R·I·T

NTID 2013

Annual Report

Prepare for Success

Rochester Institute of Technology
National Technical Institute for the Deaf

2013 Annual Report

Note of Explanation

This Annual Report notes activities and accomplishments throughout Fiscal Year 2013 (October 1, 2012 – September 30, 2013), corresponding primarily to Academic Year 2012-2013. References to Fiscal Year 2014 correspond to characteristics and accomplishments as of fall semester Academic Year 2013-2014.

NTID FY 2013 Annual Report
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December 13, 2013

The Honorable Arne Duncan
Secretary of Education
U.S. Department of Education
400 Maryland Avenue, S.W.
Washington, DC 20202

Dear Secretary Duncan:

We are pleased to submit the following report to fulfill the requirement of the Education of the Deaf Act that the National Technical Institute for the Deaf (NTID), a college of Rochester Institute of Technology (RIT), "… shall prepare and submit an annual report to the Secretary…"

After celebrating 45 years of admitting students this fall, we are proud to say that NTID's tradition of excellence has not wavered in Fiscal Year 2013. Ninety-three percent of FY 2012 graduates seeking employment were employed in FY 2013. An FY 2013 study conducted with the Social Security Administration determined that NTID graduates have higher salaries and reduced dependence on federal Social Security Income and Social Security Disability Insurance than deaf or hard-of-hearing students who do not attend NTID. A record 424 students graduated from NTID in FY 2013, a 49 percent increase from FY 2009. NTID also celebrated the opening of Rosica Hall, a new center for innovation, creativity and research, as well as the formation of the Research on Employment and Adapting to Change Center for Studies on Career Success and the Research Center for Teaching and Learning. These accomplishments are all the more significant in light of a 5.2 percent cut to our federal appropriation after two years of level funding.

NTID has managed its resources carefully in clear recognition of the current federal economic climate. We have postponed our construction needs, dramatically reduced our workforce and equipment/travel needs, increased tuition, and offered a one-time voluntary retirement incentive program, all while continuing to serve a high number of students. Though these challenges have tested us all, we continue to celebrate the many positive things happening in our community and remain focused on NTID's students and our mission:

> *To provide deaf and hard-of-hearing students with outstanding state-of-the-art technical and professional education programs, complemented by a strong liberal 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. Secondarily, NTID prepares professionals to work in fields related to deafness; undertakes a program of applied research designed to enhance the social, economic and educational accommodation of deaf people; and shares its knowledge and expertise through outreach and other information dissemination programs.*

This report is also available in full to the general public at:

www.ntid.rit.edu/media/annual-report

The RIT/NTID community, including students, faculty, staff and friends, rely on the guidance and support you and the Department of Education continue to provide NTID.

With warm regards,

William W. Destler, Ph.D.
President, RIT

Gerard J. Buckley, Ed.D.
President, NTID
Vice President and Dean, RIT

Cover Photos

TechGirlz and TechBoyz Outreach Programs

Twenty deaf and hard-of-hearing girls and 28 deaf and hard-of-hearing boys in grades 7–9 attended TechGirlz/TechBoyz in 2013 to explore their interests in science, technology, engineering and mathematics. The week-long summer camps held in August gave girls and boys the opportunity to learn more about careers in science and technology-related fields. They built their own computers, analyzed a "crime scene" and worked with computer-aided drafting equipment to create a telescope. The program included an hour-long workshop for parents that focused on what colleges expect from high school students, how parents should encourage their students to prepare for college and how to access financial aid.

The top photo features TechGirlz participants assembling NXT robots that they will navigate through obstacle courses. The girls develop programs with commands that will enable the robots to move in circles and figure 8's and make right and left turns.

The bottom photo features TechBoyz participants engaging in one of several hands-on laboratory activities relevant to public health topics, specifically in the areas of cholesterol, diabetes screenings and disease transmission.

NTID Job Fair

The back cover photo features RIT/NTID student Aaron Pagan, of New York, N.Y., with Scott Van Nice, who works in computer forensics for Procter & Gamble, at NTID's Job Fair. Aaron currently is pursuing a bachelor's degree in Advertising and Public Relations. Scott is an RIT/NTID alumnus who graduated with a bachelor's degree in Information Technology and recently received his law degree. After a cooperative work experience as a student with Procter & Gamble in Cincinnati, Ohio, Scott was hired full-time.

Sponsored by the NTID Center on Employment, the Job Fair is held each October, which is Disability Employment Awareness Month. In 2013, 93 percent of NTID students who graduated in FY 2012 were employed.

The primary mission of the National Technical Institute for the Deaf is to provide deaf and hard-of-hearing 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.

Secondarily, NTID prepares professionals to work in fields related to deafness; undertakes a program of applied research designed to enhance the social, economic and educational accommodation of deaf people; and shares its knowledge and expertise through outreach and other information dissemination programs.

Budget Reductions

In March 2013, NTID's FY 2013 budget was reduced by 5.2 percent as a result of sequestration, decreasing the federal appropriation by approximately $3.4 million. This cut came after two consecutive years of level funding and in the midst of record enrollments and inflationary increases.

As a result, NTID continued budget reduction strategies from FY 2012 and took new steps to help manage the budget deficit created by the reduced federal appropriation, including: a hiring freeze (replacing only essential positions); travel freeze (except recruitment, employment and development travel); equipment purchases limited to emergency replacements; moratorium on unnecessary office moves; tuition increase of 9 percent for the upcoming academic year; 20 percent reduction in controllable accounts through the end of FY 2013; increasing faculty and staff workloads to maximize productivity; modifying staffing for the Explore Your Future and Summer Vestibule Programs; and temporarily suspending the lecturer promotion process.

In addition, NTID offered a one-time voluntary retirement incentive program, resulting in 22 faculty and staff retiring effective June 30, 2013, with three more entering a one-year retirement transition program. These retirements and efficiencies enabled NTID to better manage the budget deficit for FY 2013.

As the federal government continues to face budgetary challenges, these budget reduction strategies (other than the retirement program) will continue into FY 2014, and the NTID community will continue to look for additional opportunities to create budget efficiencies. Despite the significant reduction in federal appropriations, NTID will maintain the high standards of education, access services, employment assistance and staff commitment that will ensure student and graduate success.

National Technical Institute for the Deaf – At a Glance

Character
World's first and largest technological college for students who are deaf or hard of hearing. One of nine colleges of Rochester Institute of Technology (RIT), a privately endowed, coeducational university that is student-centered and career-focused.

Primary Mission
To provide deaf and hard-of-hearing 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.

History
Formally established in 1965 through an Act of Congress (PL 89-36). Began operation in 1967 at RIT, with first students in 1968. RIT was founded in 1829.

RIT Campus
Occupies 1,300 acres in suburban Rochester, the third largest city in New York state. RIT also has international campuses in Eastern Europe and Dubai.

Enrollment
Total of 1,432 students enrolled as of fall 2013. Undergraduate: 1,195 deaf and hard-of-hearing students, 147 hearing students (enrolled in ASL-English Interpretation program). Graduate: 90 students (48 hearing, deaf and hard-of-hearing in the Master of Science program in Secondary Education of Students who are Deaf or Hard of Hearing and 42 deaf and hard-of-hearing students in the other colleges of RIT). These students are part of a university that includes more than 17,000 hearing students studying at the associate, baccalaureate, master's and doctoral levels.

Academic Calendar
The RIT academic year includes two semesters (fall and spring) and generally runs from August through May. Each semester is approximately 15 weeks. There also is an optional three-week intersession in January and a 10-week summer term.

Male/Female Ratio
52 percent male; 48 percent female.

Diversity
Of the 1,432 students enrolled, 32.6 percent are minority students and 3.1 percent are international students from 16 countries.

Residence Life
Most undergraduates live in campus residence halls, apartments and townhouses. On-campus fraternities, sororities and special-interest houses also are available. Freshmen are guaranteed housing.

RIT Campus Activities
Major social events and activities are sponsored by the College Activities Board, Residence Halls Association, sororities, fraternities and special interest clubs of many kinds. There are more than 200 student clubs and organizations on campus. NTID's Student Life Team also sponsors a variety of co-curricular educational programs.

RIT Campus Technology
Extensive wireless computer access, smart classrooms with state-of-the-art computers and multimedia-based technologies, microcomputer labs, computer graphics and computer-aided drafting labs, microelectronics and computer engineering facilities, digital printing presses, a laser optics lab, robotics program, a distance learning/access demonstration lab and fully networked residence halls equipped with strobe lights.

Cooperative Education
In keeping with a career education focus, most RIT/NTID degree programs require students to complete at least one cooperative work assignment for experience in their chosen profession before graduation.

Post-Graduation Employment
Over the past five years, 91 percent of deaf and hard-of-hearing graduates who have sought jobs after graduation have found one within a year, and last year, 93 percent of graduates successfully found employment.

Research
Integrated research program of international prominence, focusing on teaching and learning; employment and career success; access technology; education research partnerships; cognitive, language and psychosocial aspects of the deaf experience; economic, demographic and policy studies related to the deaf and hard-of-hearing population; and technological education for deaf and hard-of-hearing students.

Degree Programs
Students enrolled at NTID can earn associate degrees in 17 accredited programs. Qualified deaf and hard-of-hearing students also can earn bachelor's or master's degrees in more than 200 programs offered by RIT's other colleges: Applied Science and Technology, Business, Computing and Information Sciences, Engineering, Health Sciences and Technology, Imaging Arts and Sciences, Liberal Arts and Science.

Communication/Support
NTID instructors use a variety of communication strategies while teaching, which may include sign language, spoken language (FM systems are available), finger spelling, printed/visual aids and Web-based instructional materials. Support and access services for classes throughout the other colleges of RIT may include notetaking, tutoring, FM systems, real-time captioning services and the largest interpreting staff for a college program in the United States.

Annual Expenses 2013-2014
for Undergraduate/U.S. Citizens

Tuition	$ 13,512
Room	$ 6,530
Board	$ 4,648
Fees	$ 492
Total	$ 25,182

Financial Aid
A combination of institutional grants and scholarships, federal and state grants, private scholarships and Vocational Rehabilitation are available to students. The average financial aid per domestic student in FY 2013 was $11,129, not including loans.

Annual Highlights

Noteworthy accomplishments and statistics for the past year include the following:

- In FY 2013, NTID and the Social Security Administration examined more than 16,000 deaf and hard-of-hearing individuals who have attended NTID since its beginning. The studies show that NTID graduates over their lifetimes are employed at a higher rate, earn more and participate at a lower rate in public assistance programs than those who withdraw or earn degrees from other institutions of higher education.
- NTID's largest graduating class in history, 424 students, graduated in 2013 including a record 220 bachelor's degree students.
- NTID's most recent employment rate for graduates in 2012 is 93 percent. The average employment rate over the past five years is 91 percent.
- More than 145,000 hours of interpreting services were provided to students in FY 2013.
- NTID's first-year persistence rates and graduation rates for both sub-baccalaureate students and baccalaureate students were higher than the national rates for two-year and four-year colleges.
- For the last six years, NTID's annual enrollment has been more than 1,400 students.
- Lydia Callis, a graduate of NTID's ASL-English Interpretation program, received national attention for her work interpreting for New York City Mayor Michael Bloomberg during his Hurricane Sandy press conferences in October 2012.
- RIT/NTID's Center for Education Research Partnerships received a $2.3 million research grant from the National Institute on Deafness and Other Communication Disorders to study "Language, Learning, and Cognition among Deaf Students with and without Cochlear Implants."
- In June 2013, NTID, along with RIT, Al Sigl Community of Agencies and Paradigm, sponsored the first Effective Access Technology Conference, featuring some of the more than 70 access technology projects underway at RIT.
- In June 2013, NTID hosted the 64th biennial Convention of American Instructors of the Deaf.
- RIT/NTID's Center on Access Technology and the University of Rochester Medical Center's Clinical & Translational Science Institute received a $2.1 million grant from the National Institute for General Medical Sciences to build a model program that integrates activities at each university to improve the experience of deaf and hard-of-hearing students seeking advanced degrees.
- NTID's new center devoted to innovation and research, Sebastian and Lenore Rosica Hall, opened in October 2013.
- In October 2013, more than 500 alumni from RIT/NTID and their families came to campus for the NTID 45th Anniversary Reunion celebrating 45 years of NTID.

Executive Summary

New Registrations	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Fall Admissions (Deaf and Hard-of-Hearing Students Only)					
Applications	900	906	902	989	833
Acceptances	482	477	439	504	507
Registrations	341	351	345	381	381
Other New Registrations					
AAS/BS ASL-English Interpretation	52*	57**	41	45	43
MS in Secondary Education	30	27	18	19	16
Total New Registrations	**423**	**435**	**404**	**445**	**440**
Enrollment (Deaf and Hard-of-Hearing Students Only)					
Sub-Baccalaureate Programs					
Career-Focused Programs	485	488	449	400	368
Associate+Bachelor's/Pre-Baccalaureate	150	168	204	198	190
Subtotal Sub-Baccalaureate	**635**	**656**	**653**	**598**	**558**
Baccalaureate Programs at RIT	478	495	515	551	526
Graduate Programs at RIT	38	40	42	37	42
Subtotal Baccalaureate and Graduate at RIT	**516**	**535**	**557**	**588**	**568**
Career Exploration Studies	124	112	113	120	111
Subtotal Deaf and Hard-of-Hearing Students Only	**1,275**	**1,303**	**1,323**	**1,306**	**1,237**
Other Enrollments					
ASL-English Interpretation	138*	147**	160	167	147
MS in Secondary Education***	61	71	64	56	48
Subtotal Other	**199**	**218**	**224**	**223**	**195**
Total Enrollment	**1,474**	**1,521**	**1,547**	**1,529**	**1,432**

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*   There are an additional three students who are double-majors, with one major in NTID and another in a different college of RIT.

**   There is an additional student who is a double-major, with one major in NTID and another in a different college of RIT.

*** Included from FY 2007 to date are non-matriculated students (between four and 15 per year) taking courses offered by the Master of Science program in Secondary Education, but who are part of a grant-supported joint program between NTID and Nazareth College of Rochester to train speech pathologists to work with deaf and hard-of-hearing people.

	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Withdrawn (All Students)	15%	14%	13%	14%	16%
Graduates					
Total Degrees Granted	284	306	288	355	424
Degree Level					
Certificate	7	12	15	6	13
Diploma	1	1	0	0	0
Associate (AOS)	35	42	41	52	48
Associate (AS/AAS)	73	74	82	107	104
Associate (Interpreting)	0	2	1	0	1
Bachelor's (Interpreting)	34	31	18	32	52
Bachelor's	89	112	97	118	168
Master's	22	14	11	10	21
Master's (MSSE)	23	18	23	30	17
Post-Graduation Employment					
Post-Graduation Employment	94	96	95	124	N/A*
Post-Graduation Employment Rate	90%	90%	91%	93%	N/A*
By Sector of the Economy					
Business and Industry	59%	57%	54%	65%	N/A*
Education	21%	27%	31%	24%	N/A*
Government	20%	16%	15%	11%	N/A*
Cooperative Work Experiences	262	281	298	299	295
Access/Support Services					
Notetaking Hours	63,291	63,620	77,436	66,797	67,671
Tutoring Hours	17,636	18,236	19,395	18,039	16,559
Interpreting Hours	109,618	116,782	131,065	129,900	145,003
Real-Time Captioning Hours	18,168	19,493	21,493	19,516	18,263

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* Post-graduation employment numbers reflect status as of one year following graduation; employment numbers for September 1, 2012 through August 31, 2013 graduates will be reported next year.

Executive Summary (continued)

Outreach (Number of External Participants)	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
C-Print® Training	0	7	6	0	6
Deaf Initiative in Technology	64	88	34	31	23
Digital Arts, Film and Animation	64	62	47	32	63
Explore Your Future	196	217	228	192	192
FutureQuest	96	128	102	125	196
Interpreter Training*	37	74	63	132	104
Math Competition	98	61	105	115	83
NTID Center on Employment	577	521	677	613	413
National Science Fair	62	66	54	72	52
Notetaker Training	223	346	359	277	262
Project Fast Forward	86	76	55	25	87
SpiRIT Writing Contest	42	31	31	36	38
Steps to Success	20	23	23	21	23
TechGirlz/TechBoyz Camp	32	41	38	57	48

Financial Aid (Domestic Students)					
Grant-in-Aid	$1,415,786	$1,174,944	$1,268,955	$1,303,635	$1,303,299
Vocational Rehabilitation	8,192,636	8,377,642	8,805,867	9,314,927	9,422,417
Pell Grants	1,839,938	2,781,909	3,130,369	2,972,676	2,796,483
State Grants	549,382	548,863	464,249	502,031	509,868
Federal Loans	4,060,757	5,394,370	5,671,152	6,058,928	5,476,048
Scholarships and Other	2,165,910	2,147,416	2,571,691	2,381,377	2,546,133
Total Financial Aid	**$18,224,409**	**$20,425,144**	**$21,912,283**	**$22,533,574**	**$22,054,248**
Average Aid per Domestic Student (Excluding Loans)**	**$10,031**	**$10,496**	**$10,966**	**$10,947**	**$11,129**

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* Students supported by grants from the New York State Board of Regents, State Education Department, Vocational and Educational Services for Individuals with Disabilities, awarded to RIT/NTID and the Monroe County #1 Board of Cooperative Education Services of Rochester, N.Y.

** Total financial aid, less loans, divided by domestic student enrollment.

Executive Summary (continued)

Domestic Student Rates*	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Tuition	$10,233	$10,719	$11,583	$12,393	$13,512
Room	5,583	5,862	6,096	6,309	6,530
Board	4,059	4,182	4,317	4,491	4,648
Fees	717	753	453	474	492
Total	**$20,592**	**$21,516**	**$22,449**	**$23,667**	**$25,182**
Fundraising Activity					
Cash to Endowment and Restricted Funds	$2,602,401	$2,975,368	$1,460,336	$935,832	**
Equipment and Software	$94,100	$1,028,004	$141,740	$29,380	**
Federal Funds Matched***	$1,102,800	$220,700	$141,418	$177,000	**

Courtney Kerr, from Montego Bay, Jamaica, shares a moment of pride on receiving his associate degree in Computer-Aided Drafting Technology.

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* Per the Education of the Deaf Act, international students pay differing tuition rates, depending on whether they are from a developing or developed country. Their charges for room, board and fees are the same as for domestic students.

** Information not yet available.

*** There no longer is a separate appropriation for the Matching Endowment Program. Any monies matched must be funded through operating funds efficiencies.

The Education of the Deaf Act

The Education of the Deaf Act requires NTID to submit this report annually to the federal government.

Helen Yu, of Sunnyvale, Calif., celebrates Commencement with her family. As former president of the RIT/NTID Asian Deaf Club and an NTID Senator in RIT Student Government, Helen has made her mark on NTID and currently is pursuing a bachelor's degree in Business Management from RIT.

Reporting Requirements of the Education of the Deaf Act and the Agreement with RIT

This section includes, verbatim, the section of the Education of the Deaf Act (EDA) that applies to reporting requirements for the National Technical Institute for the Deaf. The material below in brackets provides cross-references, indicating sections of this report that reflect NTID compliance with these EDA provisions. In addition, reporting on inventions is included below based on a requirement of the Agreement with RIT.

NOTE: Where "…" appear, sections of the EDA that do not apply to NTID have been removed.

Reports for the EDA

The … Board of Trustees or other governing body of the institution of higher education with which the Secretary has an agreement [RIT] under section 4332 of this title shall prepare and submit an annual report to the Secretary, and to the Committee on Education and Labor of the House of Representatives and the Committee on Labor and Human Resources of the Senate, not later than 100 days after the end of each fiscal year, which shall include the following: [This *Annual Report* meets this requirement.]

(1) The number of students during the preceding academic year who enrolled and whether these were first-time enrollments, who graduated, who found employment, or who left without completing a program of study, reported under each of the programs … of NTID. [Refer to the Executive Summary section.]

(2) For the preceding academic year, and to the extent possible, the following data on individuals who are deaf and from minority backgrounds and who are students (at all educational levels) or employees:

    (A) The number of students enrolled full- and part-time. [Refer to the Academic Programs and Diversity and Pluralism sections.]

    (B) The number of these students who completed or graduated from each of the educational programs. [Refer to the Persistence, Graduation & Employment and Diversity and Pluralism sections.]

    (C) The disposition of these students upon graduation/completion on the date that is one year after the date of graduation or completion of programs at NTID … in comparison to students from non-minority backgrounds. [Refer to the Persistence, Graduation & Employment and Diversity and Pluralism sections.]

    (D) The number of students needing and receiving support services (such as tutoring and counseling) at all educational levels. [Refer to the Student Support Services section.]

    (E) The number of recruitment activities by type and location for all educational levels. [Refer to the Outreach section of the Executive Summary.]

    (F) Employment openings/vacancies and grade level/type of job and number of these individuals that applied and that were hired. [Refer to the Diversity and Pluralism section.]

    (G) …

(3) (A) A summary of the annual audited financial statements and auditor's report … as required under section 4353 of this title. [The audit of RIT is provided to the Secretary, as is a separate schedule for NTID.]

(B) A summary of the annual audited financial statements and auditor's report of NTID programs and activities of this title, and such supplementary schedules presenting financial information for NTID for the end of the federal fiscal year as determined by the Secretary. [The audit of RIT is provided to the Secretary, as is a separate schedule for NTID.]

(4) For the preceding fiscal year, a statement showing the receipts of … NTID and from what federal sources, and a statement showing the expenditures … by function, activity, and administrative and academic unit. [Refer to the Financial Operations section.]

(5) A statement showing the use of funds (both corpus and income) provided by the Federal Endowment Program under section 4357 of this title. [Refer to the External Funding section.]

(6) A statement showing how such Endowment Program funds are invested, what the gains or losses (both realized and unrealized) on such investments were for the most recent fiscal year, and what changes were made in investments during that year. [Refer to the External Funding section.]

(7) Such additional information as the Secretary may consider necessary. [NTID responds on a regular basis to requests for additional information from staff of the U.S. Department of Education.]

Agreement with RIT: Certification Regarding Inventions

The *Agreement for Establishment and Operation of the National Technical Institute for the Deaf Between the Secretary of Health, Education, and Welfare and Rochester Institute of Technology (RIT) (1966)* requires annual disclosure of any inventions developed during the year or a certification that no inventions were made during the applicable period. NTID hereby certifies that the following invention was made during the year covered by this Annual Report. [In addition, refer to the Research, Innovation & Creativity section.]

2013-011

Old RIT Track Code	None
Title	Methods for Conducting Detailed Diagnostic Assessments of Speech Recognition Abilities and Predicting Hearing Thresholds

This Invention Disclosure has not as yet been protected with a patent application, but has been received in RIT's Intellectual Property Management Office and is under discussion with NTID.

