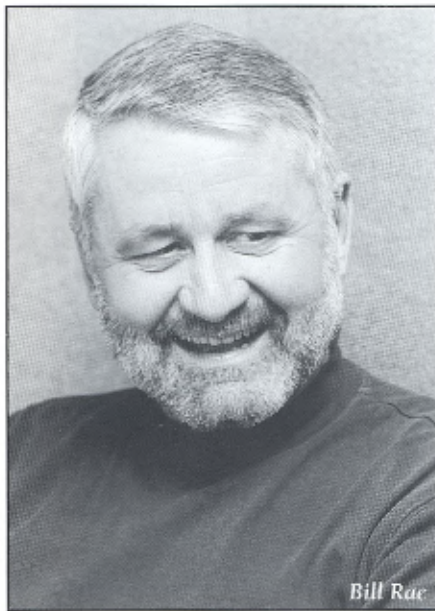


Andrew Washington

Deaf athletes are wrestling their way into a new heyday in RIT sports, and newcomer Andrew Washington, 19, is in the thick of the action as one of three deaf grapplers on RIT's varsity wrestling team. Now wrestling at 140 pounds, the Brooklyn, New York, native was a two-time Eastern Schools for the Deaf Athletic Association wrestling champion and multi-sport stand-out at the Lexington School for the Deaf.

Outside of competition, Andrew is actively involved in NTID's Ebony Club and is considering computer integrated machining technology as his major once he completes his career exploration studies program.

"I like sports a lot, but school comes first," says Andrew. "Early in high school I set my mind on going to college. RIT is the best place for me to be because it's welcoming to all different people."

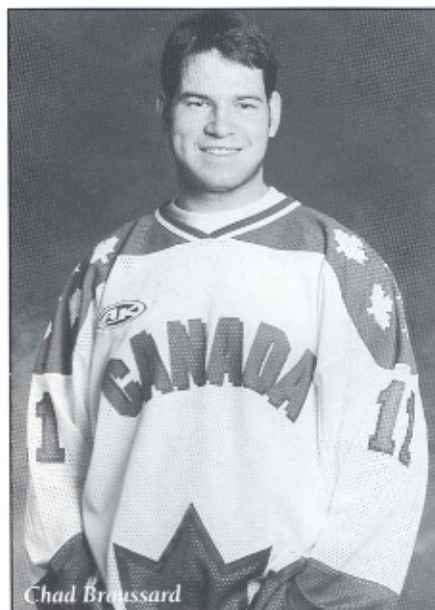


Bill Rae

RIT alum Bill Rae, 55, has come full-circle. When he graduated from the university's College of Business with a business administration degree in 1967, NTID had not yet opened its doors to students. Now retired after a 31-year career in financial and managerial computer systems design at Eastman Kodak in his native Rochester, New York, Bill is back at RIT, this time with support from NTID, a multidisciplinary student specializing in civil engineering technology. His goal is to reenter the workforce and start a second career combining his fascination for technology and his love of the outdoors.

"I always knew that I'd go back to college," says Bill, "and when I did, I knew that I'd do it my way. I didn't want any of the communication barriers that I had previously on the job and in school. Communication is so important because it makes you more productive."

Bill is married with two grown children. Mainstreamed throughout his previous education, Bill's progressive



hearing loss started at age 7, following complications related to the mumps. By 1984 most of his useful hearing was gone, and today Bill considers himself to be "functionally deaf."

Perhaps he was meant to come back to RIT to share his wisdom with a new generation of deaf college students.

"I think that college football coach Joe Paterno said it best when he said, 'The will to win is important, but the will to prepare is vital,'" says Bill. "I hope that deaf students appreciate what they have here and prepare well for their future."

Chad Broussard

Hockey is a way of life for 21-year-old Chad Broussard. As a member of the Canadian Deaf Hockey Federation Team, he traveled to Davos, Switzerland, for the Winter World Games for the Deaf in March and won a gold medal.

"This was a very exciting opportunity for me," the second-year computer integrated machining technology student says. "I love to play hockey, and I'm proud to represent Canada."

Chad began developing his hockey skills while at the Ernest Charles Drury School for the Deaf in Milton, Ontario. He came to NTID with long-time teammate Dale Sharp, 22, a second-year electromechanical technology student at NTID who is now Chad's roommate.

"Dale and I played hockey together in Canada, and now we play on an intramural team at RIT," Chad says. "We were known as the 'Young Guns' back in Milton because our style of play is so quick."

Chad, whose parents are both hearing, has a younger deaf brother who is carrying on the family hockey tradition.

"I would love to coach a hockey team one day," he says. "But while I'm in college, I'd like to play for the RIT team. They have a great reputation and I'd like to be part of it."

Matt Covington

Matt Covington is an example of persistence in the face of adversity. Matt, a 36-year-old applied computer technology student, not only deals with ataxia, a progressive disease that affects his balance and hearing, but he also attended two other colleges before finding his niche at NTID. He began his college career in Arkansas without support services, transferred to another college to get better support services, and then entered NTID in 1994 for the best of both worlds: a major he likes in an accessible environment.

In between these college experiences, Matt, a Rogers, Arkansas, native, worked for Senator Dale Bumpers, D-Arkansas, as an intern on Capitol Hill for one summer. In that role, he developed his strong interest in politics while watching Senate hearings and typing up summaries for his senator.

During his cooperative work with the United States Army base in Aberdeen, Maryland, during the summer of 1998, Matt entered technical military reports in Microsoft Word on a Macron computer that were then distributed throughout the military and to public universities and the general public.

"I want to work for the government because government and politics are related," says Matt. "The government is a good place to get a job as a computer operator or programmer."

Charmaine Mendonsa

Born in Goa, India (near Bombay), Charmaine Mendonsa and her family moved to Jackson Heights, New York, when she was 2 years old after she was diagnosed as being deaf.

"My father's sister was already in New York City," she says. "My parents moved us there, planning on surgery for me, but then my uncle found the deaf school, and my parents enrolled me."

After graduating from Lexington School for the Deaf in New York,

Charmaine, 22, arrived at NTID to study business technologies. A third-year student who enjoys organizing and learning computer software and skills, she has become familiar with Microsoft Word, Excel, Powerpoint, WordPerfect, and PageMaker. She also is considering pursuing another associate degree in NTID's digital imaging & publishing technology program, which uses many of the same skills and software, but in different applications.