Performance Indicators

Performance indicators, required by the Government Performance and Results Act, measure NTID's performance related to enrollment, persistence, graduation and employment.
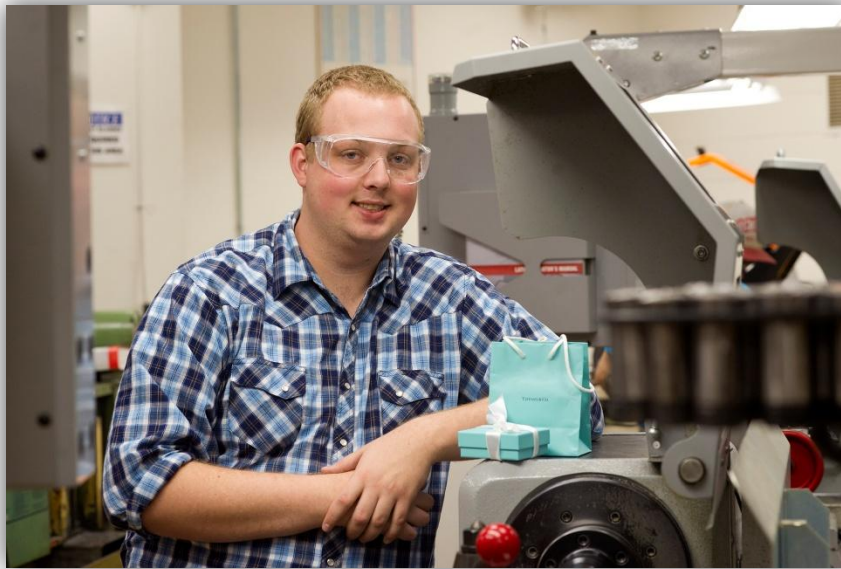
Dalton Allen, of Bastrop, Texas, graduated in 2013 with an associate degree in Computer-Integrated Machining Technology. After having a 10-week cooperative work experience with Tiffany & Co. in 2012, he was offered a job at their Cumberland, R.I., headquarters, where he will be a computer numerical control machine operator.

Performance Indicators

Performance indicators are critical elements of the Congressionally mandated Government Performance and Results Act (GPRA), which requires the Department of Education to measure the performance of all entities within its oversight receiving federal funds. There are four objectives, each with several measures to track performance.

Objective 1 of 4

Provide deaf, hard-of-hearing and hearing students in undergraduate and professional studies with outstanding state-of-the-art technical and professional education programs, complemented by a strong arts and sciences curriculum and supplemented with appropriate student support services.

Though not related directly to required performance indicators, the table below reports an overview of the total enrollment for the National Technical Institute for the Deaf (NTID), which includes:
- Deaf and hard-of-hearing sub-baccalaureate students
- Deaf and hard-of-hearing baccalaureate students
- Baccalaureate students in the ASL-English Interpretation programs
- Deaf and hard-of-hearing graduate students enrolled in colleges of RIT other than NTID
- Deaf, hard-of-hearing and hearing students in NTID's Master of Science program in Secondary Education of Students who are Deaf or Hard of Hearing (MSSE).

Fiscal Year	Total Enrollment
1998	1,205
1999	1,278
2000	1,220
2001	1,219
2002	1,238
2003	1,231
2004	1,270
2005	1,281
2006	1,256
2007	1,250
2008	1,343
2009	1,450
2010	1,474
2011	1,521
2012	1,547
2013	1,529
2014	1,432

Performance Indicators (continued)

Measure 1.1 of 3: The number of NTID-supported deaf and hard-of-hearing undergraduates (desired direction: increase)			
Fiscal Year	**Target**	**Number**	**Status**
1997		1,069	Measure Not In Place
1998		1,085	Measure Not In Place
1999	1,080	1,135	Target Surpassed
2000	1,080	1,084	Target Surpassed
2001	1,080	1,089	Target Surpassed
2002	1,080	1,121	Target Surpassed
2003	1,080	1,093	Target Surpassed
2004	1,080	1,064	Target Not Met
2005	1,080	1,055	Target Not Met
2006	1,080	1,013	Target Not Met
2007	1,080	1,017	Made Progress From Prior Year
2008	1,045	1,103	Target Surpassed
2009	1,045	1,212	Target Surpassed
2010	1,045	1,237	Target Surpassed
2011	1,045	1,263	Target Surpassed
2012	1,200	1,281	Target Surpassed
2013	1,200	1,269	Target Surpassed
2014	1,200	1,195	Target Not Met

Source. National Technical Institute for the Deaf, Registrar Office records

Frequency of Data Collection. Annual

Data Quality. Enrollment data does not include part-time students or non-degree-seeking students, with the exception of students who are part-time taking their final courses for completion of their degrees.

Target Context. In September 2011, the target for the number of undergraduates who are deaf and hard of hearing enrolled in NTID was increased from 1,045 students to 1,200 students, as NTID enrolled more than 1,200 undergraduate students in FY 2009, FY 2010 and FY 2011. The target will be revisited prior to October 2014 and revised, if needed, after the budget outlook for FY 2014 and subsequent years becomes clearer.

Explanation. On the next page is a table showing the number of undergraduate students who are deaf or hard of hearing who were enrolled in baccalaureate programs at RIT and in sub-baccalaureate programs at NTID.

Performance Indicators (continued)

Fiscal Year	Baccalaureate	Sub-Baccalaureate	Total
2001	447	642	1,089
2002	440	681	1,121
2003	449	644	1,093
2004	434	630	1,064
2005	427	628	1,055
2006	438	575	1,013
2007	439	578	1,017
2008	443	660	1,103
2009	451	761	1,212
2010	478	759	1,237
2011	495	768	1,263
2012	515	766	1,281
2013	551	718	1,269
2014	526	669	1,195

As seen from the above table, NTID experienced a decrease in the undergraduate enrollment of students who are deaf and hard of hearing from 1,269 students during the 2012-2013 (FY 2013) academic year to 1,195 students in the 2013-2014 (FY 2014) academic year. This decrease largely is a function of the high number of students graduating in the FY 2013 academic year. The change from a quarter to semester system in FY 2014 may have motivated those students nearing the completion of their curriculum to finish their studies in FY 2013, resulting in NTID's largest graduating class in history of more than 400 students.

Measure 1.2 of 3: The number of students enrolled in NTID's ASL-English Interpretation programs (desired direction: increase)

Fiscal Year	Target	Number	Status
1997		72	Measure Not In Place
1998		84	Measure Not In Place
1999	100	93	Made Progress From Prior Year
2000	100	77	Target Not Met
2001	100	75	Target Not Met
2002	100	53	Target Not Met
2003	100	65	Made Progress From Prior Year
2004	100	92	Made Progress From Prior Year
2005	100	100	Target Met
2006	100	116	Target Surpassed
2007	100	130	Target Surpassed
2008	100	130	Target Surpassed
2009	100	135	Target Surpassed
2010	100	138	Target Surpassed
2011	120	147	Target Surpassed
2012	140	160	Target Surpassed
2013	140	167	Target Surpassed
2014	140	147	Target Surpassed

Performance Indicators (continued)

Source. National Technical Institute for the Deaf, Registrar Office records

Frequency of Data Collection. Annual

Data Quality. Enrollment data for students in the ASL-English Interpretation programs does not include part-time students or non-degree-seeking students, with the exception of those students who are part-time taking their final courses toward completion of their degrees.

Target Context. NTID has reported that the ASL-English Interpretation programs receive more applicants than they are able to accept. NTID allowed these programs to expand in FY 2009 to help meet the increasing demand for qualified interpreters. As a result of the expansion, the target increased to 120 students for FY 2011, and again to 140 students for FY 2012. Due to the continued increase in enrollment, the target was revised upward to 160 students in FY 2015 and subsequent years. The target will, however, be revisited prior to October 2014 and revised, if needed, after the budget outlook for FY 2014 and subsequent years becomes clearer.

Measure 1.3 of 3: The number of students enrolled in NTID's Master of Science program in Secondary Education of Students Who are Deaf or Hard of Hearing (MSSE) as well as deaf or hard-of-hearing students pursuing graduate degrees in other RIT colleges (desired direction: increase)			
Fiscal Year	**Target**	**Number**	**Status**
1997		32	Measure Not In Place
1998		36	Measure Not In Place
1999	50	50	Target Met
2000	50	59	Target Surpassed
2001	50	55	Target Surpassed
2002	75	60	Made Progress From Prior Year
2003	75	73	Made Progress From Prior Year
2004	75	114	Target Surpassed
2005	90	126	Target Surpassed
2006	120	127	Target Surpassed
2007	120	101	Target Not Met
2008	105	110	Target Surpassed
2009	105	103	Target Not Met
2010	105	99	Target Not Met
2011	105	111	Target Surpassed
2012	95	106	Target Surpassed
2013	95	93	Target Not Met
2014	95	90	Target Not Met

Source. National Technical Institute for the Deaf, Registrar Office records

Frequency of Data Collection. Annual

Data Quality. Enrollment data does not include part-time students or non-degree-seeking students, with the exception of those students who are part-time taking their final courses toward completion of their degrees.

Performance Indicators (continued)

Target Context. In the FY 2008 Performance Plan, the target for the number of students enrolled in NTID's MSSE program, as well as students pursuing graduate degrees in the other colleges of RIT, was reduced from 120 students to 105 students. The target was further reduced from 105 students to 95 students for FY 2012 and subsequent years, as NTID's *Strategic Decisions 2020* envisions that enrollment in the MSSE program will decrease to 50 by the end of the decade. In FY 2014, NTID had a total of 48 students in the MSSE program and 42 deaf and hard-of-hearing students in other RIT graduate programs, for a total of 90 students.

Objective 2 of 4

Maximize the number of students successfully completing a program of study.

Unlike other data reported in performance indicator objectives, the data in Objective 2 is reported to the Integrated Postsecondary Education Data System (IPEDS) using its April timeline. Therefore, FY 2013 data will be reported in April 2014.

Measure 2.1 of 4: The percentage of first-time, full-time, degree-seeking sub-baccalaureate students who were in their first year of postsecondary enrollment in the previous year and who are enrolled in the current year (desired direction: increase)			
Fiscal Year	**Target**	**Percentage (or date expected)**	**Status**
2004		72.0	Measure Not In Place
2005		65.6	Measure Not In Place
2006		64.5	Measure Not In Place
2007		72.4	Measure Not In Place
2008	Set a Baseline	75.5	Target Not In Place
2009	Maintain a Baseline	71.9	Target Not In Place
2010	70	68.8	Target Not Met
2011	70	69.8	Made Progress From Prior Year
2012	70	66.8	Target Not Met
2013	70	(April 2014)	Pending

Source. Rochester Institute of Technology, Registrar Office records

Frequency of Data Collection. Annual

Data Quality. In April 2013, NTID reported to the Department the FY 2012 persistence rate of its sub-baccalaureate students, including interpreter education students, who returned from the 2011-2012 academic year to their second year in the 2012-2013 academic year. NTID will report to the Department the FY 2013 persistence rate in April 2014, with a sub-set of disaggregated data on the persistence rates of sub-baccalaureate students who are deaf and interpreter education students. Prior to FY 2008, this measure did not include interpreter education students.

NTID reported that the persistence rate of its first-time, full-time, degree-seeking sub-baccalaureate students who are deaf and who are not enrolled in NTID's ASL-English Interpretation programs is 66.8 percent. Currently, there are no sub-baccalaureate students enrolled in the ASL-English Interpretation programs.

Target Context. The target for the persistence rate of NTID's sub-baccalaureate students is 70 percent. In comparison, IPEDS data indicate that two-year public colleges have an average persistence rate of

52.5 percent, and two-year private colleges have an average persistence rate of 60.1 percent. Based on this comparison with IPEDS data, the Department and NTID determined that the target of 70 percent for FY 2010 and subsequent years is an ambitious, yet achievable, goal for NTID.

Explanation. This measure was added to the FY 2008 Performance Plan and is consistent with the methodology used by IPEDS and other Department programs in measuring the persistence of postsecondary students. The persistence rate is the percentage of first-time, full-time, degree-seeking sub-baccalaureate students who were in their first year of enrollment in the previous year and who are enrolled in the current year.

Measure 2.2 of 4: The percentage of first-time, full-time, degree-seeking baccalaureate students who were in their first year of postsecondary enrollment in the previous year and are enrolled in the current year (desired direction: increase)

Fiscal Year	Target	Percentage (or date expected)	Status
2004		91.9	Measure Not In Place
2005		82.6	Measure Not In Place
2006		86.3	Measure Not In Place
2007		75.7	Measure Not In Place
2008	Set a Baseline	85.9	Target Not In Place
2009	Maintain a Baseline	88.0	Target Not In Place
2010	85	93.5	Target Surpassed
2011	85	88.2	Target Surpassed
2012	85	85.9	Target Surpassed
2013	85	(April 2014)	Pending

Source. Rochester Institute of Technology, Registrar Office records

Data Quality. In April 2013, NTID reported to the Department the FY 2012 persistence rate of its baccalaureate students, including interpreter students, who returned from the 2011-2012 academic year to their second year in the 2012-2013 academic year, along with a sub-set of disaggregated data on the persistence rates of baccalaureate students who are deaf and interpreter education students. Prior to FY 2008, this measure did not include interpreter education students.

The following persistence rates were submitted to the Department by NTID:

	All students	Deaf students	ASL-English Interpretation students
FY 2008	85.9%	85.7%	87.5%
FY 2009	88.0%	87.7%	89.5%
FY 2010	93.5%	92.5%	95.8%
FY 2011	88.2%	89.8%	84.2%
FY 2012	85.9%	82.6%	94.4%

NTID will report to the Department the FY 2013 persistence rate of its baccalaureate students in April 2014, with a sub-set of disaggregated data on the persistence rates of baccalaureate students who are deaf and interpreter education students.

Performance Indicators (continued)

Target Context. The target for the persistence rate of NTID's baccalaureate students is 85 percent. In comparison, IPEDS data indicate that four-year public colleges have an average persistence rate of 69.9 percent, and four-year private colleges have a persistence rate of 70.6 percent. Based on this comparison with IPEDS data, the Department and NTID determined that the target of 85 percent for FY 2010 and subsequent years is an ambitious, yet achievable, goal for NTID.

Explanation. This measure was added to the FY 2008 Performance Plan and is consistent with the methodology used by IPEDS and other Department programs in measuring the persistence of postsecondary students. The persistence rate is the percentage of first-time, full-time, degree-seeking baccalaureate students who were in their first year of enrollment in the previous year and who are enrolled in the current year.

Measure 2.3 of 4: The percentage of first-time, full-time, degree-seeking sub-baccalaureate students who graduate within 150% of the program-based length of time (desired direction: increase)			
Fiscal Year	**Target**	**Percentage (or date expected)**	**Status**
2004		25.3	Measure Not In Place
2005		23.3	Measure Not In Place
2006		25.4	Measure Not In Place
2007		25.3	Measure Not In Place
2008	Set a Baseline	26.9	Target Not In Place
2009	Maintain a Baseline	37.4	Target Not In Place
2010	26	33.7	Target Surpassed
2011	26	46.0	Target Surpassed
2012	27	40.5	Target Surpassed
2013	35	(April 2014)	Pending

Source. Rochester Institute of Technology, Registrar Office records

Frequency of Data Collection. Annual

Data Quality. In April 2013, NTID reported to the Department the FY 2012 percentage of its sub-baccalaureate students (those who were initially enrolled in the 2006-2007 academic year), including interpreter education students, who graduated within 150 percent of the program-based length of time, along with a sub-set of disaggregated data on the graduation rates of sub-baccalaureate students who are deaf and interpreter education students. Prior to FY 2008, this measure did not include interpreter education students.

The following graduation rates were submitted to the Department by NTID:

	All students	**Deaf students**	**ASL-English Interpretation students**
FY 2008	26.9%	29.3%	0.0%
FY 2009	37.4%	37.8%	33.3%
FY 2010	33.5%	29.6%	73.3%
FY 2011	46.0%	41.3%	81.0%
FY 2012	40.5%	37.3%	84.6%

(Note: There were only three students included in the ASL-English Interpretation cohort reported for FY 2008. None of these students persisted to graduation, resulting in a rate of 0 percent.)

NTID will report to the Department the FY 2013 graduation rate of its sub-baccalaureate students in April 2014, with a sub-set of disaggregated data on the graduation rates of sub-baccalaureate students who are deaf and interpreter education students.

Target Context. The target for the graduation rate of NTID's sub-baccalaureate students is 27 percent. In comparison, IPEDS analysis of data on 100 community colleges indicated an average graduation rate of 23 percent for full-time, first-time degree/certificate-seeking students within 150 percent of program-based length of time. Based on the comparison with IPEDS data, the Department and NTID determined that the target of 27 percent for FY 2012 is an ambitious, yet achievable, goal for NTID. The target will be increased in subsequent years.

Explanation. This measure was added to the FY 2008 Performance Plan and is consistent with the methodology used by IPEDS and other Department programs to measure the graduation rate of postsecondary students. Program-based length of time refers to whether the stated program length for sub-baccalaureates is two or three years. The measure will allow the Department to obtain data that is comparable with what is being submitted to IPEDS by other institutions on graduation rates.

Measure 2.4 of 4: The percentage of first-time, full-time, degree-seeking baccalaureate students who graduate within 150% of the program-based length of time (desired direction: increase)

Fiscal Year	Target	Percentage (or date expected)	Status
2004		50.0	Measure Not In Place
2005		62.1	Measure Not In Place
2006		62.9	Measure Not In Place
2007		53.3	Measure Not In Place
2008	Set a Baseline	60.5	Target Not In Place
2009	Maintain a Baseline	64.9	Target Not In Place
2010	60	55.6	Target Not Met
2011	60	65.9	Target Surpassed
2012	61	62.2	Target Surpassed
2013	62	(April 2014)	Pending

Source. Rochester Institute of Technology, Registrar Office records

Data Quality. In April 2013, NTID reported to the Department the FY 2012 percentage of its baccalaureate students (those who were initially enrolled in the 2006-2007 academic year), including interpreter education students, who graduated within 150 percent of the program-based length of time or within six years, along with a sub-set of disaggregated data on the graduation rates of baccalaureate students who are deaf and interpreter education students. Prior to FY 2008, this measure did not include interpreter education students.

(Note: There were no first-time, full-time, degree-seeking baccalaureate students enrolled in NTID's ASL-English Interpretation programs in Fall 2002, Fall 2003, Fall 2004, Fall 2005, or Fall 2006.)

Performance Indicators (continued)

NTID will report to the Department the FY 2013 graduation rate of its baccalaureate students in April 2014, with a sub-set of disaggregated data on the graduation rates of baccalaureate students who are deaf and interpreter education students.

Target Context. The target for the graduation rate of NTID's baccalaureate students in 2012 is 61 percent. In comparison, IPEDS data on four-year public and private colleges indicates that all four-year institutions have an average of 55 percent graduation rate, with four-year public colleges at 51.9 percent and four-year private colleges at 63.5 percent. Based on the comparison with IPEDS data, the Department and NTID determined that the target of 61 percent for FY 2012 is an ambitious, yet achievable, goal for NTID. The target will be increased in subsequent years.

Explanation. This measure was added in the FY 2008 Performance Plan and is consistent with the methodology used by IPEDS and other Department programs to measure the graduation rate of baccalaureate postsecondary students who graduate within six years of entry. The measure will allow the Department to obtain data that is comparable with what is being submitted to IPEDS by other institutions on graduation rates.

Objective 3 of 4

Improve post-school outcomes.

The source of the data in these measures is a questionnaire given by NTID to its students who are nearing graduation and immediately after graduation. In addition, all graduates receive an initial email contact from NTID during the first quarter after graduation, as well as follow-up letters and phone calls, with the goal of acquiring data for every student who has graduated within the previous year. Questions include the graduate's address, whether the graduate has found or is looking for employment and whether the graduate is attending college or another postsecondary institution. If the graduate is employed, NTID requests information regarding the employment experience, including type of work, starting date and salary.

NTID reports the employment rate for deaf and hard-of-hearing, sub-baccalaureate and baccalaureate graduates one year after graduation, based on availability of valid data. In 2012, a total of 296 deaf and hard-of-hearing students graduated from NTID. Valid data existed on 271 graduates. Of the 271 graduates, 124 students were employed (46 percent), 124 students were in higher education or training (46 percent), and 23 students were not employed or in higher education or training (8 percent). Of the 23 students not employed or in higher education or training, nine were actively looking for work. The table below details each graduate's post-school status.

Category of Graduate	Count
Employed	124
Unemployed (Seeking Employment)	9
Not Seeking Employment	14
Education (Within RIT)	100
Education (Outside RIT)	24
Unknown	25
Total	296

Performance Indicators (continued)

Measure 3.1 of 3: The post-school rate of NTID graduates who are employed during their first year after graduation (desired direction: increase)

Graduation Year	Target	Rate	Status
2005		59	Measure Not In Place
2006		52	Measure Not In Place
2007	Set a Baseline	60	Target Not In Place
2008	Set a Baseline	51	Target Not In Place
2009	Maintain a Baseline	47	Target Not In Place
2010	57	42	Target Not Met
2011	57	45	Made Progress From Prior Year
2012	50	46	Made Progress From Prior Year

Source. National Technical Institute for the Deaf, post-graduation employment records

Frequency of Data Collection. Annual

Target Context. The average employment rate of 2005, 2006 and 2007 graduates who were employed full-time within one year after graduation is 57 percent. In FY 2010, the Department proposed that the target for this measure in FY 2010 and FY 2011 be equal to this average. The target has been revised downward by the Department to 50 percent for FY 2012 and subsequent years to be more consistent with the data submitted by NTID for FY 2009, 2010, and 2011.

Explanation. Originally employment rates were calculated by NTID as the percentage of graduates who are employed among those who choose to pursue employment, following the Bureau of Labor Statistics methodology. In previous years, NTID reported, in comparison with the target of 95 percent, the following percentages of students employed who have chosen to pursue employment:

Graduation Year	Percentage
2000	94
2001	90
2002	92
2003	89
2004	93
2005	93
2006	95
2007	95
2008	90
2009	90
2010	90
2011	91
2012	93

In FY 2006, the Department changed the methodology for calculating employment data, from the percentage of graduates who were employed among those seeking employment, to the percentage of graduates who are employed among all those who graduated from NTID.

Performance Indicators (continued)

Measure 3.2 of 3: The post-school rate of NTID graduates who are in advanced education or training during their first year after graduation (desired direction: increase)

Graduation Year	Target	Rate	Status
2005		33	Measure Not In Place
2006	Set a Baseline	42	Target Not In Place
2007	Set a Baseline	30	Target Not In Place
2008	Set a Baseline	39	Target Not In Place
2009	Maintain a Baseline	40	Target Not In Place
2010	35	44	Target Surpassed
2011	35	44	Target Surpassed
2012	45	46	Target Surpassed

Source. National Technical Institute for the Deaf, post-graduation employment records

Frequency of Data Collection. Annual

Target Context. The average participation rate of 2005, 2006 and 2007 graduates who were in advanced education or training full-time within one year after graduation is 35 percent. In FY 2010, the Department proposed that the target for this measure in FY 2010 and FY 2011 be equal to this average. The target has been revised upward by the Department to 45 percent for FY 2012 and subsequent years to be more consistent with the data submitted by NTID for FY 2009, 2010, and 2011.

Explanation. This indicator was added as part of the post-school outcomes to provide a more complete and accurate picture of outcomes for NTID graduates. The measure focuses on graduates who are in advanced education or training during their first year after graduation. Separate measures cover graduates who are in the workforce during their first year after graduation and graduates who are not engaged in either advanced education or training or in the workforce during their first year after graduation.

Measure 3.3 of 3: The post-school rate of NTID graduates who are not engaged in either advanced education or training or in the workforce during their first year after graduation (desired direction: decrease)

Fiscal Year	Target	Rate	Status
2005		8	Measure Not In Place
2006	Set a Baseline	6	Target Not In Place
2007	Set a Baseline	10	Target Not In Place
2008	Set a Baseline	10	Target Not In Place
2009	Maintain a Baseline	13	Target Not In Place
2010	8	14	Target Not Met
2011	8	11	Made Progress From Prior Year
2012	5	8	Made Progress From Prior Year

Source. National Technical Institute for the Deaf, post-graduation employment records

Performance Indicators (continued)

Frequency of Data Collection. Annual

Target Context. The average rate of the 2005, 2006 and 2007 graduates, who were neither employed nor in advanced education or training full-time within one year after graduation is 8 percent. In FY 2010, the Department proposed that the target for this measure in FY 2010 and subsequent years be equal to this average. The target was revised downward by the Department to 5 percent for FY 2012 and subsequent years to reflect changes made in the two previous indicators on the percentage of students employed and/or in advanced education or training during their first year after graduation and each alumnus being counted only once. This allows the percentage across all three categories (Measures 3.1, 3.2, and 3.3) to equal 100% of the alumni being tracked by NTID.

Explanation. This indicator has been added as part of the post-school outcomes to provide a more complete and accurate picture of outcomes for NTID graduates. The measure focuses on graduates who are not engaged in advanced education or training or in the workforce during their first year after graduation. Other measures cover graduates who are in the workforce during their first year after graduation and graduates who are in either advanced education or training during their first year after graduation.

Objective 4 of 4:

Improve the efficiency of operations at NTID as defined by the cost per successful student outcome, where the successful outcome is graduation.

Measure 4.1 of 2: Federal cost per NTID graduate (desired direction: decrease)			
Fiscal Year	Target	Cost (or date expected)	Status
2003		239,900	Measure Not In Place
2004		206,600	Measure Not In Place
2005		209,800	Measure Not In Place
2006		181,400	Measure Not In Place
2007	Set a Baseline	210,100	Target Not In Place
2008	Maintain a Baseline	188,600	Target Not In Place
2009	Maintain a Baseline	196,300	Target Not In Place
2010	196,898	187,400	Target Surpassed
2011	201,230	205,900	Target Not Met
2012	205,657	172,000	Target Surpassed
2013	205,657	146,600	Target Surpassed
2014	205,657	(December 2014)	Pending

Source. National Technical Institute for the Deaf, Budget Office

Frequency of Data Collection. Annual

Data Quality. The FY 2013 data on the federal cost per graduate, as reported by NTID, is an average of the cost per graduate from FY 2008 to FY 2013. The federal cost per graduate includes graduates who receive associate, bachelor's and master's degrees from NTID.

Performance Indicators (continued)

Target Context. In determining the appropriate target each year for the federal cost per graduate, future inflation must be taken into account, as well as the variation in the number of students who graduate each year from NTID. The Department has identified and established targets for FY 2010 and subsequent years.

Explanation. This measure is calculated by adding the federal appropriations for the current year and the five preceding years, which is then averaged. The average (from six years of federal appropriations) is divided by the number of graduates in the current year, including sub-baccalaureate, baccalaureate and graduate students. Federal student financial aid, vocational rehabilitation payments, other federal support for students, federal grants and contracts, the Federal Endowment Grant Program tuition and other private funds received by NTID are not included in this calculation.

Measure 4.2 of 2: Total educational cost per NTID graduate (desired direction: decrease)			
Fiscal Year	**Target**	**Cost (or date expected)**	**Status**
2003		273,400	Measure Not In Place
2004		239,400	Measure Not In Place
2005		246,100	Measure Not In Place
2006		214,300	Measure Not In Place
2007	Set a Baseline	250,300	Target Not In Place
2008	Maintain a Baseline	226,700	Target Not In Place
2009	Maintain a Baseline	236,400	Target Not In Place
2010	236,675	223,900	Target Surpassed
2011	241,882	246,400	Target Not Met
2012	247,203	206,100	Target Surpassed
2013	247,203	176,900	Target Surpassed
2014	247,203	(December 2014)	Pending

Source. National Technical Institute for the Deaf, Budget Office

Frequency of Data Collection. Annual

Data Quality. The FY 2013 data on the total educational cost per graduate, as reported by NTID, is an average of the cost per graduate from FY 2008 to FY 2013. The total educational cost per graduate includes graduates who receive associate, bachelor's and master's degrees from NTID.

Target Context. In determining the appropriate target each year for the total educational cost per graduate, future inflation must be taken into account, as well as the variation in the number of students who graduate each year from NTID. The Department has identified and established targets for FY 2010 and subsequent years.

Explanation. This measure is calculated by adding the federal appropriations and non-federal funds (tuition, room, board and fees collected from students) for the current year and the five preceding years, which is then averaged. The average (from six years of federal appropriations and non-federal funds) is divided by the number of graduates in the current year, including sub-baccalaureate, baccalaureate and graduate students. Costs associated with public services, auxiliary enterprises and construction are excluded from this calculation.

Strategic Planning

Strategic Decisions 2020, NTID's strategic planning initiative, was forged with students, staff and faculty involvement.

Daniel Vasilew, a Business major from Cumberland, R.I., and Joe Vengen, a Mechanical Engineering major from Oak Ridge, N.J., practice American Sign Language (ASL) with NTID support faculty Jennifer Briggs during the New Signers Program, a one-week, pre-orientation program for deaf and hard-of-hearing students who have little or no prior ASL skills.

Strategic Decisions 2020

FY 2013 marked the third year of NTID's
implementation of *Strategic Decisions 2020*, the
strategic plan for the next seven years.

Strategic Decisions 2020, or SD 2020, is rooted in NTID's founding mission statement. This statement establishes our institutional responsibility for working with students to develop their academic, career and life-long learning skills as future contributors in a rapidly changing world. It also recognizes our role as a special resource for preparing individuals for conducting applied research in areas critical to the advancement of individuals who are deaf or hard of hearing, and for disseminating our cumulative expertise.

SD 2020 establishes key initiatives responding to future challenges and shaping future opportunities. The initiatives are organized around six central themes: Students; Program and Curriculum Development; Communication; Access; Faculty/Staff; and Innovation, Scholarship and Research. Further details and updates are available at www.ntid.rit.edu/president/sd2020.

A current and ongoing example of *SD 2020* initiatives is the establishment of NTID as a National Resource Center of Excellence in the education of deaf and hard-of-hearing students in senior high school and at the postsecondary level. A component of this effort includes DeafTEC, a program led by three NTID faculty members (Donna Lange, Gary Long and Myra Pelz) that provides training to educators and employers on how to teach and employ deaf and hard-of-hearing people in STEM fields. DeafTEC has been funded by a $4.5 million grant from the National Science Foundation.

An envisioned example of *SD 2020* initiatives is the improvement of services to underprepared students by working with regional partners to implement intensive summer academic programs in selected high-growth, ethnically diverse areas of the country. Through this initiative, NTID identifies students demonstrating promise for success in career-focused associate degree-level programs and beyond, and provides consultation regarding postsecondary educational alternatives.

SD 2020 implementation began in earnest during the 2010-2011 academic year with the establishment of various committees comprised of administrators, faculty and staff from throughout NTID. These committees were charged with recommending specific steps that NTID should take in order to achieve the overarching goals set forth in *SD 2020*.

The following are examples of *SD 2020* goals that NTID actively is addressing at this time, even as we continue to address the challenges posed by increasingly limited financial resources:

Providing Space for Innovation, Scholarship and Research

Three emerging forces within the larger university are shaping the landscape of scholarship, research and innovation at NTID: 1) the strategic objective of RIT to become a premier innovation university; 2) the expectation that all RIT tenured and tenure-track faculty will establish ongoing programs of scholarship and research; and 3) the expectation that faculty will collaborate with undergraduate and graduate students as active participants in these programs of scholarship and research. It therefore has become imperative for NTID to create and provide space for activities that would further these objectives and expectations.

On October 13, 2013, NTID celebrated the grand opening of Sebastian and Lenore Rosica Hall, a 23,000-square-foot facility devoted to fostering student-faculty collaboration on innovation, scholarship and research. This facility, which was completed on schedule and under budget, was financed entirely by private contributions, the largest being a $1.75 million donation from the William G. McGowan Charitable Fund. Rosica Hall provides new flexible research and innovation incubator space dedicated to housing NTID's Strategic Research Centers as well as selected discipline-based research and innovation projects.

Some space has intentionally not been filled to make room for future research projects. Research centers and labs active in the building include:

- DeafTEC, formed in 2011 with a National Science Foundation grant to create a National Center of Excellence as a resource for schools around the country that educate students in science, technology, engineering and math.

- The Research Center for Teaching and Learning, where diverse teams of faculty and students conduct research that improves deaf education, expose students to research practice and prepare future generations of RIT/NTID educational researchers and scholars.

- The REACH (Research on Employment and Adapting to Change) Center for Studies on Career Success, which studies employment and career success for deaf and hard-of-hearing people.

- The Deaf Studies Laboratory, which studies the cognitive, language and psychosocial aspects of the deaf experience and provides structured mentoring experiences for future deaf scientists.

- The NTID Collaboratory on Economic, Demographic and Policy Studies seeks to describe the demographic and economic conditions of the deaf and hard-of-hearing population of the United States, with emphasis on the impact education has on improving these conditions.

The second floor of the building houses the Hearst Foundations Imaginarium, where faculty and students gather to develop creative and innovative ideas.

Enhancing Faculty/Staff Professional Development

Because nearly 40 percent of our current workforce is eligible for retirement, we must take immediate steps to assure a smooth transition to the well-trained and productive leaders of the NTID of the future. A committee was organized to review and make recommendations to enhance the professional development options available to both new and veteran faculty and staff.

The committee addressed five critical areas of professional development: (1) communication skills; (2) teaching effectiveness; (3) scholarship and research; (4) discipline-based content expertise; and (5) leadership. The committee developed recommendations within these five areas, including but not limited to: new faculty and staff orientation programs; discipline-based mentoring by senior faculty members; supporting tenure-track faculty members' completion of terminal degrees in light of university-wide guidelines and standards; and enhancing communication effectiveness for both new and veteran faculty.

The committee recommended the establishment of a centralized office for offering faculty and staff professional development focused on the "NTID-related" aspects of the five central areas described above, while advocating greater coordination with university-wide professional development programs in order to enhance integration of NTID faculty and staff within the greater university community and achieve efficiencies and cost savings. To implement these critical goals despite financially austere circumstances, a former employee of the now-closed Department of Educational Design Resources was transferred to a new professional development coordinator position, reporting to Dr. Kathryn Schmitz, associate dean for Academic Administration. This effort will be augmented as resources become available.

In addition, to better serve the communication development needs of our faculty and staff, NTID has moved the Faculty and Staff Sign Language program (FSSL) out of the American Sign Language and Interpreter Education (ASLIE) department into a new free-standing unit, the Office of ASL Training and Evaluation (ASLTE), effective August 2013. This reorganization will free ASLIE faculty to focus on providing credit-bearing ASL courses as well as the sign language interpreting degree program. Professor Geoff Poor coordinates ASLTE, which is responsible both for administering the Sign Language Proficiency Interview and for enhancing faculty and staff sign language proficiency. To staff this office,

NTID created a 12-month ASL instructor professional staff position to support faculty and staff sign language development as well as other sign language instruction as needed.

Achieving Balance in Tenure/Non-Tenure Positions

In light of increasing expectations regarding tenured and tenure-track faculty research and scholarship, NTID has committed to following RIT's lead in moving toward a balance of 50 percent tenured/tenure-track positions and 50 percent non-tenured (lecturer) positions by 2020. At the time of publication of *SD 2020,* NTID's overall balance was roughly 75 percent tenured/tenure-track and 25 percent non-tenured. That balance now is approximately 63 percent tenured/tenure track and 37 percent non-tenured, which shows significant progress in just three years. Several academic departments have already achieved, or are close to achieving, a 50-50 balance. This progress has been achieved chiefly through replacing departing and retiring tenured faculty positions with lecturers; in certain cases, tenure-track faculty have been recruited and hired to fulfill specific departmental and institutional objectives.

Ensuring Coordination Among Technical Education, General Education and Co-Curricular Programs – International Component

Part of NTID's primary mission is to prepare deaf and hard-of-hearing students "to live and work in the mainstream of a rapidly changing global community." In order to achieve this objective, NTID must mirror the larger university's commitment to an international education, including study abroad.

Opportunities abound for RIT students to broaden their learning perspectives in educational programs that span the globe. From 2010-2012, 27 deaf or hard-of-hearing RIT/NTID students engaged in study abroad in 19 different learning venues around the world – some under the auspices of an RIT-sponsored program, and others independently. With these increased opportunities, however, come increased costs in the form of access services and questions about which entity will pay for them. NTID realizes that in order to best afford its students commensurate access to international education, it needs to create economies of scale by developing its own faculty-led study abroad programs for deaf and hard-of-hearing students. Three such trips have been or will be taken during the 2013-14 academic year: to Italy, Chile and Costa Rica.

Increasing Support from NTID Alumni

Now numbering more than 7,000, NTID alumni are a critical, and eager, constituency in furthering our strategic interests, from identifying and recruiting new students, to securing cooperative work experiences and job placements, to advancing our national visibility and supporting our new initiatives. Ultimately, our institutional identity is defined not only by the students we serve, but by the lives and careers that our former students create for themselves.

The position of NTID director of Alumni Relations has been filled on an interim basis since April 2012. With the 45th anniversary celebration behind us, NTID is conducting a national search for a permanent director of Alumni and Constituent Relations, whose duties will involve a significant fundraising component in recognition of the fact that many of our alumni now have progressed to stages in life where they are able to give back significantly to their alma mater. This position will report to NTID's Senior Director of Development and Alumni Relations.

NTID held its 45th Anniversary Reunion in October 2013 in conjunction with RIT's annual Brick City Homecoming Weekend and the grand opening of Sebastian and Lenore Rosica Hall. That weekend, RIT/NTID alumna Angela Donnell Officer, immediate past chairperson of the NTID Alumni Association (NTIDAA) Board of Directors, became the first deaf individual to receive the prestigious RIT Volunteer of the Year Award in recognition of NTIDAA's achievements in fundraising for Rosica Hall. The celebration was a rousing success and laid the groundwork for continued and increased engagement with our growing alumni base.

Admissions and Enrollment

NTID had 440 total new registrations for FY 2014 (fall 2013), the second highest number in the last five years.

RIT's Tiger Walk welcomes new students as they walk the path from the residence halls to the Convocation for New Students and Families ceremony, the official opening of the academic year. NTID Associate Professor Todd Pagano was the keynote speaker at the fall 2013 convocation ceremony.

Admissions and Enrollment Highlights

Because deafness is a low-incidence disability, with deaf and hard-of-hearing students widely dispersed throughout the nation, recruiting qualified students to NTID always is a challenge.

Admissions counselors visited 355 schools during the FY 2013 admissions cycle. Visits this year covered 351 high schools, including 116 in the Midwest, 65 in the Southeast, 56 in the Northeast, 44 in New York State, and 70 in the West Coast. Counselors visited four colleges: three in the West Coast region and one in the Southeast region. Of the 351 high school visits, 306 were mainstream schools and 45 were schools for the deaf.

The number of new students entering NTID in fall 2013 was 440. The total included 359 deaf and hard-of-hearing freshmen and transfers, 32 first-year deaf and hard-of-hearing graduate students (10 in the Master of Science program in Secondary Education of Students who are Deaf or Hard of Hearing [MSSE] and 22 in other RIT master's programs) and 49 first-year hearing students (43 in the ASL-English Interpretation program, and six in the MSSE program).

Overall, NTID's applicants decreased by 15 percent from last year's 1,288 to 1,095 applicants for fall 2013 enrollment. Total enrollment was 1,432 compared to 1,529 for last year. The breakdown of the 1,432 students is as follows:

	Deaf and Hard-of-Hearing	Hearing	Total
Undergraduate Programs			
Career Exploration Studies	111	0	111
Career-Focused Associate Programs	368	0	368
Associate+Bachelor's Programs	190	0	190
Baccalaureate (ASL-English Interpretation)	0	147	147
Baccalaureate/Master's Programs in Other RIT Colleges	526	0	526
Subtotal NTID Undergraduate Programs	**1,195**	**147**	**1,342**
Graduate Programs at RIT	42	0	42
MSSE Program	18	30	48
Total Enrolled Students	**1,255**	**177**	**1,432**

NTID's student population remains strong in both ethnic and geographic diversity. Minority students represent 35 percent of this year's fall 2013 entering class, compared to 33 percent of the total student body. Minority students have represented approximately 32 to 40 percent of the entering student population over the past five years. Additionally, minority students have represented approximately 28 to 34 percent of the entire student population over the past five years (for more information see the Diversity and Pluralism section). Students come from all over the country, with 12 percent from the West, 19 percent from the South, 20 percent from the Midwest, and 49 percent from the Northeast.

In addition, NTID enrolled 16 new international students. The total number of international students is 44, or 3.1 percent of the entire student population. International students have represented approximately 3 or 4 percent of the entire student population in the past five years.

In summary, NTID registered 440 new students and is serving a total of 1,432 students.

NTID's fall 2013 enrollment of 1,432 continues to exceed the high enrollments from 1983 to 1988 resulting from the rubella epidemic 20 years earlier in which pregnant mothers who contracted rubella gave birth to increased numbers of deaf children.

Fall Enrollments of NTID Students
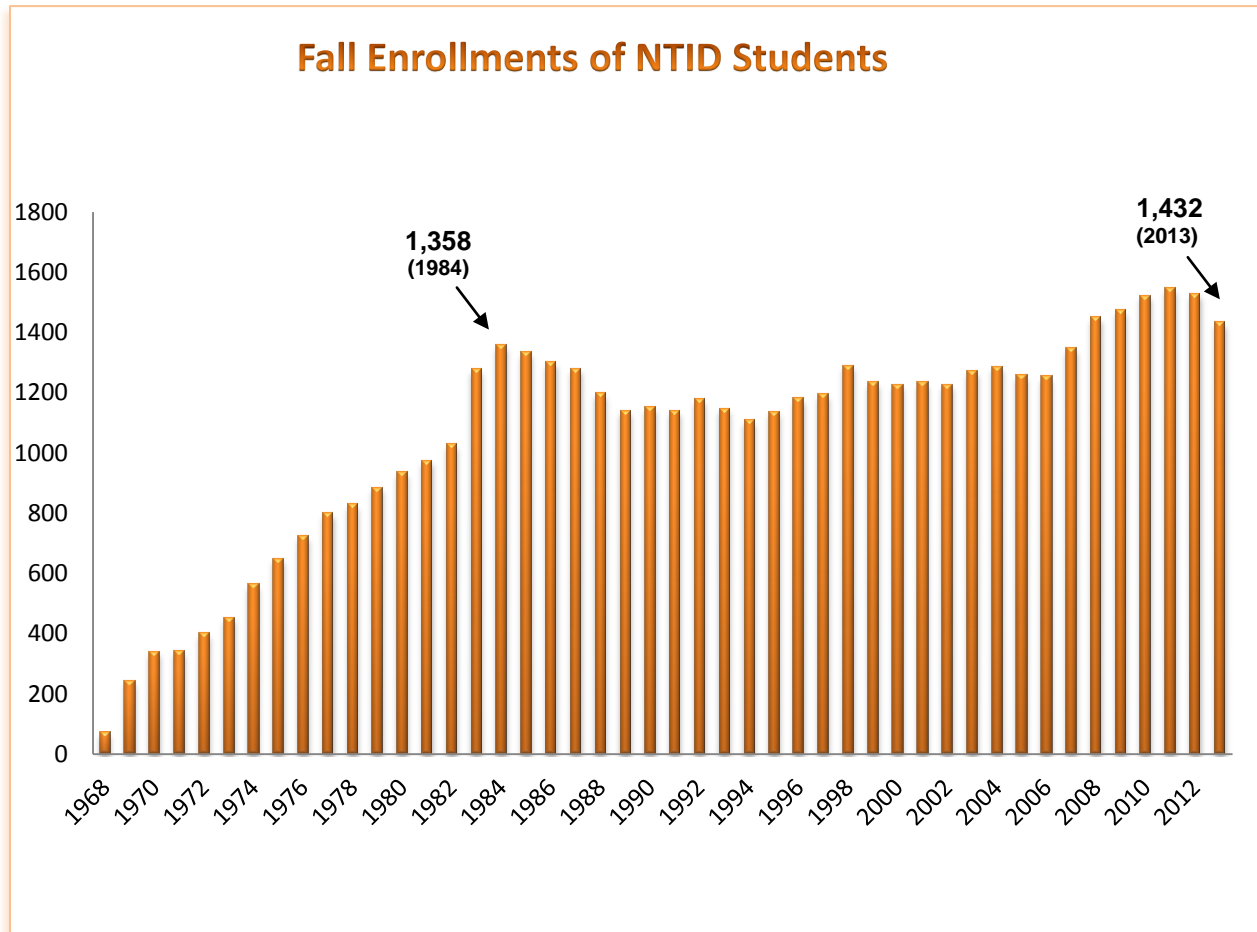
Comparative Admissions Data

Applications, excluding the ASL-English Interpretation or MSSE programs, decreased significantly from last year.* The acceptance rate was 61 percent of applications. Registrations were 381, achieving a yield rate of 75 percent.

	Number of New Students				
	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Applicants	900	906	902	989	833
% Increase or Decrease from Previous Year	+0.6%	+0.7%	-0.4%	+9.6%	-15.8%
Accepted Applicants	482	477	439	504	507
% Increase or Decrease from Previous Year	-9.7%	-1.0%	-8.0%	+13.0%	+0.1%
Acceptance Rate (Percent of Total Applicants)	53.6%	52.6%	48.7%	50.9%	60.9%
Registrations	341	351	345	381	381
Yield Rate (Registrations as a Percent of Accepted Applicants)	70.7%	73.6%	78.6%	76.8%	75.1%

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* Overall, NTID's total applications decreased by 15 percent from last year's 1,288 to 1,095 applicants for fall 2013 enrollment, as reported on p. 34. In the figures on this page, "applicants" and the other categories include deaf and hard-of-hearing international students, but do not include admissions activity in the ASL-English Interpretation programs or the Master of Science program in Secondary Education. Specific data on these students is reported in the section on Academic Programs.

Summary Vestibule Program

Summary Vestibule Program

The Summer Vestibule Program (SVP) is an experience that allows new students to engage in career exploration and decision-making, adjust to college life and assess their academic competencies. Students get hands-on experience and information about various academic programs and majors.