"I'm using the PC now," she explains, "but I want to learn the Mac so that I'm flexible and have more options for jobs in the future."

Lisa Herbert

Lisa Herbert, 19, grew up in Montreal, Quebec, Canada, and moved to Miami, Florida. Her spoken and written French skills enable her to enjoy shops and restaurants during visits to her hometown.

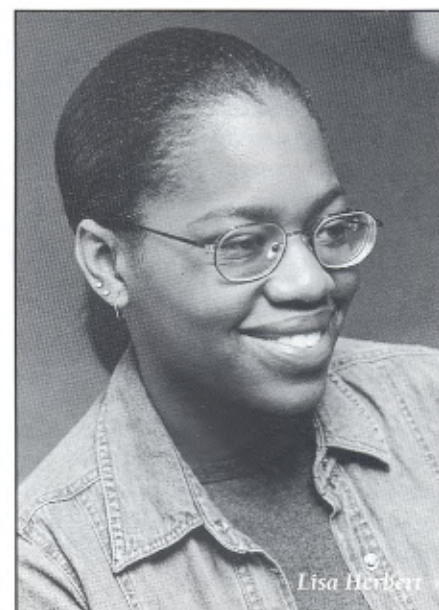
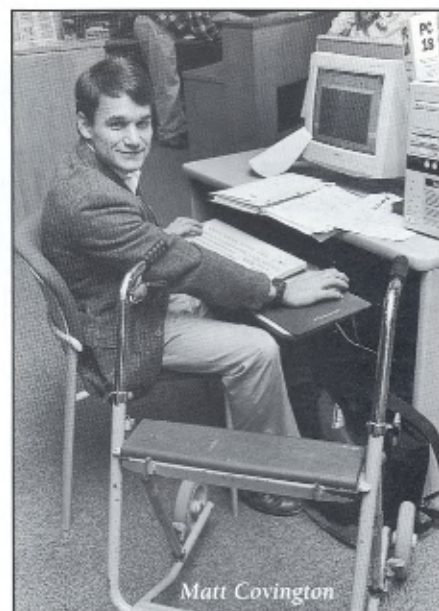
"I understand written French and can speak it a little," says Lisa. "I find it very difficult to lipread, though."

Lisa began her college career elsewhere and transferred last fall into the biology program in RIT's College of Science.

"I transferred to RIT because I was impressed by what I heard of the teachers who teach with much clarity and the support services (interpreting, tutoring) in each department," explains Lisa. "These services have proven to be excellent so far, so I am happy I transferred."

She plans to get more involved with the RIT Dance Comany as well as committees in the NTID Student Congress. She now studies developmental biology, but hopes to switch to the psychology program in RIT's College of Liberal Arts for more opportunities to work with individuals one on one.

"I plan to pursue a career in the health field, perhaps in physical therapy or psychology," she says.



Cross-Registered Students: The Other Side of NTID

by Frank A. Kruppenbacher

*NTID! Its time and tide had come
To integrate the hearing and the deaf
In kindred studies on a common campus,
Each learning from the other an awareness
Of human needs, of unfulfilled desires,
Of breaching the divisive wall of silence
And bridging the communication gap.*

... from the poem "NTID," by Robert F. Panara, Professor Emeritus of NTID

As seasons change from summer to fall, RIT's incoming population of 360 (on average) deaf and hard-of-hearing learners join nearly 1,000 current deaf students on campus. These students meld into the university's mainstream (totaling 13,000 students) and collectively journey through college and into careers.

Real-world mix

"Cross-registered," in the RIT vernacular, is a term that generally identifies NTID-supported students who are either partially or fully enrolled in degree programs within the other six colleges of RIT.

NTID's pre-baccalaureate studies program, within the Center for Baccalaureate and Graduate Studies (CBGS), is a non-degree-granting academic bridge for deaf and hard-of-hearing students to enter and succeed in any of RIT's more than 200 highly competitive professional studies

programs. Students take up to three academic quarters to complete the program, which provides them with appropriate foundations, skill development, and related coursework to fulfill bachelor degree entry requirements and successfully start a specific major in one of the colleges of RIT other than NTID.

Incoming students who fully satisfy the entry requirements for bachelor-, master-, or doctoral-level programs offered at RIT may immediately declare, or confirm interest in, a major. These students, like those completing pre-baccalaureate studies, enter RIT programs directly and request NTID-provided educational access and support services, such as interpreters, notetakers, and tutors coordinated by CBGS.

At the beginning of academic year 1998-99, 74 deaf students were enrolled in pre-baccalaureate studies, with 398 students fully matriculated

in RIT baccalaureate or master's degree programs. These students, with roughly 150 of NTID's 579 technical studies students, take some of their credit-bearing coursework in other colleges of RIT and account for more than 600 deaf students enrolled in one or more classes with hearing students at RIT.

Deaf students who attend classes with hearing students are supported by one of six NTID academic support departments of CBGS located within their relevant colleges of RIT. Support departments include: Business/Computing Sciences, Imaging Arts & Sciences, Liberal Arts, Physical Education & Athletics, Science/Engineering, and Social Work.

Faculty within support departments are professionals in fields of study offered by RIT's colleges. They are skilled in working with people who are deaf or hard of hearing and provide such students enrolled in RIT programs or classes with academic

advising and counseling. In addition to teaching classes in RIT's colleges, support department faculty tutor students in groups or individually. They also identify courses that deaf students will access each academic quarter through various educational access services and become key contact persons, providing deaf students with information on changes or additions to the quarterly support plan for their particular college of RIT.

NTID educational access services enabled 600 deaf or hard-of-hearing students during academic year 1998 to take more than 19,000 credit hours of coursework at RIT. The university provides more than 82,000 hours of sign language interpreting services annually to its deaf or hard-of-hearing students, and faculty and staff members. RIT employs nearly 100 full- and part-time interpreters—the largest staff of professional interpreters of any college program in the world. In addition to interpreting services, RIT provided deaf and hard-of-hearing students during academic year 1998 with nearly 42,000 hours of notetaking services and just over 18,000 hours of tutoring and advising covering some 1,600 class sections.

Measures of success

Nationally, two- and four-year mainstream colleges with deaf students in attendance (excluding RIT) have a graduation rate ranging between 30-38 percent for this student population. The graduation rate for all federally supported colleges serving deaf students similar to, but excluding, NTID stands at roughly 38 percent. NTID's graduation rate by comparison is 48 percent for students completing technical studies programs. Deaf students enrolled in baccalaureate programs within RIT colleges outside the college of NTID enjoy a graduation rate of 62 percent. Nearly 40 percent of all degrees conferred to deaf or hard-of-hearing graduates were from the other six colleges of RIT during academic year 1998.

Success of RIT's deaf and hard-of-hearing graduates as a group, according

Success of RIT's deaf and hard-of-hearing graduates as a group, according to Dr. Peter Lalley, director of NTID's Center for Baccalaureate and Graduate Studies, reflects the university's ongoing commitment to respond appropriately to student needs.

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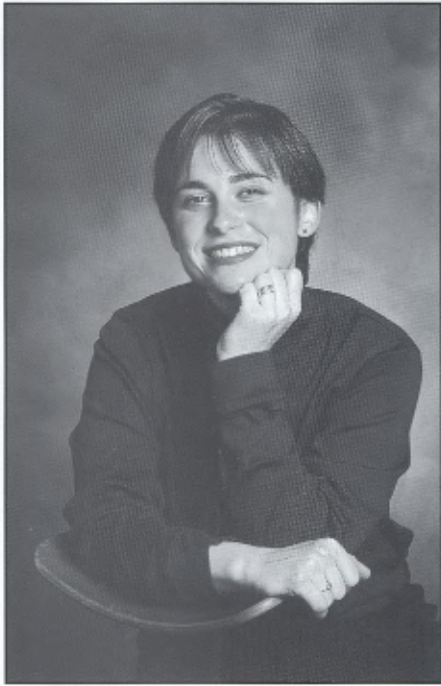
"The key to our students' success is rooted in the use of NTID resources to accommodate those going for higher degrees," says Lalley. "We also work very hard for better articulation of curricula between NTID and RIT and for the establishment of educational and access goals that foster a shared university-wide responsibility for delivering and maintaining appropriate access services for deaf students across this campus. The graduation rate among our cross-registered students is more than double that of any college serving deaf students in the world, which tells us that these efforts are paying off and that our students are benefiting the most."

Other benefits are found in NTID's 1998 study conducted in conjunction with the Social Security Administration (SSA). Data from the study indicates that as the number of deaf students who complete bachelor's and master's degrees at RIT increases, so does their potential earning power overall. The

study concluded that RIT's deaf graduates with bachelor's degrees earn 81 percent of what their hearing peers earn. By contrast, national labor statistics indicate that workers representing all disabilities earn only 70 percent of what their non-disabled peers earn. Likewise, the NTID/SSA study showed convincingly that deaf graduates of RIT who complete any program of study earn as much as \$500,000 more over a projected 40-year employment life than deaf or hard-of-hearing individuals who withdraw from college without earning a degree.

Voices from the other side of NTID

This article features six NTID-supported students studying in various programs within the colleges of RIT outside of NTID. Their journey through college and into careers, like those of their current classmates and the college's alumni, reinforces the fundamental ideal of NTID—that deaf, hard-of-hearing, and hearing individuals can live, work, and succeed together and collectively make meaningful contributions towards a better society.



Katherine Hoheusle

Bethel, New York

Imaging science, 4th year

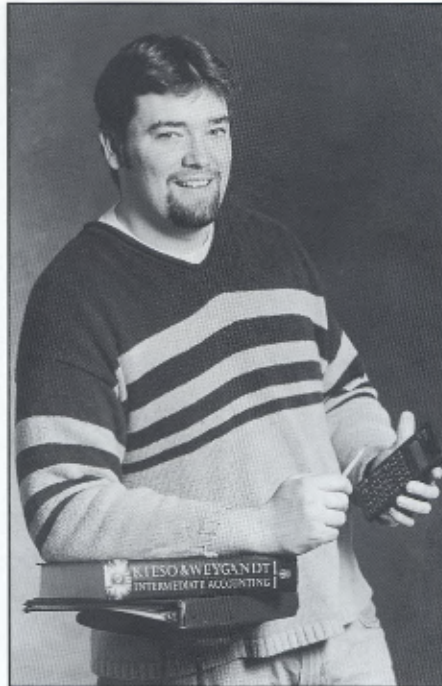
College of Science

RIT Clare Boothe Luce Scholar

I entered RIT as a baccalaureate student supported by NTID. My love for science started long ago when my dad used to take me on nature walks, and I started to understand science from that. In the imaging science program at RIT, we study the physics of light and the science of color and how the mind perceives light to optics to radiometry to digital image processing, and so on. I like learning about what I use the most—my eyes.

Many professors at RIT were reluctant to talk to me at first, and I had to prove to them that I could do the work. I took more challenging courses just to show that I could do it just like any of the hearing students. Since then I've seen a huge improvement in attitudes towards deaf students in the College of Science.

I am thankful that the support services have been so reliable. Sure, there are times when students have to make sacrifices in their schedule, but we are always thankful the services are there. I don't think that I would have been able to achieve the level of success I have without help from RIT interpreters and notetakers.



Scott Plummer

Needham, Massachusetts

Accounting, 4th year

College of Business

My first interest was computer engineering, but it really wasn't for me. I've since switched to accounting. I picked RIT because the tuition cost was reasonable among other colleges that I looked at. RIT also provided assistive listening devices, tutors, and notetaker support services that I was accustomed to from high school. RIT wasn't my first choice for college, but I came here because the environment and support services fit my style of studying.

I really use the tutoring services a lot. If I have a test coming up or if a class I'm taking is particularly challenging for me, I'll go work with the tutor at least once a week.

I rely on assistive listening more than sign language interpreting in the classroom. If an instructor uses incorrect English or has a heavy foreign accent, it can be difficult for me to understand. Sometimes I don't have a choice. But, in general, those kinds of situations are rare, and the services I am receiving all go together nicely.