SVP includes a Student/Parent Orientation Weekend designed to give participants an overview of the program and familiarize them with NTID and its place on the RIT campus. Informational seminars, awareness workshops and in-depth orientation programs are offered to facilitate student-parent separation and student transition to the college environment.

There were 268 SVP registrants for summer 2013.

	Number of Students*				
	FY 2009	**FY 2010**	**FY 2011**	**FY 2012**	**FY 2013**
SVP Students Accepted	366	352	323	349	346
SVP Students Registered at Start of Program	265	269	269	269	268
SVP Students Completing Program	259	268	268	268	266
SVP Students Registered in Academic Programs for Fall Term	253	263	265	267	266

More than 1,800 RIT students competed in Mud Tug 2013, an annual tug-of-war fundraiser benefiting an organization that provides housing and support services to children and families in Rochester.

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* Figures reported include deaf and hard-of-hearing international students, but do not include admissions activity in the ASL-English Interpretation programs or the Master of Science in Secondary Education program. Specific data on these students is reported in the section on Academic Programs.

Admissions and Enrollment

NTID Student Enrollment by Term* (Deaf and Hard-of-Hearing Students Only)

The enrollment reported reflects only deaf and hard-of-hearing students in undergraduate programs on the RIT campus or in graduate programs at other RIT colleges. Not included are hearing students enrolled in the ASL-English Interpretation program (147), or deaf, hard-of-hearing or hearing students enrolled in the Master of Science program in Secondary Education (48). In addition, large numbers of hearing, deaf and hard-of-hearing students access a variety of part-time and non-credit-bearing coursework at NTID throughout the year.

PERIOD COVERED		FALL TERM		WINTER TERM			SPRING TERM			SUMMER TERM		SUMMER VESTIBULE PROGRAM	
		A	B	A	B	C	A	B	C	A	B	A	B
FY 94:	Oct. 93-Sep. 94	1,092	-3.36%	1,021	-3.50%	-6.50%	978	0.00%	-4.21%	299	19.12%	196	-16.60%
FY 95:	Oct. 94-Sep. 95	1,045	-4.30%	977	-4.31%	-6.51%	900	-7.98%	-7.88%	240	-19.73%	272	38.78%
FY 96:	Oct. 95-Sep. 96	1,056	1.05%	968	-0.92%	-8.33%	933	3.67%	-3.62%	194	-19.17%	260	-4.41%
FY 97:	Oct. 96-Sep. 97	1,085	2.75%	1,021	5.48%	-5.90%	965	3.43%	-5.48%	187	-3.61%	253	-2.69%
FY 98:	Oct. 97-Sep. 98	1,085	0.00%	1,010	-1.08%	-6.91%	960	-0.52%	-4.95%	189	1.07%	241	-4.74%
FY 99:	Oct. 98-Sep. 99	1,155	6.45%	1,030	1.98%	-10.82%	976	1.67%	-5.24%	217	14.81%	255	5.81%
FY 00:	Oct. 99-Sep. 00	1,107	-4.16%	1,040	0.97%	-6.05%	1009	3.38%	-2.98%	221	1.84%	256	0.39%
FY 01:	Oct. 00-Sep. 01	1,113	0.54%	1,045	0.48%	-6.11%	1,017	0.79%	-2.68%	236	6.79%	242	-5.47%
FY 02:	Oct. 01-Sep. 02	1,151	3.41%	1,056	1.05%	-8.25%	1,007	-0.98%	-4.64%	224	-5.08%	234	-3.31%
FY 03:	Oct. 02-Sep. 03	1,122	-2.52%	1,027	-2.75%	-8.47%	994	-1.29%	-3.21%	228	1.79%	195	-16.67%
FY 04:	Oct. 03-Sep. 04	1,109	-1.16%	1,047	1.95%	-5.59%	1,005	1.11%	-4.01%	249	9.21%	168	-13.85%
FY 05:	Oct. 04-Sep. 05	1,097	-1.08%	1,029	-1.72%	-6.20%	962	-4.28%	-6.51%	222	-10.84%	190	13.10%
FY 06:	Oct. 05-Sep. 06	1,066	-2.83%	988	-3.98%	-7.32%	926	-3.74%	-6.28%	263	18.47%	219	15.26%
FY 07:	Oct. 06-Sep. 07	1,064	-0.19%	998	1.01%	-6.20%	963	4.00%	-3.51%	339	28.90%	254	15.98%
FY 08:	Oct. 07-Sep. 08	1,154	8.46%	1,099	10.12%	-4.77%	1,040	8.00%	-5.37%	396	16.81%	295	16.14%
FY 09:	Oct. 08-Sep. 09	1,260	9.19%	1,216	10.65%	-3.49%	1,155	11.06%	-5.02%	428	8.08%	265	-10.17%
FY 10:	Oct. 09-Sep. 10	1,275	1.20%	1,166	-4.11%	-8.55%	1,170	1.90%	0.34%	411	-3.97%	269	1.51%
FY 11:	Oct. 10-Sep. 11	1,303	2.20%	1,213	4.03%	-6.91%	1,211	3.50%	-0.16%	442	7.54%	269	0.00%
FY 12:	Oct. 11-Sep. 12	1,323	1.53%	1,211	-0.16%	-8.47%	1,103	-8.92%	-8.92%	314	-28.96%	269	0.00%
FY 13:	Oct. 12-Sep. 13	1,306	-1.28%	1,168	-3.55%	-10.57%	1,082	-1.90%	-7.36%	323	+2.87%	268	-0.37%
FY 14:	Oct. 13-Sep. 14	1,237	-5.28%										

NOTES: Column A = Number of Student Enrollments for the period covered
Column B = Percent Change of Enrollment from the same term in previous year
Column C = Percent Change of Enrollment from the previous term

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* Prior to FY 2014, RIT followed a quarter calendar. Beginning in FY 2014, RIT follows a semester calendar.

Percent of Registered Students with Full-Time Status

On average, 94 percent of NTID-supported students are registered full time. At RIT, full-time status is defined as taking at least 12 credit hours in an academic quarter (prior to FY 2014) or semester (FY 2014).

| | FY 2010 | FY 2011 | FY 2012 | FY 2013 | FY 2014 | | |
| | | | | | | Number | |
					Percent	Full-Time	Total
Career Exploration	99%	100%	98%	98%	98%	109	111
Career-Focused and Associate+Bachelor's Degrees	97%	97%	98%	97%	95%	503	528
Pre-Baccalaureate	100%	100%	100%	100%	100%	30	30
Baccalaureate and Graduate	93%	93%	93%	93%	90%	513	568
ASL-English Interpretation	93%	97%	94%	97%	97%	142	147
Master of Science in Secondary Education (MSSE)*	75%	80%	84%	82%	98%	47	48
Overall	94%**	95%***	95%****	95%	94%	1,344	1,432

NTID students who are proud members of the RIT Women's Crew: ASL-English Interpretation students Christina DiSalvo, of Derry, N.H., and Brittany Dzugas-Smith, of West Babylon, N.Y.; Packaging Science student Molly Mangarian, of Folsom, Calif.; and ASL-English Interpretation student, Anna-Marie Lee, of Newcastle, Maine.

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*   Included for FY 2007 to date are non-matriculated students (between four and 15 per year) taking courses offered by the Master of Science program in Secondary Education, but who are part of a grant-supported joint program between NTID and Nazareth College of Rochester to train speech pathologists to work with deaf and hard-of-hearing people.
**   Information on full-time status is not available for 25 students, who therefore are not included.
***   Information on full-time status is not available for 22 students, who therefore are not included.
**** Information on full-time status is not available for 21 students, who therefore are not included.

International Student Recruitment

This year, applications from international students numbered 55 and, of those, 18 were accepted and 14 registered. Canadian students always have represented the largest contingent of international students, but many of them continue to experience a lack of funding resources, which discouraged a number of prospective students from applying or prevented many of those accepted from being able to attend NTID. Students from developing countries also encounter financial difficulties, and NTID has limited scholarship dollars to assist them. However, per the Education of the Deaf Act, international students pay differing tuition rates, depending on whether they are from a developing or developed country. Until the situation in Canada changes, and until NTID obtains additional private scholarship funds, enrollment of international students will continue to be a challenge.

	Number of Students*				
	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Applicant Continent of Origin					
Africa	20	12	7	24	5
Asia	12	10	6	16	15
Europe	8	8	5	4	1
North America	29	31	40	45	29
South America	0	2	1	2	0
Unknown	0	0	0	0	5
Total Applicants	**69**	**63**	**59**	**91**	**55**
Accepted Applicants	**13**	**14**	**7**	**20**	**18**
Acceptance Rate (Percent of Total Applicants)	19%	22%	12%	22%	33%
New Registrations	**12**	**9**	**7**	**15**	**14**
Yield Rate (New Registrations as a Percent of Accepted Applicants)	92%	64%	100%	75%	78%
Returning International Students	**30**	**31**	**34**	**33**	**25**
Total Enrollment (Returning International Students plus New Registrations)	**42**	**40**	**41**	**48**	**39**

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* Figures reported do not include admissions activity in the ASL-English Interpretation programs or the Master of Science program in Secondary Education. Specific data on these students is reported in the section on Academic Programs.

Demographic Characteristics of All Entering Students

The demographic profile of entering students demonstrates an increase in the percentage of transfer students and graduate students.*

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Characteristics of Entering Students					
Gender					
Male	60%	54%	64%	55%	60%
Female	40%	46%	36%	45%	40%
Mean Age at Entry	21	21	21	20	21
Parents' Hearing Status					
Both Hearing	85%	86%	83%	90%	89%
Both Deaf	9%	8%	10%	5%	5%
One Hearing/One Deaf	6%	6%	7%	5%	6%
Origin of Entering Students					
United States by Region: 100% of U.S. students distributed across four regions					
West	9%	14%	13%	15%	11%
Midwest	26%	25%	28%	23%	20%
South	22%	22%	20%	21%	22%
Northeast	43%	39%	39%	41%	47%
Distribution of United States and International Students					
United States	96%	96%	98%	96%	96%
International	4%	3%	2%	4%	4%
School Background of Entering Students					
First Time in College	72%	72%	81%	80%	72%
Transfer from Other Colleges	16%	20%	12%	13%	17%
Previously Enrolled at RIT	8%	5%	5%	4%	5%
Graduate Students	4%	3%	2%	3%	6%

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* Figures reported include deaf and hard-of-hearing international students, but do not include admissions activity in the ASL-English Interpretation programs or the Master of Science in Secondary Education program. Specific data on these students is reported in the section on Academic Programs.

Admissions and Enrollment

Demographic Characteristics of Enrolled International Students Compared to Enrolled U.S. Students

	FY 2014*		
	International	**U.S.**	**Overall**
Demographics			
Gender			
Male	62%	57%	57%
Female	38%	43%	43%
Entry Age, All Students	25	22	22
Entry Scores			
Hearing Level (Pure Tone Average)	102.2 dB	89.8 dB	90.2 dB
ACT Composite Score	18.5	20.5	20.4
Program Area			
Career Exploration	5%	9%	9%
Career-Focused Associate Degrees	23%	30%	30%
Associate+Bachelor's Degrees	8%	16%	15%
Other Colleges of RIT Baccalaureate/Master's	64%	45%	46%
FY 2014 Status of Students Enrolled FY 2013			
Still Registered	58%	63%	63%
Withdrawn	27%	21%	21%
Graduated	15%	16%	16%

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* Figures reported do not include students in the ASL-English Interpretation programs or the Master of Science in Secondary Education program. Specific data on these students is reported in the section on Academic Programs.

ACT Information on Entering Class (Deaf and Hard-of-Hearing Students Only)

Beginning in 1969, the Stanford Achievement Test (now known as the SAT) was used to evaluate educational achievement for admission to NTID. In 1996, the decision was made to replace the SAT with the American College Test (ACT).

Mean scores for the ACT are presented below. Results indicate that skill levels of entering students were similar to students entering in fall 2012.

American College Test (ACT)*	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
ACT English	15.3	14.5	15.1	15.8	14.9
ACT Reading	18.1	17.0	18.1	18.5	17.7
ACT Mathematics	18.3	17.5	18.3	18.6	18.3
ACT Science Reasoning	19.4	18.7	19.7	19.7	19.3
ACT Composite**	17.9	17.2	18.0	18.6	19.5

Ernie Roszkowski, a lecturer in the Arts & Imaging Studies Department, helps a student use digital design to produce a pop-up flag book as part of the Explore Your Future (EYF) program. EYF is an outreach program that introduces high school students to their career choices and NTID.

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* Figures reported include deaf and hard-of-hearing international students, but do not include admissions activity in the ASL-English Interpretation programs or the Master of Science in Secondary Education program. Specific data on these students is reported in the section on Academic Programs.

** The highest score between ACT composite and total SAT was considered.

Academic Skills of Entering Students

The academic preparedness of most entering NTID-supported students is substantially below that of their hearing peers. NTID students directly admitted to one of RIT's other colleges have a mean ACT composite score of 27.5, and represent 23.6 percent of NTID's entering class of 2013. The average ACT composite score for students entering associate+bachelor's programs is 21.4, and represents 22.7 percent of NTID's entering class. The average ACT composite score for students entering career-focused associate programs is 15.8, and represents 31.0 percent of NTID's entering class. Lastly, average ACT composite score for students entering career-exploration programs is 14.9, and represents 22.7 percent of NTID's entering class. The average ACT composite score of 19.5 for all entering students is in the range achieved by students entering four-year schools with open admissions standards and many community colleges. By any measure, the majority of these students would not be admissible to the other colleges of RIT, yet many deaf and hard-of-hearing students graduating from baccalaureate/master's programs throughout RIT came through NTID first, which means they graduated in spite of the fact that their entering ACT scores were in the 15-19 range.

Degree Level	Percentage of Deaf and Hard-of-Hearing Students by Degree Level	ACT Composite Mean
Bachelor's in Other RIT Colleges	23.6%	27.5
NTID		
Associate+Bachelor's Programs	22.7%	21.4
Career-Focused Associate Programs	31.0%	15.8
Career Exploration	22.7%	14.9
Total*	**100%**	
Average Score of All Entering Students*		**19.5**

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* Includes only undergraduate students. Does not include students enrolled in the ASL-English Interpretation programs.

Hearing Assessment and Cochlear Implant Information

Hearing is measured in units of intensity called decibels (dB) at a variety of frequencies [Hz (cycles per second)]. The hearing level reported here is calculated by taking the arithmetic mean of an individual's responses in dB to pure tones presented at 500 Hz, 1000 Hz and 2000 Hz. Normal hearing is in the range of –10 dB to 20 dB. Moderate hearing loss is defined as having a pure tone average of 40-55 dB, with moderately severe at 56-70 dB, severe at 71-90 dB and profound at 90 dB or more. NTID continues to serve a prelingually, profoundly deaf population whose measured decibel hearing loss over the past five years averages 92.9 dB.

The number of students with cochlear implants has increased to 360 in fall 2013.

The Communication Studies and Services Department currently has four audiologists trained to provide cochlear implant mapping, consultation and follow-up services. Mapping services are provided to users of cochlear implants from all three current manufacturers. Students register for mapping and auditory training services in the cochlear implant center. This five-room facility is equipped with state-of-the-art computer-based technology, training software and telecommunications devices. A separate area is available where faculty and staff can meet with students to troubleshoot cochlear implant issues and replace some parts of the external equipment.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Total Number of Deaf Students*	1,307	1,332	1,354	1,331	1,255
Students with Cochlear Implants	273	305	331	356	360
Percent with Cochlear Implants	20.8%	22.9%	24.4%	26.7%	28.7%
Average Hearing Level	93.2 dB	93.0 dB	93.5 dB	94.9 dB	90.2 dB

Students with Cochlear Implants
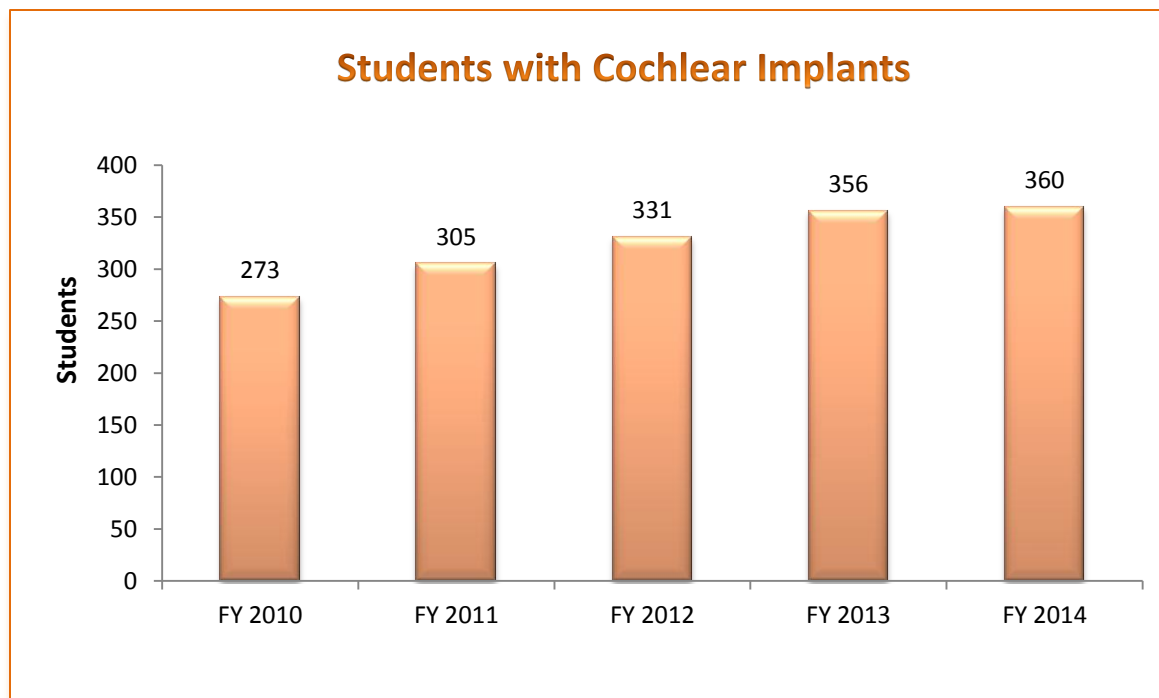
* This figure includes all deaf and hard-of-hearing students, undergraduate and graduate.

Admissions and Enrollment

Students with Secondary Disabilities

NTID is working with significantly increased numbers of students with disabilities in addition to deafness. The table shows the number and percent of NTID-supported undergraduate students eligible to receive services from the RIT Disability Services Office, which serves students "with physical or mental impairments that limit one or more major life activities." NTID works directly with the RIT Disability Services Office to accommodate these students through services such as notetaking and extended time to complete assignments. Their services ensure equal access to education based upon legal foundations established by federal law—the Rehabilitation Act of 1973, including Section 504, and the Americans with Disabilities Act of 1990. NTID also has a committee of faculty and staff that focuses on the accommodation of deaf and hard-of-hearing students specifically with visual disabilities, a student population that continues to increase.

Number and Percent of Students Receiving Secondary Disability Services			
Fiscal Year	**Total Deaf Students***	**Students with Secondary Disabilities**	**Percent**
2003	1,093	97	9%
2004	1,064	95	9%
2005	1,055	110	10%
2006	1,013	129	13%
2007	1,019	115	11%
2008	1,103	126	11%
2009	1,212	133**	11%**
2010	1,237	112	9%
2011	1,263	143	11%
2012	1,281	169	13%
2013	1,269	158	12%

Students with Secondary Disabilities

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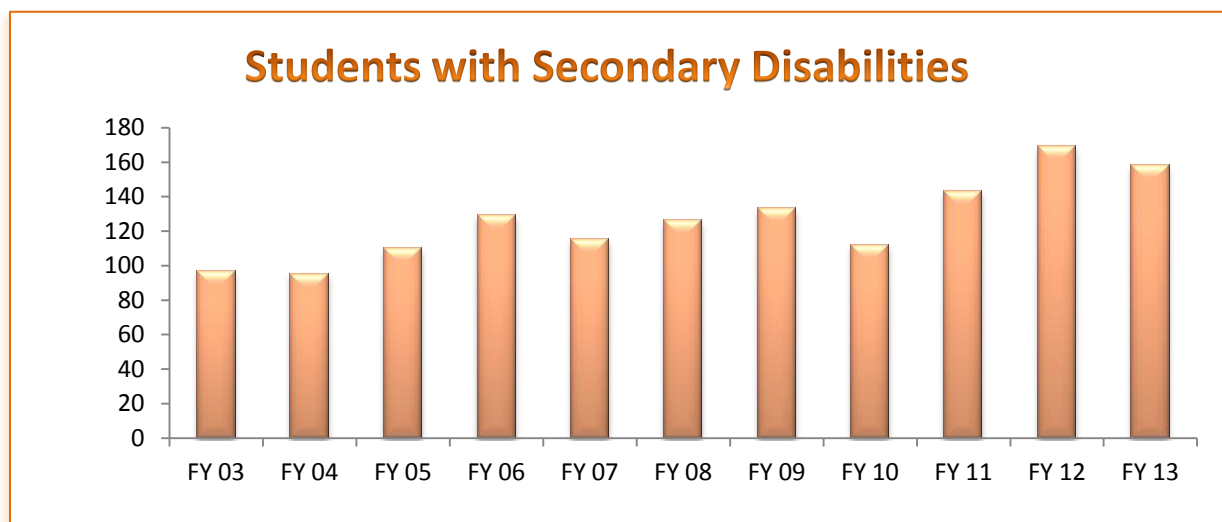
* This figure includes all undergraduate deaf and hard-of-hearing students.
** Secondary disability numbers for FY 2009 are estimates; these data are not available.

Origin of Students and Graduates

NTID students enrolled as of fall 2013 come from 49 states. A total of 16 countries are represented among current international students.

Since NTID began accepting students, NTID has had students from more than 50 countries and all 50 states.

Home State or U.S. Territory (Domestic Students)	Number in Student Body FY 2014	Graduates to Date as of Fall 2013	Cumulative Students to Date*
Alabama	4	34	63
Alaska	5	11	25
Arizona	12	32	99
Arkansas	3	30	69
California	99	371	829
Colorado	5	62	119
Connecticut	34	196	385
Delaware	10	31	74
District of Columbia	3	16	41
Florida	35	186	449
Georgia	18	71	175
Guam	0	0	2
Hawaii	4	26	42
Idaho	0	4	16
Illinois	86	434	932
Indiana	22	105	255
Iowa	2	59	111
Kansas	12	45	106
Kentucky	9	44	127
Louisiana	6	53	106
Maine	11	48	115
Maryland	52	169	439
Massachusetts	69	333	696
Michigan	28	284	578
Minnesota	27	97	208
Mississippi	3	5	25
Missouri	36	159	329
Montana	1	7	17
Nebraska	9	36	76
Nevada	2	7	20
New Hampshire	10	53	100
New Jersey	75	365	713
New Mexico	2	24	72
New York	406	2,055	4,147
North Carolina	18	64	146
North Dakota	1	19	36

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* Includes current and withdrawn students and graduates.