Amy Storch

Howard Beach, New York

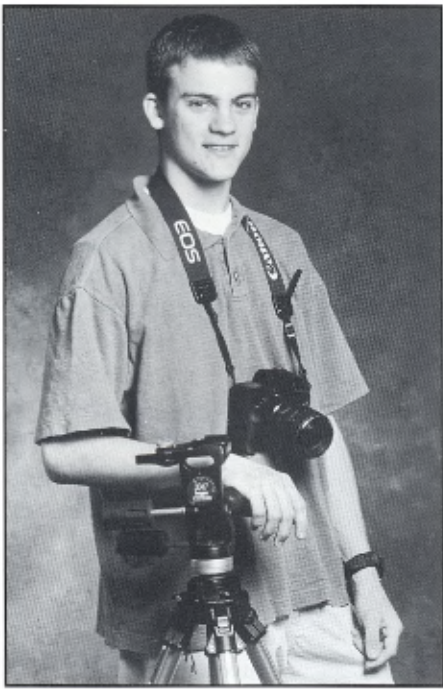
Social work, 3rd year

College of Liberal Arts

I've attended a variety of schools from New York to Illinois, Arizona, and Washington, D.C. I picked RIT for college because, as a hard-of-hearing individual, I felt that I would get the best of both worlds [deaf and hearing] instead of one.

The one major obstacle I faced was that some of the hearing students at RIT automatically assume that when someone wears a hearing aid that person can't hear sound. Another is that some RIT instructors tend to stereotype all deaf students based on a bad experience with just one student. How frustrating! Life is about teaching and learning. Eventually something good is gained out of it.

I find that RIT runs its support system for deaf students quite smoothly. As a result, my interest in studies related to my major really 'sparked' when I arrived here. In high school I had limitations, but in college it's rather different. At RIT students have the opportunity to see themselves in the greatest detail. If they recognize their potential they can seek nothing else but great success.



David Yerby

Camden, Arkansas

Applied photography, 1st year

College of Imaging Arts and Sciences

I've been involved with photography for about six years now. I've been self-employed as a photographer, and I have a long list of experiences from high school journalism that led to many awards for my work. I picked RIT because of its excellent reputation in academics and photography in particular. I plan to get a bachelor of fine arts degree at RIT and possibly move on to a master of fine arts degree.

RIT is the first opportunity for me to socialize with a large number of other individuals who, like me, are deaf.

Learning in courses related to my major is fast-paced. The topics are advanced also. I would have to say that the support services are great. It's all very challenging here at RIT, and I accept all challenges.



Sanh Ha

Santa Ana, California

Mechanical engineering, 1st year

College of Engineering

I transferred to RIT from a mainstream liberal arts college in my home state of California. The school was smaller than RIT, and support services there were available but limited at times. RIT just does it better.

I like that fact that I have two faculty advisors, one hearing and one deaf. My hearing advisor helps me pick courses each quarter and set a plan of work for my major. My deaf advisor helps me with my homework and when I need to request educational access services.

I also like the living arrangements here at RIT as well. I live on a mainstream floor in a dorm where there are both hearing and deaf students. I'm involved in activities with all deaf students or a mix of deaf and hearing students, like the intramural basketball team I'm on. RIT is what I expected, and more.



Veronica Lepore

Rockaway, New Jersey

Information technology

Master of Science

College of Applied Science and Technology

My aspiration was to enter a technical field and meet the challenges as a deaf woman. I chose RIT because of its excellent academic reputation, social environment for all students—deaf or hearing, and its sports program.

Looking back to my first year at RIT, it was frustrating trying to figure out all of the various support services. I found my way around pretty quickly, and I am pleased with the services I have received.

The key, I think, is for deaf students to initiate communication and encourage others not to be afraid or embarrassed to communicate in different ways. Students need to be determined to overcome the obstacles they may face in school, on the job, or in their personal lives.

Mission Outreach: Sharing Strategies, Techniques, and Technology

by Pamela L. Carmichael



Outreach in action Students and parents learn about career options in the creative arts at a recent Career Awareness Program (CAP) workshop in New Hampshire. CAP is just one of NTID's many outreach activities.

The legislation that established NTID in 1965 stressed the importance of sharing knowledge with others who work or interact with persons who are deaf or hard of hearing. When NTID opened its doors in 1968, it incorporated that legislative charge into its mission, stating that NTID would "share its knowledge and expertise through outreach and other information dissemination programs."

"Our work is not and will never be limited only to the deaf and hard-of-hearing students in attendance here," says Dr. Robert Davila, vice president for NTID. "We have a responsibility to share what we know by reaching out to others involved in the education and career preparation of deaf and hard-of-hearing individuals."

For 31 years, the pursuit of NTID's mission to have a positive impact on the lives of deaf people beyond the boundaries of its campus has led to a number of different programs. Today, the activities of the Department of Educational Outreach and the Northeast Technical Assistance Center (NETAC) are manifestations of NTID's mission in action.

Educational Outreach

NTID's Department of Educational Outreach is one of the institute's primary vehicles for interfacing with the publics served outside the college. Its efforts include innovative programs that share educational information and provide technical assistance to students, teachers, and parents, as well as

alumni and other deaf and hard-of-hearing adults.

"Our goal is to respond to the needs of these various external audiences, and by doing so, to enhance the education of, and career opportunities for, deaf and hard-of-hearing people," says Jean Bondi-Wolcott, coordinator of educational outreach.

A major focus of NTID's outreach efforts is transition education and planning. This has led to a variety of programs that provide resources to help students move successfully through the educational environment and into the world of work.

"It's never too early to begin transition planning," Bondi-Wolcott explains. "We design our programs to give students the information they need to make better decisions about what they want to do and how they can achieve their goals."

According to Bondi-Wolcott, an important component of transition planning is career awareness. NTID's Transition Education Outreach Project promotes career awareness in students through in-service training programs that assist teachers and guidance counselors with infusing career awareness concepts across the school curriculum.

Related to the Transition Education Outreach Project is the Career Awareness Program (CAP), a day and a half-long workshop that brings high school students, parents, and teachers together with successful deaf professionals from a variety of career fields.

"Our objective is to get the students, parents, and teachers to see future possibilities so they can set goals and begin working toward them," says

Robb Adams, CAP project leader. "Many students and their families are not aware of their options. We try to get them thinking about life after graduation, and we help connect them with the resources they need to facilitate the transition to postsecondary school or the world of work."

Another of NTID's transition education projects is Explore Your Future (EYF)—a one-week program that seeks to expand career horizons for deaf and hard-of-hearing students during the summer before they enter their senior year in high school. The program, conducted on the RIT campus, provides students with career assessment, counseling, and hands-on experience in a variety of career areas so that they can make decisions about their lives after high school. EYF also gives students a chance to experience life on a college campus away from home.

On the last day of the program, parents are invited to participate in the Parent Transition Workshop, where they learn strategies for encouraging their teenager's independence and responsible decision making as well as helping them prepare for college or the workplace.

Other educational outreach programs include the Access to English and Science Outreach Project (AESOP) and English Language Teachers Outreach Project (ELTOP). Both programs are designed for teachers to address the need for quality instruction by focusing on the development of specific strategies for teaching deaf and hard-of-hearing students.

For NTID alumni and other deaf and hard-of-hearing adults, educational outreach activities include workshops



Probing the possibilities NTID lecturer Sam Holcomb, on stage, leads students in a group activity during Explore Your Future, a weeklong career-planning program specially designed for high school seniors.

to enhance professional skills and technical training. Some of the topics covered in workshops focus on state-of-the-art computer hardware and software. Others assist with surviving the job market.

"We provide opportunities for alumni and other adults to update their skills so they can keep up with changes in the workplace and enhance their career advancement," explains Bondi-Wolcott.

C-Print

The Department of Educational Outreach also sponsors week-long training programs in the application of C-Print, a computer-aided speech-to-print transcription system developed at NTID as a support service option for deaf and hard-of-hearing students in mainstream educational environments. The goal of the C-Print system is to provide high quality information in a text display format.

Using a laptop computer, a C-Print captionist types a teacher's lecture along with classroom discussion. The typed information is displayed simultaneously on a second laptop

computer or a television monitor. Afterward, the printed text is available to students and teachers for review purposes.

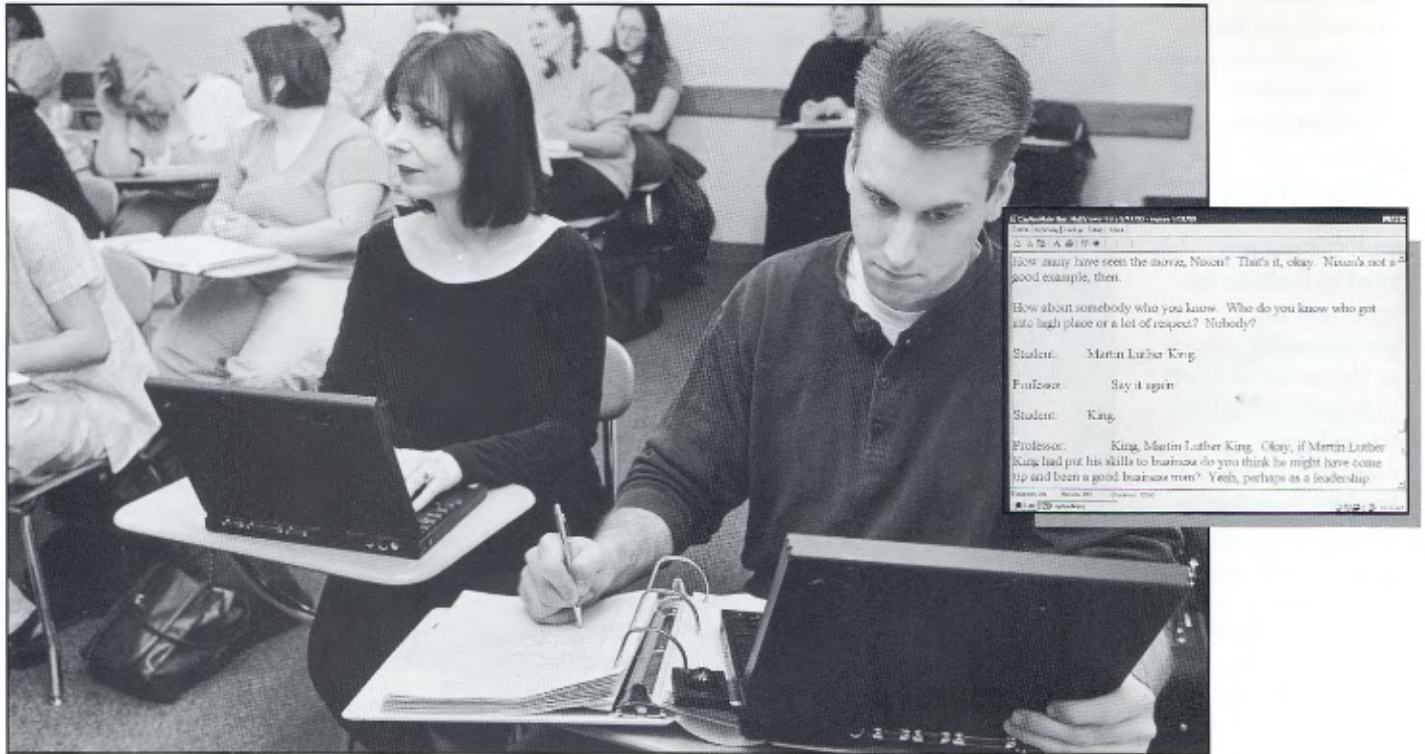
"Some students prefer printed text of lectures over sign language interpreters or notetakers as a means of acquiring information," says Dr. Michael Stinson, professor in the Department of Educational and Career Research and a member of the original team that developed the C-Print technology at NTID.

School districts in New York and California, along with NTID, are participating in a three-year, federally funded research project to study the use of C-Print in mainstream classes.

"We are continuing to develop C-Print technology, researching and evaluating the system's effectiveness," explains Stinson. "So far, indications are that C-Print is of value to many deaf and hard-of-hearing students."

Alex Brin, a fourth-year RIT computer science student from Miami, Florida, agrees.

"Without C-Print, I would be wasting my time going to classes," says Brin. "I prefer oral communication and don't



Cutting-edge classroom C-Print captionist Joyce Gambacurta, left, captions a class lecture for Michael Bouyea, a second-year information technology student at Monroe Community College in Rochester, New York. Inset photo shows what Bouyea sees on his computer screen.

know much sign language, so interpreters can't help me. C-Print gives me access to all of the information in a class, including group discussions."