Admissions and Enrollment

Home State or U.S. Territory (Domestic Students)	Number in Student Body FY 2014	Graduates to Date as of Fall 2013	Cumulative Students to Date*
Ohio	39	395	727
Oklahoma	4	17	45
Oregon	7	53	104
Pennsylvania	70	564	1,128
Puerto Rico	0	9	19
Rhode Island	3	40	80
South Carolina	6	22	52
South Dakota	1	11	22
Tennessee	6	49	98
Texas	47	181	463
Utah	1	12	26
Vermont	6	40	88
Virgin Islands	0	1	4
Virginia	36	139	311
Washington	20	73	171
West Virginia	1	31	65
Wisconsin	17	110	238
Wyoming	1	4	7
Other**	0	48	171
Subtotal	**1,384**	**7,334**	**15,561**

Where Are Our Students From?

WASHINGTON 20 · MONTANA 1 · NORTH DAKOTA 1 · MINNESOTA 27 · NEW HAMPSHIRE, 10 · VERMONT, 6 · MAINE 11 · OREGON 7 · IDAHO 0 · WYOMING 1 · SOUTH DAKOTA 1 · WISCONSIN 17 · MICHIGAN 28 · R·I·T · NEW YORK 406 · MASS., 69 · NEVADA 2 · UTAH 1 · COLORADO 5 · NEBRASKA 9 · IOWA 2 · OHIO 39 · PENNSYLVANIA 70 · R.I., 3 · CONN., 34 · NEW JERSEY, 75 · CALIFORNIA 99 · KANSAS 12 · MISSOURI 36 · ILLINOIS 86 · INDIANA 22 · W. VIRGINIA 1 · VIRGINIA 36 · KENTUCKY 9 · DELAWARE, 10 · MARYLAND, 52 · DISTRICT OF COLUMBIA, 3 · ARIZONA 12 · NEW MEXICO 2 · OKLAHOMA 4 · ARKANSAS 3 · TENNESSEE, 6 · N. CAROLINA 18 · S. CAROLINA 6 · TEXAS 47 · MISS. 3 · ALABAMA 4 · GEORGIA 18 · LOUISIANA 6 · FLORIDA 35 · ALASKA 5 · HAWAII 4

The numbers on the map represent the number of deaf and hard-of-hearing students currently enrolled at RIT/NTID from each state. We also have students from Bermuda, Canada, China, Fiji, Ghana, Hungary, India, Jamaica, Japan, Malaysia, Nepal, Norway, Pakistan, Philippines, Saudi Arabia, Tanzania and Vietnam.

* Includes current and withdrawn students and graduates.
** U.S. citizens living in other countries.

Origin of Students and Graduates (continued)

Country (International Students)	Number in Student Body FY 2014	Graduates to Date as of Fall 2013	Cumulative Students to Date*
Australia	0	1	1
Bahamas	0	1	1
Bangladesh	0	0	1
Belgium	0	1	1
Bermuda	1	1	3
Bolivia	0	1	1
Brazil	0	0	1
Bulgaria	0	1	1
Cameroon	0	0	2
Canada	18	165	304
Chad	0	0	1
China	3	3	8
Colombia	0	1	1
Czech Republic	0	1	1
Dominican Republic	0	0	1
Ecuador	0	0	1
Estonia	1	1	2
Fiji	1	0	1
Ghana	1	5	7
Greece	0	1	2
Honduras	0	1	1
Hong Kong	0	0	1
Hungary	1	1	1
India	3	19	30
Ireland	0	1	2
Jamaica	1	0	6
Japan	1	4	6
Kenya	0	0	1
Korea	0	0	2
Lebanon	0	0	1
Malaysia	1	1	3
Mexico	0	1	3
Nepal	1	1	3
Nigeria	0	1	4
Norway	1	0	2
Pakistan	1	2	4
Philippines	1	2	4
Portugal	0	1	1
Saudi Arabia	1	2	2
Singapore	0	4	4
Somalia	0	0	1

* Includes current and withdrawn students and graduates.

Admissions and Enrollment

Country (International Students)	Number in Student Body FY 2014	Graduates to Date as of Fall 2013	Cumulative Students to Date*
South Africa	0	1	1
Switzerland	0	1	1
Taiwan	0	4	6
Tanzania	1	1	6
Thailand	0	5	7
Trinidad and Tobago	0	1	2
Turkey	0	1	1
Uganda	0	1	1
United Arab Emirates	0	0	1
United Kingdom	0	2	3
Venezuela	0	1	1
Vietnam	1	0	1
Zambia	0	0	2
Zimbabwe	0	1	2
Other	6	19	19
Subtotal	**48**	**262**	**476**
Total	**1,432**	**7,596**	**16,037**

As of fall 2013, NTID has 44 international students enrolled based on visa status.

	Number	Percent
U.S. Students	1,388	96.9%
International Students	44	3.1%
Total	**1,432**	**100.0%**

* Includes current and withdrawn students and graduates.

Academic Programs

Students enrolled at NTID can earn associate degrees in 17 accredited programs. Qualified deaf and hard-of-hearing students also can earn bachelor's or master's degrees in more than 200 programs offered by RIT's other colleges.
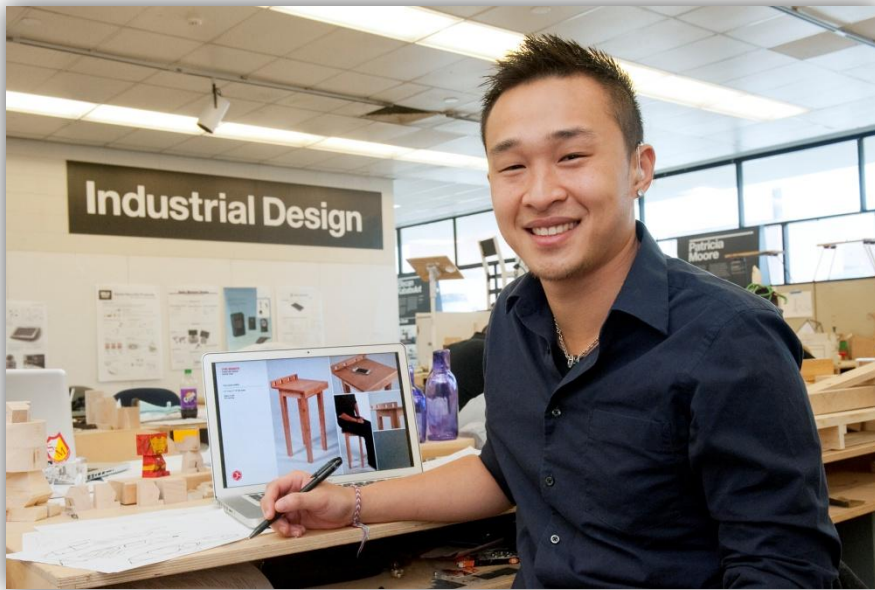
Jay Che-Wei Liu, a 2013 graduate with a bachelor's degree in Industrial Design, won second place in a design competition for his toy design. As a result, his toy was displayed at the International Contemporary Furniture Fair in New York City, and will be manufactured by Areaware. He currently is employed as an industrial designer at KEM Studio in Kansas City, Mo.

National Technical Institute for the Deaf

Academic Program Highlights

This fiscal year, Academic Affairs continued the implementation of *Strategic Decisions 2020 (SD 2020)*. The academic departments continue to: 1) explore identifying new majors for career-focused associate degrees and associate+bachelor's degrees; 2) explore the possibility of new baccalaureate or master's degrees; 3) enhance the development of "soft skills" in the curriculum; 4) enhance the use of technology to improve learning; 5) coordinate technical education and co-curricular activities; and 6) foster the use of English and ASL in the instructional process.

Four college-wide *SD 2020* initiatives were set in place: 1) Flexibility in the Use of the Direct Instruction Model, 2) a New Innovation, Scholarship and Research Model; 3) discussion of Enrollment Targets for 2020; and 4) Coordinating NTID Institutional Research.

The RIT ASL-Deaf Studies Community Center, opened in January 2011 to promote education, understanding and participation in the RIT deaf community by all members of the RIT community and hosts a variety of events ranging from weekly ASL classes to regular community meetings and special Rochester-area group gatherings in its new location in the Wallace Center.

This fiscal year marked the last year of the quarter system at RIT. To ease their transition, students who enrolled at RIT for the first time in fall 2012 began their careers by following the degree requirements under the forthcoming semester system, which began in fall 2013. Previously matriculated students continued to follow quarter-system graduation requirements.

Career-Focused Associate Degrees

NTID offers career-focused degrees in the areas of Arts & Imaging, Business, Computing, Engineering Technologies and Laboratory Science Technology. The programs within these clusters are designed to lead directly to employment in high-demand technical jobs. NTID's *SD 2020* calls for reviewing and updating the career-focused program portfolio by conducting an evaluation of existing programs with the goal of continuing, modifying, deleting and creating new programs—the latter to be in areas such as green technology, sustainability and health care. *SD 2020* also repeats the target originally stated in the previous strategic plan of having 35 percent of NTID students in programs at this degree level.

At the beginning of Academic Year 2013-2014, there were 479 deaf and hard-of-hearing students enrolled in career-focused programs, including students enrolled in AOS and non-associate+bachelor's AAS degrees as well as students in Career Exploration Studies.

In AY 2012-13, the Arts & Imaging Studies (AIS) Department developed and implemented a student success and retention strategy that included a new formal faculty tutoring assignment aimed at first-year students and a variety of faculty/staff/student social interaction events. Twenty students completed their AAS degree and 17 students completed their AOS degree. The AIS faculty completed the development of content for all AIS program semester courses and coordinated the content in the core courses, the graphic design and production concentration area courses, and the elective courses. The proposal for a new AAS program in Game Graphics and Development has evolved into a proposal for 3D Computer Graphics which will articulate with the 3D Digital Graphics BFA program. This proposal will be presented for development approval early in AY 2013-14.

The Business Studies Department continues to enjoy steady enrollments in the AOS and AAS programs. Perhaps due to semester conversion, a large number of students completed requirements for graduation. In addition, 23 students completed cooperative work experiences, a record number.

The Department of Engineering Studies (DES) completed the RIT conversion to semester curriculum for Computer-Aided Drafting Technology (CADT A/E/C) and Computer-Integrated Machining Technology's (CIMT) career-focused programs. The Automation Technology (AT) program was officially discontinued at the summer 2012 quarter, based on institute program review. In addition, the department continues to advocate that existing students complete their cooperative work experiences to satisfy their degree requirements. To continue enhancing the process for student program selection and expand the scope of

employment marketability, DES began a major curriculum conversion from a quarter to semester model, explored more than 40 skill sets for future potential program niches and considered expanding the existing programs. As a result, we currently are drafting a full proposal of Civil Technology's articulation agreement with RIT's College of Applied Science and Technology's Civil Engineering Technology program. During the FY 2013 Summer Vestibule Program, eight students were interested in DES engineering-related studies, but were rejected for the program because they did not meet the entry requirements in Math and English. These students were accepted into the developmental engineering program, the pilot program's fifth year, thus allowing them to do developmental work in Engineering Technology, Math and English. This project is considered a technical expansion program for underprepared students as a "school-within-a-school." As a result, 47 students have gone through this developmental work. More than half of these students eventually matriculated into Engineering Studies, and three have graduated with degrees. A larger group of students will obtain degrees this academic year.

In AY 2012-13, the Information and Computing Studies (ICS) Department worked on curriculum for all courses for semester conversion. A concept paper is being developed to propose a new AAS program in Mobile Application Design and Development (MADD). The goal of this program is to enable students to design, develop and publish mobile applications in response to rapid growth in the use of this platform.

During the 2012-2013 academic year, the Department of Liberal Studies (DLS) finalized its semester courses and course schedules. DLS continues its collaborative efforts with the RIT University Writing Program and RIT's College of Liberal Arts to prepare students for success in the semester English and general education courses.

The curriculum for the Laboratory Science Technology (LST) program was successfully converted to a semester calendar and has been enhanced in several ways to provide students with a strong foundation in the biological sciences. A full year of introductory biology is now required during the first year of the program and a new one-semester course in biochemistry has been added to the second year of the program. The addition of these courses helps to support NTID's goal of enhancing students' education in the area of biological and health sciences while maintaining the strength and rigor of the chemistry portion of the LST program.

Associate+Bachelor's Degrees

Following a recommendation of *Strategic Vision 2010*, NTID has developed a number of transfer associate degrees that provide seamless transition to RIT baccalaureate programs. There now are seven of these programs, called "associate+bachelor's" degree programs (to avoid confusion with the word "transfer"). They have been very successful, both in terms of growth, graduation at the associate level, transfer to a bachelor's program in one of RIT's other colleges and subsequent graduation at the bachelor level.

At the beginning of the 2013-2014 academic year, 190 students were enrolled in these and pre-baccalaureate programs. This number is slated to increase as the number of such programs is expanded and marketed as precursors to RIT baccalaureate programs. *Strategic Decisions 2020* calls for increasing the total proportion of students in these programs from the existing 15 percent to 20 percent of the deaf and hard-of-hearing student body (excluding students in the ASL-English Interpretation programs or the Master of Science in Secondary Education program).

While the AIS Department does not have an associate+bachelor's agreement with any programs in the College of Imaging Arts and Sciences (CIAS), there is a long history of AIS program students making the transition from the NTID AIS associate degree program into a CIAS BFA or BS program. In AY 2012-13, 14 AIS program students were accepted to start in a CIAS bachelor's degree program: two of these students completed their AAS degree and 12 of these students were accepted prior to completion of their AIS associate degree.

NTID's AS in Applied Liberal Arts remains the largest associate+bachelor's degree program with more than 50 students. The program prepares students for entry into any of 12 baccalaureate majors in RIT's College of Liberal Arts (COLA). DLS has worked closely with RIT's College of Liberal Arts and the Undergraduate Admissions Office to streamline the transfer of its AS students into COLA baccalaureate programs. Several of the members of the first graduating class are entering their senior year in their baccalaureate studies and planning to continue their education at graduate school or enter the workforce.

In the Business Studies Department, the associate+bachelor's degree program continues to successfully graduate students who are accepted into RIT's Saunders College of Business, and the Administrative Support Technology program has had great success with students transferring to and graduating from the Multidisciplinary Studies program in RIT's Center for Multidisciplinary Studies. In addition, the AS degree in Hospitality has experienced great success with graduates enrolling in the College of Applied Science and Technology International School of Hospitality for their bachelor's degrees. Current department numbers show 54 percent of students in AS and BS degrees and 42 percent in AOS/AAS degrees.

In the Information and Computing Studies Department, the number of students enrolled in the associate+bachelor's and bachelor's degree programs continues to thrive. This past year, the number of students expanded approximately 26 percent. Current numbers show 42 percent of students enrolled in associate+bachelor's (AS) programs and 58 percent in associate degree (AAS & AOS) programs.

Upon completion of the Laboratory Science Technology (LST) AAS degree, students have been able to transition into a number of bachelor's-level programs within RIT, demonstrating that there are numerous paths that students can pursue to obtain a bachelor's degree. Over the past five years, some students who have finished their LST degree have gone on to complete baccalaureate degrees in biochemistry, environmental science, biomedical sciences and biotechnology offered through RIT's College of Science (COS) or College of Health Sciences and Technology (CHST). Other students have chosen to pursue, via a partnership with RIT's Center for Multidisciplinary Studies (CMS), a bachelor's-level degree that has an emphasis in biotechnology and requires two to three years of study beyond the LST degree. As part of the university's conversion to semesters, this program has also been successfully revised to incorporate coursework offered through the COS, CHST, and CMS to build upon the chemical and biological concepts that students have learned through their work in the LST program.

Support for Baccalaureate Students

Strategic Decisions 2020 continues the goal of pursuing enrollment targets and admissions and programming strategies that will result in increasing numbers of NTID graduates achieving baccalaureate degrees and higher.

At the beginning of AY 2013-2014, 526 students (42 percent of the total deaf and hard-of-hearing student enrollment) were registered for classes in one of the other colleges of RIT. NTID faculty and staff provide tutoring, direct instruction, academic advising and counseling for these students. In addition, interpreting, notetaking and C-Print® services are offered through NTID's Department of Access Services.

***Strategic Decisions 2020* Enrollment Targets**

The enrollment targets set in *Strategic Decisions 2020* were: 35 percent career-focused programs, 20 percent associate+bachelor's degree programs and 45 percent baccalaureate/master's programs. At the beginning of AY 2013-2014 the enrollment percentages for deaf and hard-of-hearing undergraduates were 40 percent career-focused, 16 percent associate+bachelor's degree programs and 44 percent baccalaureate/master's programs. *Strategic Decisions 2020* has established the objective of developing a network of high schools and community colleges to create pathways to postsecondary education. The goal is to strengthen the preparation of deaf and hard-of-hearing students entering college and reduce the amount of developmental education that NTID must offer, resulting in higher enrollment at the baccalaureate level.

Academic Program Highlights (continued)

Calendar Conversion from Quarters to Semesters

RIT's decision to change the academic calendar to a semester system by fall 2013 necessitated a third and final year of curriculum activity focused on general education courses, including the creation of Individual Advisement Plan templates for students who entered NTID during AY 2012-13. All of the semester academic programs and associated course outlines as well as the general education (liberal arts and sciences) courses were approved during AY 2010-11 or 2011-12, but a number of clerical corrections and minor revisions to course outlines occurred this academic year. Also, several new science courses and an International Studies Seminar course were added and approved for general education perspective designation and credit.

Several substantive changes were made during AY 2012-13 which affected the academic program masks in the following ways:
- A one-credit Freshman Seminar course was added to each AAS and AS program.
- The Applied Liberal Arts AS program changed to allow students to take any approved liberal arts courses in the four perspective categories instead of requiring a specific course for each category.
- The AOS programs reduced the number of general education credits from 24 (eight three-credit courses) to 15 (five three-credit courses) in response to budgetary challenges; all programs require six credits of English coursework and three credits of mathematics; each program determined which perspective categories would be required; all programs are in compliance with university and state requirements for AOS degrees.

Students who entered NTID associate degree programs during AY 2012-13 took quarter-based courses for the first year but will need to meet semester requirements for graduation. For those students, the President of RIT pledged that semesters will add no additional time to graduation and they will not be harmed financially by the conversion to semesters. In order to assure that this pledge is met, each student met with an academic advisor for an Individual Advisement Plan (IAP) meeting regarding the necessary coursework for degree completion. To prepare for these meetings, the academic program and general education chairpersons, the chairperson of Academic Advising and Counseling, and the associate dean for Curriculum and Special Projects collaborated to design IAP templates for this group of students. The IAPs detail the semester course requirements, which quarter courses can be taken to satisfy semester requirements and the recommended sequence of quarter and semester courses which will most expeditiously lead to graduation. IAPs for students who entered associate degree programs in AY 2012-13 as well as for all baccalaureate students were completed during AY 2012-13.

During Winter and Spring AY 2012-13 the university allowed the first stage of new program development to occur for the first time since conversion to semesters began in 2010. NTID submitted several Concept Papers for review and community vetting. These included an AAS in game and simulation graphics and associate+bachelor's degree programs in Applied Networking (with articulation to the RIT Golisano College of Computing and Information Sciences) and Civil Technology (with articulation to the RIT College of Applied Science and Technology). The full program proposals will be developed and reviewed during AY 2013-14 if approval is received from the RIT Provost. Exploration and discussion continued for possible programs related to renewable energy and health care careers.

Outcomes Assessment

During AY 2012-2013 NTID conducted student learning outcomes assessment (OA) in all academic programs as well as several general education and academic support areas. In addition, academic degree programs also completed RIT Progress Reports based on AY 2011-2012 results.

The third annual RIT Progress Report, completed in Spring Quarter 2013, utilized a web-based reporting format and asked program chairs and directors to respond to a series of questions and to report on two program-level student learning outcomes listed in AY 2011-2012 Outcomes Assessment Plans. Program information was aggregated by college and at the university level, and was shared with the Provost's Office, Board of Trustees, Deans and RIT Student Learning Outcomes Assessment (SLOA) Committee.

NTID's response rate was 100 percent, with 14/14 programs completing the report. NTID contributed favorably toward the RIT rate of 75 percent of programs completing assessments. Additionally:

- 100 percent of NTID programs met or exceeded established benchmarks for the two cited outcomes, compared to the RIT level of 75 percent; and
- 100 percent of NTID programs indicated use of assessment results to guide program planning improvements, compared to the RIT level of 84 percent.

Beginning in June 2013, data and use of results were reported for the AY 2012-2013 Outcomes Assessment Plans. NTID OA plans identify critical student learning and programmatic outcomes, performance benchmarks, assessment instruments and timelines. Specific data and use of results are archived annually online at www.ntid.rit.edu/soa/pages/archive/ in each program's Outcomes Assessment Plan/Report.

Highlights from OA Reports illustrate how outcomes assessment data impacts decision-making regarding program delivery, curriculum and provision of services at NTID.

Arts & Imaging Studies Department
- Arts & Imaging Studies: Criteria met or exceeded for five out of eight outcomes assessed; faculty in the employment courses plan to renew their emphasis on students' résumé writing as well as explaining their skills and presenting their capabilities and interests during practice interviews.

ASL and Interpreting Education Department (ASLIE)
- ASL-English Interpretation: Benchmarks met or approached for all outcomes assessed; students' interpreting and transliteration skills were below criterion levels in Practicum and Seminar I, but exceeded criterion levels by the time they were assessed in Practicum and Seminar II; faculty will discuss whether to assess only in the second course for baccalaureate students; 100 percent were employed within six months of graduation which is an improvement over the previous year's rate.

Business Studies Department
- Accounting Technology: criteria was met on three of the four outcomes assessed; students had a difficult time passing the revised exam designed to assess accounting cycle functions; with the change from quarters to semesters students should be able to stay on track and take courses in the proper order, thus being more prepared for the test when it is given in Accounting 4.
- Administrative Support Technology: Met or exceeded seven out of nine technical outcomes; faculty will continue to monitor the upward trend in final grades on the e-Portfolio to validate students' use of incremental feedback and production of acceptable business letters, reports, e-mail and newsletters; with the move to semesters, the program will place all entering freshman in the Essential Document Production course to enhance outcomes related to keyboarding.
- Business AS: Criteria exceeded for two out of three outcomes; faculty will look into areas of concern for the 34 percent of students who did not score high enough on the assessment of five core business areas through a capstone project.
- Hospitality & Service Management (AS): Small, relatively new program; criterion achieved for all outcomes; faculty will continue to monitor student success while in the associate degree program and after they enter the bachelor's degree program.

Communication Studies and Services Department
- Communication Outcomes: Assessed in conjunction with ASLIE; criterion again nearly met for face-to-face communication during cooperative work experiences and exceeded for communication via email and making formal presentations; faculty will place more emphasis on face-to-face soft skills in communication courses.
- Speech-Language, Aural Rehabilitation and Audiology Services: Criteria exceeded for student satisfaction, self-perceived benefit, progress toward goals and most pre-post tests; faculty will continue to monitor the assessment of speech intelligibility for students with goals related to pronunciation; faculty will develop a new approach to notifying students of department services.

Academic Program Highlights (continued)

Cultural and Creative Studies Department
- Critical Thinking Outcomes: 100 percent of AOS students and AAS students achieved the expected score on the critical thinking rubric applied to Capstone Seminar course projects; the results of these assessments are used in professional development activities to direct instructors' attention to this outcome and emphasize the need for it to be systematically addressed in instruction.

Engineering Studies Department
- Applied Mechanical Technology: Small, relatively new program; the first student who enrolled in RIT's College of Applied Science and Technology (CAST) directly from this program graduated during AY 2012-13; students continued to perform well in CAST courses; faculty are exploring the possibility of teaching that course at NTID in semesters.
- Automation Technologies: The program is scheduled for discontinuance so no outcomes were assessed except for job placement; of three recent graduates, two were working.
- Computer-Aided Drafting Technology: Students met or exceeded criterion for all technical and job skills outcomes, with the exception of students' ability to find technical information and incorporate it into drawings and documentation; faculty determined that they need to place more emphasis on students learning technical vocabulary earlier in the program.
- Computer-Integrated Machining Technology: Criteria exceeded for CNC and machining skills as well as skills assessed by co-op supervisors; although criteria was also exceeded for student satisfaction, faculty will continue to seek ways to enhance the overall satisfactory rating.

Information and Computing Studies Department
- Applied Computer Technology AS: criterion met or exceeded for entry into baccalaureate programs after completion of the associate degree as well as for success in the bachelor's program and student satisfaction with the associate degree program; retention and graduation rate could not be calculated as planned due to lack of a comparison group; some assessments will change for the semester-based program.
- Applied Computer Technology AOS/AAS: While criterion levels were met or exceeded for job placement, student satisfaction and co-op supervisor's evaluations, benchmarks were not met for direct assessment of technical skills; for the PC tech support outcomes, faculty will review questions used for assessment to be sure that they are adequately preparing students and to assure that it is reasonable for students to complete the assessment in the designated amount of time; for networking, faculty will discuss whether an average score is a better representation of student skill than requiring a level 2 score on *each* task in the assessment activity.

Liberal Studies Department
- Applied Liberal Arts (AS): Criteria met or approached for each assessment used to measure success in the program and transferability. Students will be monitored for both the Psychology and Writing Seminar courses through tutoring and advising.
- English Literacy Outcomes: For the first time, the benchmark was met for retention in the Intensive English program and for proficiency; benchmark was not met for students completing the Career English sequence, but this may be an artifact of the conversion from quarters to semesters; faculty will continue to monitor completion rates in semesters.

Masters of Science in Secondary Education Department
- Masters of Science in Secondary Education of Students who are Deaf or Hard of Hearing: Criterion met for students demonstrating appropriate teacher competencies on a portfolio or cooperating teachers' evaluation; very few students complete the self-appraisal of teaching skills and very few took the Certification tests; several assessments will change in the semester-based program in part due to the upcoming edTPA (Teacher Performance Assessment) requirements; requiring the GRE as part of the application process has been implemented which may lead to stronger student outcomes.

Academic Program Highlights (continued)

Science and Mathematics Department
- Laboratory Science Technology: The program again exceeded the benchmark for student learning outcomes in all general skill and technical competence areas, with the new electronic portfolio capturing system at least partly responsible for the strong marks; students continued to perform very well in skills related to instrumental, gravimetric and volumetric analysis; programmatic changes in biological and microbiological techniques have led to increased student performance in that category though the benchmark for one skill was not met; modifications to the program under semesters should remedy some of the concerns in this category.

American Sign Language and Interpreting Education (ASLIE)

ASLIE enrolled 147 students in the bachelor's degree program in ASL-English Interpretation as of fall 2013. Due to the continuing effectiveness of the strategic marketing and recruitment plan employed for the past four years at NTID, this number has stabilized since last year and has once again proved to be a high number of interpreting students in the bachelor's program. Interpreting faculty have re-conceptualized and redesigned the interpreting curriculum in response to changing requirements in the interpreting field and increased requests for transfer from two-year programs.

In AY 2012-2013, the ASL-English Interpretation programs graduated 53 students, 16 of whom responded to a Senior Satisfaction Survey. When asked about overall satisfaction with the program, 16 students (100 percent) indicated agreement; 14 students (88 percent) indicated they would recommend the program.

To implement the "Global Understanding of World Deaf Culture and Sign Languages" theme, in 2010, NTID and the Hogeschool in Utrecht, The Netherlands, signed a memorandum of understanding (MOU) which created a student exchange opportunity between the two programs. Both institutions have a sign language interpreting program. The MOU created the opportunity for students from both programs to experience foreign sign language and Deaf culture, as well as participate in courses offered by the host program.

In fall 2012, four students from the Hogeschool came to NTID and took courses for 10 weeks. They took *ASL*, *Deaf Culture*, *Interpreting I*, *Sign Mime & Creative Movement*, and participated in the NTID play "Sleepy Hollow." In May 2013, eight NTID interpreting program students went to the Hogeschool and took courses in NGT (the sign language of The Netherlands), Deaf culture, spoken Dutch and various courses related to interpreting. Students could earn up to eight quarter credits for this experience.

This exchange program has been an amazing experience not only for the students who have physically gone abroad, but also for the faculty and students of the host programs. From NTID's perspective, having the Dutch interpreting students in classes has been an enriching and enlightening experience.

Since 2010, Special Topics courses in *Mexican Sign Language* and *Russian Sign Language* have been offered and are open to interpreting students as well as other deaf NTID students. *Mexican Sign Language* will be offered in spring 2014 and *Russian Sign Language* will be offered in fall 2014.

RIT's College of Liberal Arts (COLA) offers ASL courses, coordinated and taught through NTID's ASLIE Department. In winter and spring quarters, we offered the *Beginning ASL I, II* and *III*; *Intermediate ASL I* and *II*; and *Advanced I* and *II* courses with an exception that *Beginning ASL I* was not offered in spring quarter. This was part of the transition process from quarter to semester conversion. This fall semester, we offered *Beginning ASL I* and *II* and *Intermediate ASL I* courses.

The courses may be taken by RIT students as electives or to fulfill their liberal arts immersion (formerly known as concentration). The requirement for an ASL immersion is to take any three courses from ASL and Deaf Cultural Studies. In AY 2012-2013, the COLA program had an expanding enrollment of 314 in fall quarter, 301 in winter quarter, and 166 in spring quarter for a total of 781 students for the year. Due to federal budget cuts, ASLIE was unable to offer ASL courses in the summer quarter. The program continues to maintain steady enrollment growth, despite unexpected financial changes.

The following evening courses: *Introduction to ASL and Deaf Culture I* and *II*, were offered in fall, winter and spring quarters. The courses are designed for RIT students, faculty, staff and community members at large interested in a basic introduction to ASL and Deaf culture. In AY 2012-2013, the Introduction to ASL and Deaf Culture program had an enrollment of 36 students. The Faculty Staff Sign Language program (FSSL), a program housed in ASLIE, had an enrollment of 377 faculty and staff from NTID and other departments across RIT.

ASLIE faculty provided instruction in ASL courses as part of the ASL/Deaf Studies requirement for 49 students – these courses were initially offered through the Department of Cultural and Creative Studies – they are now part of the NTID ASL (NASL) program housed under ASLIE. ASLIE also provided instruction in the Master of Science program in Secondary Education of Students who are Deaf or Hard of Hearing for 45 students, the Provost I Program for nine RIT faculty and staff and Provost I Program for 11 RIT academic advisors.

A total of seven ASLIE faculty continued to provide sign communication assessment and feedback services for RIT/NTID faculty and staff and MSSE students through the Office of Communication Assessment Services (OCAS). Faculty conducted 20 Sign Language Proficiency Interviews (SLPI), 59 SLPI Ratings, and three hours of SLPI follow-up sessions.

The Office of the RIT Provost sponsors an annual Provost Summer Intensive American Sign Language and Deaf Culture Experience for selected RIT faculty and staff. The program is offered and taught through the ASLIE Department. The aim of the program is to enhance interactions among deaf and hearing members of the RIT community. Up to 15 RIT faculty and staff, who are not employed within NTID and who represent the various academic and non-academic areas of RIT, are selected each year to participate in this intensive three-week program during the summer. The focus of the program is to develop basic American Sign Language skills and gain an understanding of Deaf culture and the dynamics of deaf and hearing interactions. The program has enjoyed success and growth in registration since its inception, and is a valued offering among RIT and NTID faculty and staff.

This past summer, nine RIT faculty and staff attended this three-week program offered in June. As in past years, it was well-received, with attendees showing an interest in continuing their study of ASL through further Faculty and Staff Sign Language program classes offered during the academic year.

For the first time this past summer, a second section of the Provost Intensive ASL and Deaf Culture Experience was offered to RIT academic advisors only. Eleven academic advisors from various RIT colleges attended this full three-week program in late July to early August. The program was very successful and received positive feedback from those who attended.

A new offering this past summer included a week-long Intensive ASL Training Program offered to new incoming NTID faculty, which included a full immersion experience of expressive and receptive ASL curricula. Seven NTID faculty attended this very successful new program. At the end of the program, participants were guided to continue their study of ASL by taking additional courses or tutoring offered through the Faculty Staff Sign Language program during the academic year.

In addressing one of the initiatives in *SD 2020*, for the second year in a row, the New Signers Program was offered to incoming NTID students with minimal or no ASL skills. The New Signers Program is an innovative and original program designed to encourage the transition of students with no ASL skills to an ASL-immersion experience. Last summer, 16 incoming freshmen participated in this week-long program. Two instructors co-taught full days, with mornings focusing on in-class instruction, afternoons scheduled with various experiential activities around campus and evenings filled with extra-curricular activities on and off-campus. Participants stayed in NTID dorms, which provided more impetus for the group to bond and practice their skills with three orientation assistants – two of whom were former NSP participants – to guide them in ASL-based activities and interaction. The New Signers Program is poised to gain momentum and continue as a valued and intrinsic part of the NTID culture in coming years.

Academic Program Highlights (continued)

Communication Studies and Services (CSS)

The Communication Studies and Services Department (CSS) comprises faculty and staff with expertise and training in the areas of communication, speech-language and audiology. Faculty and staff in the department provide credit-bearing instruction to students in areas related to communication in organizational structures, effective teams, interpersonal situations and other community settings. Other areas where direct instruction is provided are Freshman Seminar and ASLIE, where a Cued Speech compliment course is provided to those enrolled in the interpreting education program. In these areas, faculty and staff provided 61 credit hours of instruction for 190 students in 2012-2013, with an additional 190 contact hours of communication support to the Job Search Process Course for 149 students.

Audiology and speech-language clinical services were provided to members of the RIT community throughout the 2012-2013 academic year. Faculty and staff provided 3,640 hours of individual speech-language instruction, serving 202 students, and provided 2,008 hours of audiology services to 648 students and others at RIT.

The audiology and speech-language discipline also provide walk-in services in the Spoken Language Learning and Practice Lab (SLLPL) and the Hearing Aid Shop, respectively. During the 2012-2013 academic year, the SLLPL served an additional 242 students, while the Hearing Aid Shop served more than 1,300 members of the RIT community.

CSS also supports students with advisors to the Conversation Practice Group, the Vision Support Committee and the Cochlear Implant Club. CSS is also a co-sponsor of a grant from the Department of Education to train master's degree students in Speech-Language Pathology from Nazareth College of Rochester to work with deaf and hard-of-hearing students. Furthermore, CSS annually accepts a full-time extern pursuing their doctoral degree in the field of audiology. The externs come from various accredited universities throughout the United States.

Master of Science in Secondary Education of Students who are Deaf or Hard of Hearing (MSSE)

The Master of Science program in Secondary Education of Students who are Deaf or Hard of Hearing (MSSE), now in its 19th year, graduated 15 students during the 2012-2013 academic year. All of these MSSE graduates received initial certification from New York State in an academic content area (grades 7-12) and/or in education of students who are deaf or hard of hearing (grades K-12). Those who do not have certification either need to take additional NYS teacher certification exams or have chosen to pursue certification from the states where they currently are teaching. Of the 15 graduates, 12 now are teaching in residential schools for the deaf, mainstream programs or teaching American Sign Language in public school programs. Of the remaining three, one is working as an interpreter in a mainstream program, and the other two are unknown. To date, a total of 293 students have graduated from the program.

For the 2013-2014 academic year, the MSSE program has an enrollment of 48 students, of whom 18 (38 percent) are deaf or hard of hearing and six (12 percent) are members of minority groups. It is anticipated that up to 25 students will graduate from the program during the 2013-2014 academic year. There are an additional 10 students who have completed their coursework and hope to finish their capstone projects during this academic year.

The MSSE program has continued to actively recruit students with strong content area backgrounds, especially in science and math through the 4+2 program with RIT's Colleges of Science, Engineering and Liberal Arts as well as RIT's Center for Multidisciplinary Studies program. The specifics related to this program can be found at www.ntid.rit.edu/msse/4plus2.php.

MSSE has been re-accredited by the Teacher Education Accreditation Council (TEAC), 2013-2020, and has continued to maintain a partnership with the State University of New York at Cobleskill to recruit potential students with strong backgrounds in English and social studies.

Academic Program Highlights (continued)

Self-Instruction Lab

The Self-Instruction Lab (SIL) offers a variety of equipment and resources to support signed and spoken language skill development of students, faculty and staff. It serves as an environment for both expressive and receptive practice, offering flexible scheduling to meet learner needs as well as supporting individual learning styles. During AY 2012-2013, students, faculty and staff spent 1,050 hours during 887 visits to the SIL. Of the total hours, 490 were spent using the SIL video production rooms.

First Year Experiences/Career Exploration Studies and Summer Vestibule Program

First Year Experiences (FYE) programming is designed to maximize first-year student success and persistence. Beginning with NTID's Summer Vestibule Program (SVP), FYE provides an array of courses and co-curricular programs as well as personal/academic counseling designed to help students successfully complete their first year of college. This past summer, 266 students attended SVP and participated in a variety of activities, including career exploration, adjusting to college life programs and course placement assessments. Also housed within FYE, the Career Exploration Studies program (CES) allows students the opportunity to explore technical programs while satisfying necessary core and/or prerequisite coursework. During AY 2012-2013, CES served 139 students for fall, winter and spring; 48 percent of these students were accepted into a major within three quarters.

NTID Learning Center

The NTID Learning Center (NLC) provides a variety of resources (tutoring, computer, video production, studying tools and individual/group study space) in supporting the college success of students.

This year, individual students signed up to use NLC computers 41,497 times for a total of approximately 196,078 hours. This "tracking" of computer use behavior is made possible with in-house software installed on all NLC PCs that asks computer users how the computer is being used and records the length of time users are logged on per computer sign-up. The number of computer use hours in AY 2012-2013 represents a decrease of approximately 8 percent when compared to AY 2011-2012 and an increase of approximately 54 percent when compared to AY 2010-2011.

Since AY 2006-2007, the NLC has loaned laptops to students for 24-hour lending. This year, laptops were borrowed 1,954 times, which is a 4 percent decrease when compared with AY 2011-2012 and a 27 percent increase over AY 2010-2011.

To support learning outside of the typical classroom, the NLC offers individual and small group tutoring and studying in Mathematics, English, Accounting, Interpreting, Library and Spanish. This year, 142 tutors (faculty and students) provided 8,005 hours in a variety of curricular areas.

The General Area supported 464 class sessions, totaling 1,144 hours of use. The NLC continues to support the administration of SVP writing tests and the quarterly administration of the LAPT tests, and provided a number of tours for incoming freshmen and visitors from other institutions such as foundation boards and universities (national and international). The Video Production Room, established in 2007 as a video production and editing resource for the NTID community, has been reserved 1,093 times for a total of 1,237 hours. The majority of the reservations in the Video Production Room were a result of an influx of ASL-English Interpretation students whose existing ASLIE workstations were not available due to NTID-wide budgetary cuts.

The Sprint Relay Experimental Distance Learning/Access Demonstration Lab, also housed within the NLC, hosted 287 course/workshop/other sessions for a total of 371 hours. The Sprint Relay Lab supported a variety of activities, including conducting experimental videoconferencing projects as well as video/lecture-capturing classes for archiving and subsequent "anytime/anywhere" access by students.

Enrollment by Degree Programs

In fall 2013, 60 percent of NTID's 1,432 students were enrolled in a broad array of programs within NTID. Forty percent were enrolled in other colleges of RIT, including 42 students in graduate programs. Of the 1,432 students, 1,237 are deaf and hard-of-hearing students in traditional undergraduate and graduate programs (excluding MSSE and Interpreting students). Forty-six percent of deaf and hard-of-hearing students (568) enrolled in traditional undergraduate and graduate programs are partially or fully enrolled in the other colleges of RIT. Students are categorized by their primary academic college.

	Number of Students
NTID Career Exploration Studies	
Career Exploration (UND)	62
Career Prep Foundation (UND)	49
Subtotal	**111**
NTID Career-Focused and Associate+Bachelor's Degrees	
NTID General (NONDEG)	7
Non-Degree Student (NONDEG)	4
Accounting Technology (AAS)	12
Applied Computer Technology (AAS)	34
Applied Computer Technology (AOS)	48
Arts and Imaging Studies (AAS)	32
Arts and Imaging Studies (AOS)	67
Automation Technologies (AAS)	1
Business Technology (AOS)	43
Business Technology (UND)	3
Computer-Aided Drafting Technology (AOS)	21
Computer-Aided Drafting Technology (AAS)	6
Computer-Integrated Machining Technology (AOS)	38
Engineering Technologies (UND)	16
Laboratory Science Technology (AOS)	36
Administrative Support Technology (AAS)	16
Applied Computer Technology (AS)	25
Applied Liberal Arts (AS)	49
Applied Mechanical Technology (AAS)	13
Business (AS)	28
Hospitality and Service Management (AS)	7
Laboratory Science Technology (AAS)	22
Subtotal	**528**

	Number of Students
NTID ASL-English Interpretation	
ASL-English Interpretation (NONDEG)	4
ASL-English Interpretation (BS)	143
Subtotal	**147**
NTID Master of Science in Secondary Education (MSSE)	
Graduate Teacher (NONDEG)	7
Secondary Education of Students who are Deaf/Hard of Hearing (MS)	41
Subtotal	**48**
NTID Pre-Baccalaureate Students	
Pre-Baccalaureate Engineering (UND)	8
Pre-Baccalaureate Visual Communication (UND)	10
Pre-Baccalaureate Liberal Arts (UND)	2
Pre-Baccalaureate Science (UND)	10
Subtotal	**30**
NTID Subtotal	**864**
Baccalaureate Students in Other RIT Colleges	
College of Applied Science and Technology	
Engineering Technology (UND)	2
International Hospitality and Service Management (BS)	9
Packaging Science (BS)	11
Civil Engineering Technology (BS)	14
Computer Engineering Technology (BS)	2
Electrical/Mechanical Engineering Technology (BS)	5
Electrical Engineering Technology (BS)	2
Environmental Sustainability Health & Safety Management (BS)	5
Manufacturing Engineering Technology (BS)	2
Mechanical Engineering Technology (BS)	18
Subtotal	**70**

	Number of Students
Saunders College of Business	
Business Administration-Accounting (BS)	8
Business Undeclared (UND)	2
Finance (BS)	11
International Business (BS)	2
Management (BS)	18
Management Information Systems (BS)	8
Marketing (BS)	3
New Media Marketing (BS)	3
Subtotal	**55**
College of Science	
Applied Mathematics (BS)	3
Applied Statistics (BS)	1
Biochemistry (BS)	2
Bioinformatics (BS)	2
Biology (BS)	6
Chemistry (BS)	3
Environmental Science (BS)	10
Imaging Science (BS)	1
Molecular Bioscience and Biotechnology (BS)	8
Physics (BS)	3
Subtotal	**39**
College of Imaging Arts and Sciences	
3D Digital Graphics (BFA)	2
Biomedical Photographic Communication (BS)	2
Film and Animation (BFA)	6
Fine Arts-Studio (BFA)	4
Glass (BFA)	1
Graphic Design (BFA)	19
Illustration (BFA)	4
Imaging and Photographic Technology (BS)	1
Industrial Design (BFA)	12
Interior Design (BFA)	8
Media Arts and Technology (BS)	2
Medical Illustration (BFA)	3
Motion Picture Science (BS)	1
New Media Design and Imaging (BFA)	7
Photographic and Imaging Technology (BS)	1
Professional Photographic Illustration (BFA)	8
Visual Media (BFA)	1
Subtotal	**82**

	Number of Students
College of Liberal Arts	
Sociology and Anthropology (BS)	2
International and Global Studies (BS)	3
Communication (BS)	1
Public Policy (BS)	2
Advertising and Public Relations (BS)	7
Criminal Justice (BS)	16
Economics (BS)	2
Journalism (BS)	4
Liberal Arts Exploration (UND)	9
Museum Studies (BS)	3
Political Science (BS)	1
Professional and Technical Communication (BS)	4
Psychology (BS)	32
Urban and Community Studies (BS)	3
Subtotal	**89**
Kate Gleason College of Engineering	
Biomedical Engineering (BS)	7
Chemical Engineering (BS)	3
Computer Engineering (BS)	3
Electrical Engineering (BS)	3
Engineering Exploration (UND)	2
Mechanical Engineering (BS)	7
Industrial Engineering (BS)	1
Subtotal	**26**
Golisano College of Computing and Information Sciences	
Applied Networking and System Administration (BS)	6
Computing Security (BS)	9
Information Technology (BS)	27
New Media Interactive Development (BS)	3
Computer Science (BS)	17
Game Design and Development (BS)	3
Software Engineering (BS)	4
Computing Exploration (UND)	3
Networking and System Administration (BS)	1
Subtotal	**73**

	Number of Students
University Studies	
University Studies (UND)	8
Subtotal	**8**
Center for Multidisciplinary Studies	
Applied Arts and Sciences (BS)	61
Subtotal	**61**
Student Affairs	
College Restoration Program	3
Subtotal	**3**
College of Health Sciences and Technology	
Biomedical Sciences (BS)	17
Nutrition Management (BS)	1
Physician Assistant (BS)	2
Subtotal	**20**
Subtotal Baccalaureate Students in Other Colleges	**526**

Funded by the National Science Foundation, AstroDance*, a joint project between RIT's College of Science, the Golisano College of Computing and Information Sciences and NTID's Performing Arts program, is an innovative multimedia performance that uses dance to tell the story of black holes and the gravitational pull of particles in the universe.*

	Number of Students
Graduate Students in Other RIT Colleges	
College of Applied Science and Technology	
Environmental Health and Safety Management (MS)	1
Hospitality-Tourism Management (MS)	1
Human Resources Development (MS)	2
Packaging Science (MS)	1
Subtotal	**5**
Saunders College of Business	
Business Administration (MBA)	3
Business Administration Executive (MBA)	1
Subtotal	**4**
College of Imaging Arts and Sciences	
Computer Graphics Design (MFA)	3
Visual Arts (MST)	1
Metals and Jewelry Design (MFA)	1
Visual Communication Design (MFA)	1
Subtotal	**6**
College of Liberal Arts	
Communication and Media Technology (MS)	1
Criminal Justice (MS)	1
School Psychology (MS)	6
Subtotal	**8**
College of Health Science and Technology	
Health Systems Administration (MS)	1
Subtotal	**1**
College of Science	
Environmental Science (MS)	1
Bioinformatics (MS)	1
Subtotal	**2**
Kate Gleason College of Engineering	
Applied Statistics (MS)	1
Mechanical Engineering (MS)	1
Microsystems Engineering (PhD)	1
Subtotal	**3**

	Number of Students
Golisano College of Computing and Information Sciences	
Computer Science (MS)	1
Information Technology (MS)	2
Networking and System Administration (MS)	1
Software Engineering (MS)	1
Information Science and Technology (MS)	1
Subtotal	**6**
Golisano Institute for Sustainability	
Architecture (M Arch)	2
Sustainable Systems (MS)	1
Subtotal	**3**
Center for Multidisciplinary Studies	
Professional Studies (MS)	4
Subtotal	**4**
Subtotal Graduate Students in Other Colleges	**42**
Total	**1,432**

Legend	
UND	Undeclared
NONDEG	Non-Degree
AOS	Associate of Occupational Science
AAS	Associate of Applied Science
AS	Associate of Science
BS	Bachelor of Science
BFA	Bachelor of Fine Arts
MS	Master of Science
MST	Master of Teaching
MFA	Master of Fine Arts
M Arch	Master of Architecture
MBA	Master of Business Administration
PhD	Doctorate of Philosophy
2M	Double Major
CT	Certificate

Average Class Size by Discipline

The variability in average class size is influenced by the nature of instruction. For example, many programs are laboratory-oriented and use specialized equipment, which limits the number of students who can reasonably be accommodated in a class.