NETAC

Also involved in C-Print training is the Northeast Technical Assistance Center (NETAC). Located at NTID, NETAC is one of four regional postsecondary education centers that provide outreach and technical assistance to other postsecondary programs serving individuals who are deaf and hard of hearing. The four regional centers work collaboratively and are known as the Postsecondary Education Programs Network (<http://www.pepnet.org>).

"Our goal is to increase access and transition opportunities for deaf and hard-of-hearing students at the postsecondary level," says Karen Hopkins, director of NETAC. "By doing that, we can increase enrollment, retention, and graduation rates for those students."

Funded by the U.S. Department of Education through a five-year,

\$5 million grant, NETAC works with all types of postsecondary programs, providing a variety of resources and helping to expand the knowledge and skills of those who work with deaf and hard-of-hearing students.

"We tailor the assistance we provide to the specific needs of the postsecondary program we're serving," says Hopkins.

Through individual consultations, workshops, regional conferences, and information guides, NETAC helps postsecondary programs develop strategies for basic academic preparation; interpreting; notetaking; teaching English, math, or science; tutoring; and using technology in classrooms.

NETAC serves more than 2500 postsecondary programs in the states and territories of Connecticut, Delaware,

the District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Puerto Rico, Rhode Island, and Vermont.

The work continues...

Through the activities of NETAC and the Department of Educational Outreach, NTID serves thousands of deaf and hard-of-hearing individuals throughout the United States, pursuing the mission that has guided the institution for 31 years.

"We will continue to seek innovative ways to extend our reach beyond the boundaries of our campus," says Davila. "By sharing what we know, NTID is helping open doors for deaf people everywhere."

Editor's Note:

More information on NTID's outreach program is available on our website.

For Educational Outreach programs, go to <http://www.rit.edu/~418www/ready.shtml>

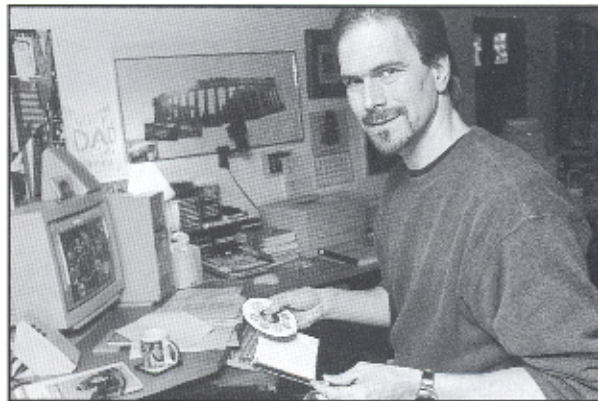
For NETAC, go to <http://www.netac.rit.edu>

Profiles After College

David Michalowski

by Karen E. Black

At work David Michalowski's home office is fully equipped with a range of technology for his multi-media projects.



David Michalowski's education in computer graphic design at RIT put him so far ahead of his peers and his employers that after nine years of working for other people, he decided to start his own business.

"My employers weren't ready to think outside of the box," says Michalowski, a 1990 graduate of RIT's master of fine arts program. "I knew the technologies were available to execute some very creative projects, but no one was ready to try new venues."

As a result, the proud entrepreneur established DM Multimedia, a computer graphics firm specializing in computer-based training (CBT), in June 1997.

"With traditional classroom training, the pace of learning is set by the slowest learner in the class," he explains from his office in his Brighton, New York, home. "But with a CD or by using a company's internal website, or intranet, the user can advance through the material at his or her own pace. Plus, it's a lot more interesting and effective than reading a chalkboard or a technical manual.

"Well-designed CBT includes visuals, audio, and interactive participation, which allows learners to skip over material already known, but won't allow the learner to proceed until understanding is achieved," he adds.

This type of training not only lowers costs substantially for his customers, like Eastman Kodak and Xerox, but also ensures the success of training.

Michalowski's spacious workstation is uniquely organized to easily access his PCs, Macs, scanners, laptops, faxes, and TTY. This is where he

produces award-winning web design, instructional design, presentations using interactive animations, desktop publishing, two- and three-dimensional modeling for computer-generated illustrations, and virtual reality programs.

A native of Chicago, Michalowski moved to New York City where he earned his bachelor of science degree in studio arts at New York University. He then spent four years as a graphic designer there. His instincts told him that computer graphics were the future for business communications, but his employer didn't see the need to invest in the appropriate equipment.

That employer's lack of vision prompted him to move to Rochester in 1987 to pursue graduate study. After two years studying full time in interactive computer-graphic design at RIT, he once again sought employment in New York City. To his surprise, design firms there were more interested in desktop publishing and didn't even know what interactive computer graphics were.

As it turned out, one of his graduate classmates who worked at the technologically savvy Eastman Kodak Co. recommended him for a contract job as an interactive designer for its Education Center. He gladly accepted and, after that assignment, continued his work at other design firms in computer graphics design and multimedia before venturing on his own.

Deaf since birth, Michalowski, 41, says he has never lost or won a job because of his deafness. He attributes his success to a strong work ethic, being reliable and responsible, and, of course, excelling at what he does.

Evidently, those qualities are what have earned him clients across the country.

His deafness, he says, has been merely an aside.

"You can't take people's discomfort with deafness personally," he says. "It's always a win-win situation when you can be patient and take the time to teach them ways to work together."

Michalowski's artistic talents were first demonstrated on the ice, when at age 10, he began his 14-year figure skating career, which included competing and placing 11th at the 1980 Olympic Trials at the U.S. National Figure Skating Championships in Atlanta, Georgia. His performance was broadcast on the ABC Wide World of Sports, along with figure skaters Scott Hamilton and Brian Boitano.

The future looks bright for Michalowski, professionally and personally.

His professional goals include designing interactive media to replace confusing product manuals. He envisions a quick and easy-to-understand virtual reality program, including captions and audio, for connecting electronic appliances.

Despite his big-city nature, Michalowski has grown quite attached to the Rochester area and its "wonderful" deaf community. He and his wife, Sheryl, who also is deaf, and their two hearing daughters Alexandra, 8, and Shayna, 3, have established a close-knit group of deaf and hearing friends. And he also enjoys community work, like designing projects on a pro bono basis for the fund-raising committee at his daughter's school.