	AY 2012-2013		
	Fall	Winter	Spring
Accounting Technology	8.7	9.8	9.0
American Sign Language	11.5	6.7	0.0
Applied Computer Technology	7.0	6.3	5.9
Arts & Imaging Studies	7.8	7.3	6.4
ASL-English Interpretation	9.8	10.4	8.4
Business Technology	6.3	6.9	7.9
Communication Studies and Humanities	10.6	8.4	12.0
Computer-Aided Drafting Technology	8.8	6.7	4.6
Computer-Integrated Machining Technology	8.0	7.7	8.2
Deaf Studies	9.0	12.0	12.0
English	9.1	10.0	7.8
Freshman Seminar / Career Exploration	10.6	9.2	4.5
Interdisciplinary Studies	11.5	12.2	12.8
Laboratory Science Technology	9.1	8.7	9.6
Master of Science in Secondary Education	10.6	11.2	11.6
Mathematics	10.2	9.4	9.1
Performing Arts	7.9	8.7	7.3
Science	12.6	11.2	10.8
Social Sciences	11.7	11.8	11.5
Overall Average	**9.0**	**8.8**	**8.3**

Educational Support: Teaching

In addition to providing academic advisement, tutoring and notetaking services for deaf and hard-of-hearing students enrolled in the other colleges of RIT, NTID faculty also teach some RIT courses with deaf students enrolled. By providing direct instruction in these courses as well as advisement and tutoring, faculty members help maximize the benefit students receive to ensure their success in RIT's highly competitive academic environment. Below are the statistics for FY 2013.

		Number of Students	
	Number of Sections	Deaf and Hard-of-Hearing	Hearing
Saunders College of Business			
Business Software Applications	1	19	0
Subtotal	**1**	**19**	**0**
Golisano College of Computing and Information Sciences			
JAVA for Programmers	2	2	17
Subtotal	**2**	**2**	**17**
College of Imaging Arts and Sciences			
Special Topics: Digital Imaging II	1	0	9
Special Topics: Revit Elective	1	0	20
Survey of Western Art & Architecture I	1	23	0
Survey of Western Art & Architecture II	1	25	0
Survey of Western Art & Architecture III	1	23	0
Subtotal	**5**	**71**	**29**
College of Liberal Arts			
American Politics	1	9	0
American Sign Language Literature	4	16	17
Arts of Expression: Writing the Discipline	3	36	0
Beginning American Sign Language I	16	11	307
Beginning American Sign Language II	14	17	195
Beginning American Sign Language III	12	16	146
Beginning Spanish I	1	21	0
Childhood & Adolescence	1	12	0
Computer Crime	3	20	92
Concepts in Criminal Law	3	17	104
Criminology	1	20	0
Deaf American Literature	1	16	16
Deaf Art & Cinema	3	34	51
Deaf Culture in America	2	28	37
Diversity in Deaf Community	1	7	25
Fine Arts: Visual Arts	3	60	0
Foundations of Sociology	2	38	0

		Number of Students	
	Number of Sections	Deaf and Hard-of-Hearing	Hearing
College of Liberal Arts (continued)			
History: Modern America	3	61	0
Honors Research	1	8	8
Independent Study	1	1	0
Intermediate American Sign Language I	5	5	32
Intermediate American Sign Language II	1	1	9
Intermediate American Sign Language III	1	1	3
Introduction to Psychology	9	134	151
Linguistics of ASL	2	18	17
Literary and Cultural Studies	3	35	0
Modernist Euro Theatre	1	0	10
Oppression and Deaf People	1	14	18
Psychological Testing	1	8	0
Professional Communication for Business	1	20	0
Scientific Writing	2	20	0
Science Technical Value	1	19	0
Senior Project Psychology I	2	6	0
Senior Project Psychology II	3	6	0
Special Topics: SLA & Bilingualism	1	0	9
Special Topics: Advanced American Sign Language I	1	0	3
Special Topics: Advanced American Sign Language II	1	0	6
Written Communication I	9	88	0
Written Communication II	12	158	0
Writing Seminar	16	221	0
Subtotal	**149**	**1,202**	**1,256**
College of Science			
Data Analysis I	3	20	88
Data Analysis II	1	2	31
Environmental MS Thesis	1	1	0
Independent Research	1	1	0
Inorganic Chemistry II	1	0	17
Stellar Astronomy Lab	3	2	42
Subtotal	**10**	**26**	**178**

	Number of Sections	Number of Students	
		Deaf and Hard-of-Hearing	Hearing
Kate Gleason College of Engineering			
Statistics	1	3	41
Subtotal	**1**	**3**	**41**
First-Year Enrichment			
Discovery	1	0	25
Subtotal	**1**	**0**	**25**
Center for Intercollegiate Athletics and Recreation			
Country Line Dance	2	2	21
Kundalini Yoga	3	2	110
Spinning	2	3	54
Spirituality and Health	2	1	16
Turbo Kick	2	17	33
Ultimate Frisbee	1	0	25
Subtotal	**12**	**25**	**259**
Golisano Institute for Sustainability			
Integrated Building Systems III	1	0	10
Subtotal	**1**	**0**	**10**
Total	**182**	**1,348**	**1,815**

American Sign Language-English Interpretation Program

The degree programs in ASL-English Interpretation graduated 32 students in 2011-2012, all with BS degrees. Forty-three new students matriculated into the program in September 2013. Currently, 15 percent of total enrollment are students from ethnic minority backgrounds. Since its inception, the Department of ASL and Interpreting Education has graduated 671 students. Of that number, 464 have graduated with an AAS degree, 189 with a BS degree, and eight with a certificate.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Fall Applicants	210	202*	229	250	224
Accepted	69	66**	49	51	51
Registrations	52	57***	41	45	43
Enrollment					
AAS	0	0	0	1	0
BS	138	147***	156	162	143
Non-Matriculated	0	0	4	4	4
Total Enrollment	**138**	**147***	**160**	**167**	**147**
Employment Report					
Graduates	33	19	32	****	****
Employment Rate	100%	100%	100%	****	****

In addition to the interpreting program, ASL and Interpreting Education faculty also provide the following programs:	FY 2013 Enrollment
ASL courses in RIT's College of Liberal Arts (COLA)	781
Faculty Staff Sign Language program, open to all RIT and NTID employees	377
ASL courses for deaf students, NTID	49
Master of Science in Secondary Education Program, NTID	45
Introduction to ASL and Deaf Culture	36
Provost Summer Intensive ASL Experience Program, RIT's Office of the Provost	20
New Signers Program	16
Global Understanding Program Fall Quarter – Hogeschool, the Netherlands students to NTID	4
Global Understanding Program Summer – NTID interpreting students to Hogeschool, the Netherlands	8

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*	There were an additional 10 internal transfer RIT applicants.
**	Includes eight Change of Program accepts (internal RIT transfers) and two double major accepts.
***	Does not include one double-major, with one major in NTID and another in a different college of RIT.
****	As of the writing of this report, the employment information for FY 2013 and FY 2014 is incomplete.

Master of Science in Secondary Education of Students who are Deaf or Hard of Hearing (MSSE)

The MSSE program is now in its 19th year. To date, 293 students have graduated from the program. One hundred percent of the FY 2012 graduates have accepted teaching jobs throughout the country.

To complete the program, each student must successfully complete 94 credit hours, including two student-teaching assignments and a master's project.

In addition to the coursework and other expectations, all full-time students serve as graduate assistants during the quarters (or, as of FY 2014, the semesters) they are not student teaching. They work as teaching assistants, program assistants, research assistants or tutors, primarily at NTID.

To recruit students with strong content area backgrounds, especially in science and math, the program has implemented a 4+2 program with the College of Science, the College of Engineering and the College of Liberal Arts as well as the Center for Multidisciplinary Studies at RIT. The specifics related to this program can be found at www.ntid.rit.edu/msse/4plus2.php.

Thirty-eight applications for admission for fall 2013 were received. Sixteen were offered admission. Of those, 16 matriculated into the program. For the 2013-2014 academic year, the MSSE program has a total enrollment of 48 students: 32 second-year or returning students and 16 first-year students. Of the 48 matriculated students, 38 percent are deaf or hard-of-hearing and 12 percent are minority.

MSSE Student Data

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Fall Applications	50	50	43	49	38
Acceptances	37	34	26	30	16
New Registrations	30	27	18	19	16
Deaf and Hard-of-Hearing Enrollment	32	29	12	25	18
Total Enrollment*	**61**	**71**	**64**	**56**	**48**
Employment Report					
Graduates	18	23	30	**	**
Employment Rate	100%	94%	100%	**	**

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*   Included from FY 2007 to date are non-matriculated students (between four and 15 per year) taking courses offered by the Master of Science program in Secondary Education, but who are part of a grant-supported joint program between NTID and Nazareth College of Rochester to train speech pathologists to work with deaf and hard-of-hearing people.

**   As of the writing of this report, the employment information for FY 2013 and FY 2014 is incomplete.

Cooperative Work Experiences

Cooperative work experience is an integral part of academic programming at NTID. Employment specialists assist students in securing 10-week work experiences that augment their studies. Employment specialists or faculty members visit students and their supervisors at their workplaces to assess progress and resolve any workplace issues. Most academic programs require from one to three cooperative assignments, which generally add another year to the program length (totaling three years for associate degree programs and five years for bachelor's degree programs).

During FY 2013:
- 295 students were enrolled in cooperative work experiences
- 53 academic programs had students on cooperative work experiences
- 14 faculty and staff visited 30 students at their job sites during the summer

	Number of Students Involved in Cooperative Work Experiences*				
	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Sub-Baccalaureate					
NTID Career-Focused and Associate+Bachelor's Degrees	132	123	107	96	105
Percent of Total Co-op Enrollment	50%	44%	36%	32%	36%
Baccalaureate/Master's					
College of Applied Science and Technology	41	46	50	57	64
Saunders College of Business	23	33	36	34	38
Golisano College of Computing and Information Sciences	35	21	34	41	29
Kate Gleason College of Engineering	11	10	14	11	16
College of Health Sciences and Technology	N/A	N/A	N/A	6	5
College of Imaging Arts and Sciences	5	7	13	11	7
College of Liberal Arts	11	28	35	37	25
College of Science	4	13	9	6	6
Subtotal	130	158	191	203	190
Percent of Total Co-op Enrollment	50%	56%	64%	68%	64%
Total Co-op Enrollment	**262**	**281**	**298**	**299**	**295**

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* Totals reported include deaf and hard-of-hearing international students, but do not include students in the ASL-English Interpretation programs or the Master of Science program in Secondary Education. Specific data on these students is reported elsewhere in this section.

Student Support Services

NTID athletes are represented throughout RIT sports.

Front row, left to right: Erin LaFave, Visual Media major from Troy, Mich., women's cross country; Wilma Dennis, Criminal Justice major from Tacoma, Wash., cheerleader; Felicia Boria, Computer-Aided Drafting Technology major from Riverside, Calif., cheerleader; Amanda Dole, ASL-English Interpretation major from Mantua, N.J., women's cross country. Back row: Eddie McBride, Computer-Integrated Machining Technology major from Germantown, Md., wrestling; Scott Farrell, Manufacturing Engineering Technology major from North Tonawanda, N.Y., swimming; Scott Matchett, Career Exploration Studies student from Brighton, N.Y., swimming.

Student Support Services Highlights

NTID provides a variety of services to support the college success of deaf and hard-of-hearing students:

- Audiological services include hearing evaluations, hearing aid trials, fittings, cochlear implant mapping and individual listening therapy that focus on the development of receptive communication skills.

- Speech and language services are offered to students who want to enhance their use of spoken English and their general communication competence. Individual and group experiences provide opportunities to improve communication in conversations, group discussions and formal presentations. The Spoken Language Learning and Practice Lab enables students to use computer technology for speech and language analysis and visual feedback.

- Mental health counseling and psychotherapy are provided to deaf, hard-of-hearing and hearing students on campus at the RIT Counseling Center. Mental health counselors fluent in American Sign Language provide services for deaf and hard-of-hearing students. A staff psychiatrist at the Student Health Center is available for consultation or referral as needed. Mental health crisis intervention is available 24 hours a day. In addition to individual counseling and psychotherapy, students can participate in support groups and skill-building groups with counseling center staff throughout the year. In AY 2012-2013, 179 deaf and hard-of-hearing students were seen for these services.

- Personal and career counseling and academic advising are provided to NTID associate-level students. All bachelor-level students receive personal and career counseling from their assigned NTID counselor and academic advising from their college advisors. Upon entry, every NTID-supported student is assigned to a counselor/academic advisor. These professional counselors/advisors play an important role in helping students maximize their educational opportunities. In AY 2012-2013, the NTID Counseling and Academic Advising Services Department provided more than 11,000 hours of career counseling, personal counseling and academic advising for students. In addition, the faculty and staff in the department taught 28 sections of courses related to various aspects of college success. This department manages a full-service Career Resource and Testing Center, which provides a number of career assessment tools and resources, including an interactive, computer-based career information system that helps students assess their interests, learning styles and values, and explore a wide range of educational and career options. Counselors/advisors also work in collaboration with other service providers on campus to assess student learning competencies and develop educational interventions where appropriate.

- Student Life Team (SLT) continued its tradition in FY 2013 of both challenging and educating students, providing resources and support for students' successful transitions throughout college and after graduation. SLT's collaborations with NTID's Counseling Services Department, the NTID Center on Employment, NTID Student and Academic Services, NTID Academic Affairs and several offices across RIT's Division of Student Affairs ensured that students were provided diverse opportunities to optimize their collegiate experiences. SLT's co-curricular and late night educational programming, afternoon informational workshops, social and cultural programs and club/organization advising are avenues of outreaching and networking with students.

- Student Wellness / NTID Student and Academic Services provides instruction and services that support wellness education. Deaf and hard-of-hearing students are ensured opportunities for exploring, developing and implementing wellness concepts, principles and behaviors into their lives. It is important to ensure deaf students receive a holistic education with a focus on career, academic, emotional, social, physical, spiritual, financial and environmental dimensions of wellness. Wellness initiatives occur through collaboration within many different areas of NTID and RIT. Students participated in wellness instructional classes, wellness presentations in Freshman Seminar classes, weekly "Wellness Wednesday" programs that address different wellness topics, presentations in residence halls, Red Barn activities, intramural programs, institute workshops and personal mentoring. There were 239 deaf students participating on 35 intramural teams.

Student Support Services Highlights (continued)

- Financial aid for domestic students was provided in AY 2012-2013 to NTID students in the form of Vocational Rehabilitation, grants-in-aid, federal and state grants, scholarships and federal loans through RIT's Financial Aid and Scholarships Office. In all, 479 received NTID merit scholarships, 77 received RIT merit scholarships, 405 received NTID endowed scholarships and 106 students received scholarships from external funding sources. In addition, the NTID Financial Services Offices provided privately funded short-term loans to students who encountered emergency situations.

- Summer Vestibule Program (SVP) is an orientation program for entering NTID students designed to transition them to college life. In 2013, 266 students went through the orientation program. Assessment tests are given to further evaluate a student's academic placement for English and mathematics classes. Students who are further evaluating their major are given a variety of career sampling choices. This is an opportunity for students to see if their major is what they expected. If not, they have the chance to enroll in a different major/program. There also is ample opportunity for peer interaction and fun. SVP is always a memorable experience as the students bond and make friends as they begin their collegiate career.

- First Year Experience incorporates a "Freshman Seminar" required for incoming first-year students and designed to further assist them in their transition to RIT/NTID. Twenty-two sections were offered with an average class size of 11 students. A variety of topics are covered, such as navigating the campus, library resources, Student Information System, conflict resolution, time management, clubs/organizations, study skills, stress management, goal setting, healthy relationships and more. This also is another opportunity for students to connect with their instructor if they have personal/academic struggles, and the instructor can act as a resource.

- Career Exploration Studies (CES) is a program that allows career-undecided students the opportunity to explore technical programs while satisfying necessary core and/or prerequisite coursework. During AY 2012-2013, CES served 139 students in fall, winter and spring. Forty-eight percent of CES students were accepted into a major within three quarters.

- Substance and Alcohol Intervention Services for the Deaf (SAISD) provides culturally sensitive, linguistically accessible information on alcohol, tobacco and other drugs; prevention; intervention; and case management services to the deaf and hard-of-hearing community at RIT and throughout Rochester and the Monroe County area. SAISD also advocates for and promotes development of a full range of accessible treatment programs for alcohol and other drugs for deaf and hard-of-hearing consumers through the provision of cross-disability short-term technical assistance, consultation and training for professionals. Wherever possible, SAISD promotes its successful model across the state.

- The NTID Learning Center (NLC) provides a variety of resources (tutoring, computer, video production, studying tools and individual/group study space) in supporting the college success of students. Since FY 2007, the NLC has loaned laptops to students for 24-hour lending. To support learning outside of the typical classroom, the NLC offers individual and small group tutoring and studying in Mathematics, English, Accounting, Interpreting, Library and Spanish. The NLC continues to support the administration of SVP writing tests and the quarterly administration of the LAPT tests and provided a number of tours for incoming freshmen and visitors from other institutions such as foundation boards and universities (national and international). The Sprint Relay Lab supported a variety of activities, including conducting experimental videoconferencing projects as well as video/lecture-capturing classes for archiving and subsequent "anytime/anywhere" access by students.

Support Services

NTID faculty provide academic assistance in the form of tutoring and academic advising for all NTID-supported deaf and hard-of-hearing students registered in the other colleges of RIT.

	AY 2012-2013		
	Hours of Service Tutoring/Advising	Class Sections Served	Total Student Registrations
College of Applied Science and Technology (CAST)	*	455	945
College of Imaging Arts and Sciences (CIAS)	2,056	585	1,233
Saunders College of Business (SCB)	1,996*	205	613
Kate Gleason College of Engineering (KGCOE)	1,245*	136	178
College of Liberal Arts (COLA)	1,628	828	3,266
College of Health Sciences and Technology (CHST)	419	104	377
College of Science (COS)	7,037*	613	1,869
Golisano College of Computing and Information Sciences (GCCIS)	2,178*	274	566
Total	**16,559**	**3,200**	**9,047**

Megan Bernella, a Liberal Arts student from Austin, Texas; Marlyn Calderon, a Business student from New York, N.Y.; and Andre Robinson, a Business Technology student from Randolph, Mass., participate in the Red Flag Campaign, a public awareness effort in February addressing dating violence.

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* Hours for CAST are reported under SCB, KGCOE, COS and GCCIS.

Student Access Services

NTID was an early innovator in access services, initiating short-term training programs for educational interpreters in the 1970s that have grown into a large baccalaureate degree program.

Kathy Gillies is one of 117 sign language interpreters who, along with 52 real-time captionists, provides access services to meet the needs of deaf and hard-of-hearing students at RIT/NTID. Here, she interprets for hearing and deaf students enrolled in a Deaf Art and Cinema course.

Student Access Services Highlights

NTID provides an access services system to meet the needs of a large number of deaf and hard-of-hearing students enrolled in baccalaureate and graduate degree programs in RIT's other colleges as well as students enrolled in NTID programs who take courses in the other colleges of RIT. Access services also are provided for non-academic events and activities throughout the RIT community.

Educational access services that NTID offers for deaf and hard-of-hearing students enrolled in mainstream RIT classes include:

- **Sign language interpreting** provided by 117 staff members—the largest staff of professional interpreters of any college program in the world. Students also may request interpreters for non-academic activities such as athletic events, religious services, student government meetings and guest presentations.
- **Real-time captioning** provided as a real-time access service for students who benefit from English text more than sign language interpreting. A staff that has grown to 52 real-time captionists was trained here in C-Print®, a computer-assisted system developed at NTID for transcribing in real time what teachers and students say in class. Real-time captioning also is provided for special events and out-of-class needs.
- **Classroom notetaking services** provided by trained student notetakers whose classroom notes are uploaded onto a website for easy access by deaf and hard-of-hearing students.

Other access services provided to NTID students include:

- **Captioned classroom video materials.** NTID, in conjunction with RIT, provides captioned video materials for use in classrooms.
- **Assistive Listening Systems.** NTID loans FM systems to students who benefit from such systems in classrooms.

NTID also works with each of RIT's colleges to provide the support needed to implement strategies for maximizing access to campus services for deaf students. The Provost's Deaf Access Committee and other groups address the needs of deaf and hard-of-hearing RIT students and ensure that RIT is in full compliance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act for educational accommodation. The institutional position on accessibility for deaf and hard-of-hearing people includes the following strategies, for which NTID provides support:

- Sharing responsibility for providing workshops, training and information to assist faculty in the other RIT colleges in effectively teaching deaf and hard-of-hearing students.
- Providing needed training and ensuring that academic and administrative service areas that interact with students have staff with a range of communication skills and strategies (sign language, computer terminal or other written interaction) to communicate effectively with deaf students.
- Ensuring that all audio and visual media produced at RIT are captioned, and that existing materials used in classrooms are captioned whenever possible.
- Encouraging RIT to advocate for the captioning of audio and visual materials, teleconferences and other educational media produced externally to RIT.