Profiles After College

Katie Summerfeldt

by Kathy J. Lindsley

Katherine Summerfeldt thinks her future may be in the past.

Summerfeldt, who received a master of science degree in cross-disciplinary professional studies from RIT's College of Applied Science and Technology in May, hopes to build a career combining her interest in garment construction and historic preservation with her fine arts, computer-design and multi-media background. Her first effort: creating period costumes for guides at the historic George Eastman House.

To meet the capstone project requirement for her master's degree, Summerfeldt researched clothing worn by household staff when Mr. Eastman, founder of the Eastman Kodak Co., lived at 900 East Avenue, Rochester, New York. She then designed versions of period outfits on the computer and constructed sample garments.

Summerfeldt is the first deaf student in the innovative cross-disciplinary professional studies master's program, which allows a student to create a customized course of study with two or three professional concentrations drawn from RIT graduate programs.

A native of Newmarket, Ontario, Canada, Summerfeldt grew up on a farm. Because the nearest school for the deaf was three hours away, she attended the local public school. When she went on to a college in Toronto to study graphic design, the difficulties of dealing with the hearing world became acute.

"It was very frustrating for me because of the lack of support," she says. "But this was something I was accustomed to all my life. In my third year, I was introduced to some of the computer programs, and I was not doing well because I could not understand the teacher. A technician, David Steele, who worked there knew

the difficulties I was having. He sat down with me after hours and explained to me one on one. He helped me succeed in that class.

"That year, I felt a lot of anger, and I was hating myself for being deaf because of all the complications I was going through in trying to understand and follow at least half of what was being said in a hearing classroom.

"My mother found an association that helped people with hearing loss, the Canadian Hearing Society in Toronto. I met a wonderful person there named Diane Addie, who helped me learn ways to increase my independence and my self-esteem. This also is where I found out about NTID and RIT. There are no colleges or universities for the deaf in Canada."

Summerfeldt came to RIT to study painting and illustration and received a bachelor of fine arts degree. Although she has a solid background in computer graphics, she prefers low-tech methods—especially when it comes to clothing design.

"I love the hands-on part, working with different materials and fibers," she says. She's been creating clothing since the age of 10. Because RIT doesn't offer any courses in fashion design, Summerfeldt sought out the NTID Performing Arts Department and went to work in the costume shop.

"Katie came in with a lot of skills and experience that was very helpful," says Damita Peace, artist-in-residence in NTID's performing arts department. "She's very enthusiastic. She constructed many costumes and was able to take what she learned and match it with her design experience."

"The part I liked best," says Summerfeldt, "was incorporating history, which is my minor, into some of the garments. For instance, in one of the 1998 plays, *Blythe Spirit*, I helped construct some of the outfits for the



Katie Summerfeldt (right) and George Eastman House curator Kathy Connor discuss period clothing designed by Summerfeldt, including a daytime dress and a finely detailed woolen coat.

story, which is set in the early 1900s."

The idea for the capstone project for her master's degree came during an internship in 1998 at the George Eastman House. Kathy Connor, curator of the George Eastman collection, hopes to someday enhance the museum experience with the addition of costumed guides. Summerfeldt researched the typical garb of a male and female gardener, a maid, and Eastman's personal secretary. Her challenge was to come up with clothing representative of the time period that can be adapted to contemporary physiques.

Connor was impressed with the results. "Katie's work will be of tremendous help in the future," she says.

Summerfeldt would like to see that project through to completion, but at the moment, the Eastman House hasn't budgeted for this. In the meantime, Summerfeldt continues to gain as much experience and knowledge as possible.

"I would love to design historical and modern garments for the public, whether on the computer or making the actual apparel," she says.

"I want to be known for my talent, creativity, and skills."

Researching, Understanding, and Teaching American Sign Language

by Gerard G. Walter

In any situation where two groups or cultures intersect, especially on a daily basis, the quality of these interactions depends heavily on individuals sharing a common system of communication. At RIT, deaf and hearing people interact with one another using both spoken/written English and American Sign Language (ASL). For more than 20 years, research has been conducted at NTID to better understand the linguistic bases of ASL and to find ways of improving communication at RIT through the use of ASL so that instructors can teach deaf students more effectively. Researchers have also developed a way of evaluating sign language proficiency of ASL learners, as well as materials for documenting special signs used in technical communication.

The structure of ASL

Understanding the syntactic and semantic structures of ASL is an

important component of this research. For a significant proportion of the NTID student body, ASL is the language in which they function most comfortably. In order to better serve these students, it is incumbent upon NTID faculty members to know as much as they can about the linguistic structure of the language these students use.

"Linguists have been studying ASL as a language system for only about 40 years," says Dr. Susan Fischer, researcher in NTID's Center for Research, Teaching & Learning. "During this time, research has come a long way in describing the linguistic rules that govern the structure of ASL, but there is still much that we do not fully understand."

Findings from this research helps NTID instructors use ASL as a bridge to teaching English to deaf students as well as understand the role of ASL in deepening their understanding of language in general. Their jobs require that they effectively communicate with

students, and they receive training in ASL from instructors in NTID's department of American Sign Language and Interpreting Education.

Dr. Linda Siple, acting chairperson of NTID's Department of American Sign Language and Interpreting Education, notes that instructors in American Sign Language use the findings from linguistic research to guide their development of curriculum and enhance their effectiveness as instructors.

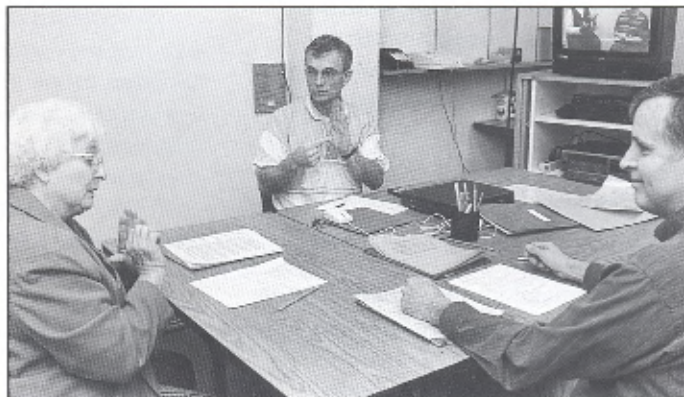
"Research findings describing the spatial syntax of ASL as opposed to other mechanisms used in languages have gone a long way to helping the teaching process," says Siple. "It is hard to imagine how sign languages were taught before linguists began documenting the grammatical rules of ASL."

Not only do instructors at NTID need to understand ASL itself, they also need to understand the characteristics of their colleagues who are learning ASL.

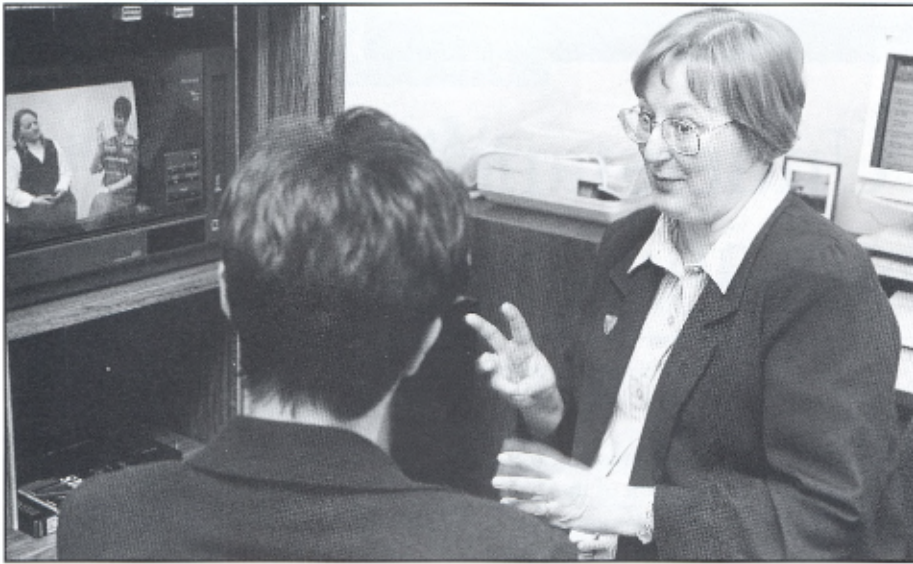
"We suspect that similar characteristics



The interview Barbara Ray Holcomb, assistant professor in NTID's Department of American Sign Language and Interpreting Education, left, conducts an SCPI interview with Michele Berger, staff assistant in NTID's Office of Communication Assessment Services.



The rating Dr. Frank Caccamise, center, watches and rates the videotape of Berger's SCPI interview with Florene Hughes, assistant professor in NTID's Social Work Support Department, left, and Peter Schragle, captionist in NTID's Instructional Television Department.



The follow-up Donna Gustina, director of NTID's Office of Communication Assessment Services, right, reviews with Berger her videotape and SCPI rating report.

affecting one's ability to learn a second auditory language play a role in one's ability to learn American Sign Language," says Fischer. "While we have a long way to go, our studies are investigating variables such as age, aptitude for language learning, time spent in a new language environment, and motivation."

A better understanding of the variables that influence ASL learning as a second language has implications for designing curricula for teaching ASL and for evaluating the progress being made by ASL learners.

Evaluation of ASL skills

"When we began the Sign Communication Proficiency Interview (SCPI) project 20 years ago, our goal was to provide programs serving deaf and hard-of-hearing persons across the United States the planning, training, and follow-up services needed for development and assessment of sign language skills of their staff," says Dr. Frank Caccamise, researcher in the Center for Research, Teaching & Learning.

"The demand for the SCPI by schools and organizations outside of NTID has far exceeded our wildest dreams," says Caccamise, who, along with co-investigator Dr. William Newell,

associate professor in the Department of American Sign Language and Interpreting Education, developed the one-to-one interview technique for assessing sign language proficiency.

The SCPI is now used at more than 40 academic and vocational rehabilitation programs across the United States and Canada. Today, in addition to providing training seminars, Caccamise and Newell are focusing their energies on developing techniques for assessing local reliability of the evaluations and on developing materials to support regional centers for training evaluators.

Collection of technical signs

From the earliest days, teaching and interpreting in technological areas has created a demand for documenting the sign language used for technical communication in classrooms, laboratories, and at work. This demand resulted in the development of technical sign manuals at NTID.

"In 1975 we started to conduct the research necessary to collect, document, and share the signs used by skilled signers of technical terminology," says Caccamise. "This project uses a process similar to the one employed by the editors of dictionaries to collect and document spoken language."

Findings from this research are recorded on 61 videotapes and in 11 books and disseminated on a national basis. Books in the areas of science, mathematics, legal, and social work terminology have recently been completed. Future plans include development of materials for applications software and business technologies and conversion of the videotape materials to allow for random access capabilities of today's videodisc technology.

"The diversity of technological areas, the large number of specialized sign language interpreters at NTID, and the presence of NTID alumni in the Rochester area provides us a great environment in which to initiate sign collection," says Caccamise. "Only when we combine our knowledge of local sign usage with usage from across the United States are we able to produce materials that are appropriate for dissemination."

NTID has existed during a period of great enlightenment concerning ASL. The Institute was established at a time when linguists were just beginning to investigate and understand the structures of sign language, structures similar to spoken language in some ways and different in others.

"Today fewer and fewer people hold the standard, often mutually contradictory, misconceptions about sign languages, such as the notion that sign languages are both not languages and degenerate forms of spoken languages, or that they are iconic and primitive," says Fischer.

Sign language research by Fischer and her colleagues from around the world have helped researchers like Caccamise and Newell by laying the foundations upon which they are able to develop model processes for sign language communication skills assessment and development. These areas of research also help instructors of sign communication approach their curricula less as an abstract art and more as a structured language system.



Fulfilling the promise Friends of NTID celebrated the successful completion of NTID's first comprehensive campaign at a dinner held in RIT's Lyndon Baines Johnson Building in May 1999. See article on page 7.



Rochester Institute of Technology
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Rochester, NY 14623-5604

CHANGE SERVICE REQUESTED



Record breaking snowfall In March 1999, the greater Rochester area was blanketed with 43 inches of snow in less than four days, and RIT was closed for two days during its spring quarter break.