NTID was an early innovator in access services, initiating training programs for educational interpreters in the 1970s that have grown from small, short-term certificate-level training into a large baccalaureate degree program. Staff interpreters from these programs and others have built careers at NTID, developing specialized expertise across the diverse technologies of RIT's curriculum. The average tenure of a staff interpreter, as of fall 2013, is greater than 15 years. This experienced resource, and similar expertise developing now in real-time captioning, affords NTID students unparalleled access to the array of educational opportunities RIT provides. This year, Access Services expanded employment and mentorship of student and apprentice interpreters, sharing the exceptional resources and expertise of NTID with interpreters developing as specialists in post-secondary education. Continued innovation and application of new technologies promise even better services in years ahead.

Access Services: Interpreting, Notetaking and Real-Time Captioning

Interpreting, notetaking and real-time captioning services are provided to allow deaf and hard-of-hearing students equal access to information in classes offered by other RIT colleges.

RIT College	Interpreting Hours	Notetaking Hours	Real-Time Captioning Hours	Class Sections Served
College of Applied Science and Technology (CAST)	10,985	6,248	1,094	344
Saunders College of Business (SCB)	10,053	6,017	1,211	199
Golisano College of Computing and Information Sciences (GCCIS)	9,417	5,965	2,144	224
Kate Gleason College of Engineering (KGCOE)	2,664	2,062	552	86
College of Imaging Arts and Sciences (CIAS)	17,342	12,119	2,785	471
College of Liberal Arts (COLA)	30,786	17,701	5,035	613
College of Science (COS)	25,205	16,144	4,765	613
NTID Students with Approved Accommodations*	1,351	917	0	55
Other Courses**	3,954	498	196	218
Total Hours	**111,757**	**67,671**	**17,782**	**2,823**

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*　NTID students in associate degree programs who were approved for interpreting and/or notetaking services and/or real-time captioning services due to a secondary disability.
**　Courses taught outside listed colleges: First Year Experience, English Learning Center, Physical Education, etc.

Access Services: Interpreting Services

In-class services include interpreting support in all colleges of RIT as well as student/professor meetings, field trips and other activities when required for credit-bearing courses. Non-class services include student use of interpreting services in student government, other organizations, judicial proceedings, emergency situations and extra-curricular programs. Administrative use includes support for RIT faculty/staff, visiting dignitaries and speakers targeted mainly for faculty/staff audiences.

FY 2013	In-Class			Non-Class Activity		Administrative Activity		Overall Total	
	Hours	%*	Sections						
Fall	34,789	79%	713	7,048	16%	1,942	4%	43,779	100%
Winter	35,936	81%	748	7,021	16%	1,578	4%	44,535	100%
Spring	36,626	80%	741	7,453	16%	1,759	4%	45,838	100%
Summer	4,406	41%	60	5,356	49%	1,089	10 %	10,851	100%
FY 2013 Total	**111,757**	**77%**	**2,262**	**26,878**	**19%**	**6,368**	**4%**	**145,003**	**100%**
FY 2004 Total	80,407	82%		12,813	13%	5,300	5%	98,520	100%
FY 2005 Total	82,265	83%		11,349	11%	5,561	6%	99,175	100%
FY 2006 Total**	89,748	84%		12,049	11%	5,460	5%	107,257	100%
FY 2007 Total**	80,417	73%	1,617	23,757	21%	6,666	6%	110,840	100%
FY 2008 Total	84,211	74%	1,869	23,620	21%	6,402	5%	114,233	100%
FY 2009 Total	80,475	73%	1,831	22,616	21%	6,527	6%	109,618	100%
FY 2010 Total	85,111	73%	1,848	24,993	21%	6,678	6%	116,782	100%
FY 2011 Total	98,032	75%	2,006	25,592	19%	7,441	6%	131,065	100%
FY 2012 Total	97,232	75%	2,032	25,766	19%	6,902	6%	129,900	100%

* Percentages are rounded to the nearest percent.
** The separation of hours between the "In-Class" and "Non-Class Activity" categories was revised from 2006 to 2007, meaning a comparison between the two years is not meaningful.

Access Services: Real-Time Captioning (C-Print®) Services

In keeping with NTID's *Strategic Vision 2010* and *Strategic Decisions 2020*, an increasing supply of real-time captioning is being made available for those students taking courses in the other RIT colleges. Students who believe they would benefit more from a text-based service may request it instead of sign language interpreting as their means of real-time access. Real-time captioning is provided via C-Print® in classroom situations; these services are provided on occasion for out-of-class activities such as graduation ceremonies.

The growth in the provision of real-time captioning from FY 2004 to FY 2013 below is reflective of strategic planning.

FY 2013	In-Class			Non-Class Activity		Administrative Activity		Overall Total	
	Hours	%*	Sections						
Fall	6,157	99%	210	56	1%	14	0%	6,227	100%
Winter	5,519	100%	191	22	0%	3	1%	5,544	100%
Spring	5,620	99%	162	41	1%	19	0%	5,680	100%
Summer	486	60%	14	146	18%	180	15%	812	100%
FY 2013 Total	**17,782**	**98%**	**577**	**265**	**1%**	**216**	**1%**	**18,263**	**100%**
FY 2004 Total	3,140	100%	82	6	0%	0	0%	3,146	100%
FY 2005 Total	7,325	98%	186	160	2%	0	0%	7,485	100%
FY 2006 Total	9,198	98%	231	150	2%	2	0%	9,350	100%
FY 2007 Total	15,074	98%	426	288	2%	78	0%	15,440	100%
FY 2008 Total	16,186	97%	496	356	2%	180	1%	16,722	100%
FY 2009 Total	17,330	95%	538	255	1%	515	3%	18,168	100%
FY 2010 Total	18,977	97%	618	203	1%	313	2%	19,493	100%
FY 2011 Total	21,068	98%	696	223	1%	202	1%	21,493	100%
FY 2012 Total	19,092	98%	592	254	1%	171	1%	19,516	100%

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* Percentages are rounded to the nearest percent.

Access Services: Staff Training

NTID Access Services offers interpreter, notetaker and C-Print® training to its staff and student employees. Notetaker training is provided to hearing RIT students hired to take classroom notes for deaf and hard-of-hearing students taking classes in the other colleges of RIT. Staff members enjoy In-Service Training courses, seminars and workshops throughout the year designed to increase knowledge and skills.
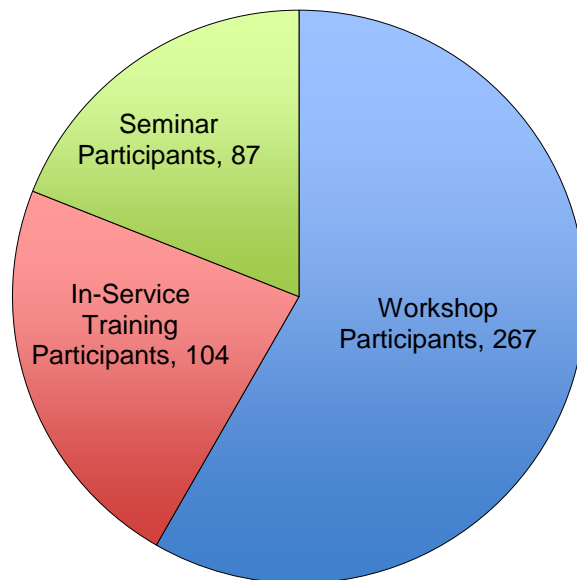
Programs	Number Enrolled				
	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
In-Service Training for Interpreters	37	74	63	132*	104
Notetaker Training	223	346	359	277	262
Real-Time Captionist Training	0	7	6	0	6
Total	**260**	**427**	**428**	**409**	**372**

Access Services Professional Development Programs
Workshops: 267
Seminars: 87
In-Service Trainings: 104

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* In 2012, 14 shorter workshops were provided to a total audience of 266 staff members in addition to the quarter-long IST courses reported above.

Persistence, Graduation & Employment

Of NTID's FY 2012 graduates, 93 percent of those seeking employment were employed in 2013.

Jessica Ziomek, from Manlius, N.Y., celebrates the receipt of her bachelor's degree in ASL-English Interpretation with her family at RIT/NTID's 2013 Commencement.

Persistence, Graduation and Employment Highlights

Preparing deaf and hard-of-hearing students to live and work in the mainstream of society is the primary reason NTID was established in 1965. Prior to 1965, there were few postsecondary educational opportunities for deaf and hard-of-hearing students and virtually none in technical studies. As a result, nearly 85 percent of deaf adults in the early 1960s found themselves in unskilled or semi-skilled jobs.

Today, NTID's highly successful academic programs and services are leading graduates to successful careers in a broad range of fields. Over the past five years, 91 percent of graduates who chose to enter the labor force found employment that is commensurate with the level of their education and training. Figures for 2012 graduates show that 93 percent, or 124 of the 133 students who chose to enter the workforce, found employment.

These statistics reflect the quality of an NTID education and its value. According to a study conducted by NTID with the Social Security Administration (SSA) in 2013, deaf and hard-of-hearing graduates from NTID far out earn those graduating from other institutions of higher education. Specifically, at age 50, $58,000 is the median salary for those graduating from NTID with a bachelor's degree, which is $17,000 more than those graduating from NTID with an associate degree, and $37,000 more than those graduating from other institutions of higher education. NTID deaf and hard-of-hearing graduates also experience higher rates of employment over their lifetimes than those graduating from other institutions of higher education.

Quality employment and higher earnings accrue to college graduates. Generally, students who withdraw fare no better earnings-wise than their peers who never went to college. With this in mind, NTID employs a variety of innovative strategies to improve persistence. All first-year students take Freshman Seminar, which undergoes continuing curriculum revisions to better address the challenges that these students experience. Students who appear to have a higher risk of attrition during their first year are identified and work closely with their Freshman Seminar instructor, academic counselor and academic chairperson. NTID requires all first-year students to meet with their academic advisor to review their program requirements, identify courses for the following semester and review their individual English placement and plans for degree completion.

NTID has a retention committee dedicated to studying persistence issues and addressing faculty, staff and student concerns related to this issue. As a result, a peer mentorship program was developed in several of the technical programs to provide a smooth transition for first-year students in their programs. In fall 2009 (FY 2010), NTID started a Step Up program designed to mentor Black or African American, Hispanic of any race and American Indian or Alaska Native first-year students in the Career Exploration Studies program. The goal for this program is to provide academic/social support for these students, encourage them to become peer mentors themselves and improve their persistence rate from their second year of study and beyond.

Persistence is a continuing concern for colleges with "open" admissions policies like NTID. However, the college fares quite well; its overall graduation rate for students entering degree programs more closely approximates the rate in colleges and universities with higher or more "traditional" entrance requirements. Notwithstanding these positive comparisons, NTID continues to work at improving its persistence to graduation rate.

For AY 2012-13, RIT/NTID awarded 424 associate, bachelor's and master's degrees as well as certificates to students. Of those graduates, 3 percent earned certificates, 36 percent earned associate degrees, 52 percent earned bachelor's degrees and 9 percent earned master's degrees. Twenty-eight percent of degrees were granted to minority students.

Persistence, Graduation and Employment Highlights (continued)

The NTID Office of Alumni Relations plans and implements strategies for engaging alumni constituents through social and professional development events and other activities, both campus-based and in targeted regions around the country. With counsel from the NTID Alumni Association Board of Directors, a group of 21 dedicated alumni volunteers work to build and maintain connections between NTID and its 7,596 alumni. More than 800 alumni and guests participated in various activities including receptions, workshops and networking events throughout the year. Also, in October 2013, more than 500 alumni from RIT/NTID and their families came to campus for the NTID 45th Anniversary Reunion.

Alumni participating in NTID's 45th Anniversary Reunion visit the NTID history timeline and recall members of NTID's charter class.

First-Year Persistence Rates

Since there is variability from year to year in terms of persistence rates for entering cohorts of students, NTID monitors and reports annually on persistence using a three-year moving average. The table below presents information about three-year moving averages for first-time, full-time, degree-seeking NTID-supported undergraduate students since 2000. Thus, the most recent three-year average is reported for the 827 students who were first-time, full-time, degree-seeking in the years 2010, 2011 and 2012. Data in the table below indicate that for the most recent three-year period, 72 percent of new students persisted to the second year. Disaggregated rates can be found on the following page.

First-Year Persistence Rates*			
Three-Year Entry Cohort	Number in Cohort	Number Registering Second Year	Overall Persistence Rate
2000, 2001, 2002	674	479	71%
2001, 2002, 2003	646	464	72%
2002, 2003, 2004	625	442	71%
2003, 2004, 2005	594	418	70%
2004, 2005, 2006	607	422	70%
2005, 2006, 2007	697	498	71%
2006, 2007, 2008	804	607	75%
2007, 2008, 2009	861	650	74%
2008, 2009, 2010	844	627	74%
2009, 2010, 2011	780	577	74%
2010, 2011, 2012	827	597	72%

* Three-year averages for first-time, full-time, degree-seeking students registering for fall quarter. ASL-English Interpretation and MSSE students are not included.

Persistence to Graduation for Deaf and Hard-of-Hearing Students

Nationally, four-year public and private colleges have a first-year persistence rate of 79 percent. This compares to an 88 percent persistence rate for first-year NTID students in a major across four-year degrees. Students admitted to NTID have ACT composite scores that are comparable to students in two-year colleges with open admissions policies; yet, first-year persistence rates at NTID are comparable with those of institutions admitting students who are far better prepared academically. The table below also indicates that NTID's graduation rates (36 percent for students admitted into sub-bachelor-level programs and 61 percent for those in bachelor-level programs) are comparable to public colleges with traditional or selective admission standards.

National and NTID Persistence Rates		
Colleges	First-Year Persistence Rate*	Graduation Rate*
Two-Year Institutions	60%	31%
NTID Sub-Baccalaureate**	**68%**	**36%**
Four-Year Institutions	79%	59%
Other RIT Colleges (NTID Baccalaureate)**	**88%**	**61%**

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*   Source of National Estimates: www.nces.ed.gov
**   NTID calculates first-year persistence and graduation rates using a three-year moving average.

Degrees Granted: FY 2009 to FY 2013

During the past five years, NTID has awarded an average of 331 degrees annually. The number for FY 2013 was 424. During this same time frame, the number of students achieving bachelor's and master's degrees has increased. This change is indicative of the demands being made by deaf and hard-of-hearing persons for access to higher-level programs and NTID's success in shifting its resources to accommodate the increasing numbers of students seeking higher degrees. In FY 2013, 90 of the 424 graduate and undergraduate degrees and certificates (28 percent) were granted to students from minority backgrounds.*

Five different degree levels are awarded to deaf and hard-of-hearing graduates of RIT.

## Sub-Baccalaureate Certification

1. An *Associate in Occupational Studies* (AOS) degree requires 57-69 quarter credit hours of technical instruction and permits students to enter their careers directly upon graduation. In addition to completing technical courses satisfactorily, students must complete a specific number of credit hours in English, communication, general education and mathematics.

2. An *Associate in Applied Science* (AAS) degree permits students to enter their careers directly upon graduation, or in many cases, to transfer to upper-division programs in the other colleges of RIT. Completion of this degree requires 57-69 quarter credit hours of technical instruction. In addition to the technical courses, students must complete 20 quarter credit hours through RIT's College of Liberal Arts and other required credit hours as determined by the program of study.

3. The *Associate in Science* (AS) degree is an associate+bachelor's degree for students seeking admission to bachelor-level studies. This degree requires completion of 90-100 quarter credit hours, half of which must be from liberal arts and science; the rest are from technical and professional areas.

Bachelor's/Master's Degrees

4. A *Bachelor's* degree is awarded to students who complete all required courses to graduate from a four- or five-year program in one of the RIT colleges. A bachelor's degree requires completion of 180-200 quarter credit hours.

5. A *Master's* degree indicates that a student has completed a minimum of 45 quarter credit hours beyond the baccalaureate level in any RIT master's degree program.

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* Minority status is unknown for 104 of these 424 graduates or the graduate has international visa status.
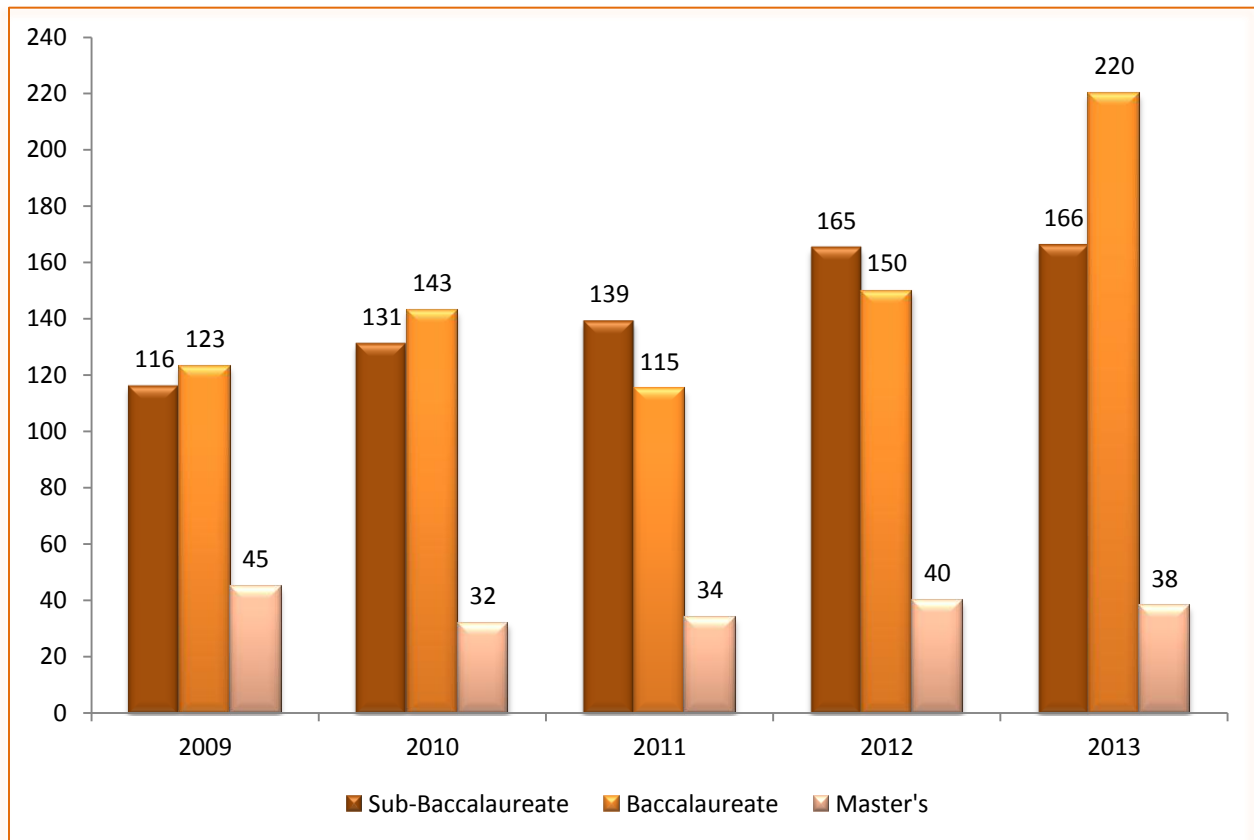
	FY 2009	**FY 2010**	**FY 2011**	**FY 2012**	**FY 2013**
Sub-Baccalaureate*	40.2%	40.9%	48.3%	46.5%	39.2%
Baccalaureate*	44.1%	43.3%	39.9%	42.3%	51.8%
Master's**	15.7%	15.8%	11.8%	11.2%	9.0%

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*   This number includes hearing graduates from the ASL-English Interpretation programs.
**   This number includes deaf and hard-of-hearing graduates from RIT, as well as deaf, hard-of-hearing and hearing graduates from the Master of Science program in Secondary Education.

Graduates by Program Areas

Of all the degrees awarded to NTID students on the RIT campus in FY 2013, 53 percent were through programs offered by NTID and 47 percent through the other colleges of RIT. Historically, 67 percent of the degrees have been awarded from NTID and 33 percent from the other RIT colleges. This change is the result of increased demand by students for entry into bachelor-level programs, better articulation between NTID and RIT curricula and improved and expanded access/support services.

Data on minority status of these graduates appear in the Diversity and Pluralism section.

	FY 2013		CUMULATIVE* (FY 1970 – FY 2013)	
	Number of Graduates	Percentage of Graduates	Number of Graduates	Percentage of Graduates
NTID				
Career-Focused and Associate+Bachelor's Degrees	156	37%	4,096	54%
ASL-English Interpretation Bachelor	52	12%	199	3%
ASL-English Interpretation Associate	1	0%	464	6%
ASL-English Interpretation Certificate	0	0%	8	0%
Master of Science in Secondary Education	17	4%	293	4%
Subtotal NTID	**226**	**53%**	**5,060**	**67%**
Other Colleges of RIT**				
College of Applied Science and Technology	34	8%	573	8%
Saunders College of Business	22	5%	375	5%
Golisano College of Computing and Information Sciences	17	4%	270	4%
Kate Gleason College of Engineering	4	1%	84	1%
College of Health Sciences and Technology	10	2%	11	0%
College of Imaging Arts and Sciences	24	6%	549	7%
College of Liberal Arts	28	7%	437	6%
College of Science	19	4%	154	2%
Multidisciplinary and University Studies	40	10%	83	1%
Subtotal Other Colleges	**198**	**47%**	**2,536**	**33%**
Total	**424**	**100%**	**7,596**	**100%**

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* Graduates are summarized uniquely according to their most recent, highest level of degree completion.
** Includes bachelor's and master's degrees granted by the other colleges of RIT, as well as some associate degrees.

Time Required to Complete a Degree

With the exception of deaf and hard-of-hearing students directly admitted to an RIT college other than NTID, students who are deaf or hard-of-hearing take a longer time to complete a degree than hearing students. There are many reasons for this, not the least of which is academic preparedness. Deaf and hard-of-hearing students admitted to NTID generally are academically behind their 18- to 19-year-old hearing counterparts. Many enter NTID with ACT composite scores of less than 16 and reading comprehension and language skills between

7th- and 9th-grade levels. Therefore, considerable time and effort is devoted to remediation and career exploration. In addition, most programs have between one- and three-quarter requirements for cooperative education experiences (paid employment in a field related to study), while some programs require more than three quarters of cooperative education. This can extend program length by approximately one year. The table below shows the average number of active quarters and years elapsed between entry and date of degree.

Time Required to Complete a Degree: Graduates FY 2013		
First Degree Category	Average Active Quarters*	Average Active Years*
Bachelor's degree	16.1	4.0
AS/AAS degree	13.2	3.3
AOS degree	12.3	3.1

NTID President Gerry Buckley congratulates Scott Farrell, of North Tonawanda, N.Y., on completing his associate degree in Computer-Integrated Machining Technology. He is the recipient of the NTID Presidential and Marine Corps scholarships and currently is pursuing a bachelor's degree in Manufacturing Engineering Technology at RIT.

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* Does not include quarters when students were withdrawn or on leave of absence.

Graduation and Employment for Recent Graduates

Employment rates are calculated using the methodology of the Bureau of Labor Statistics (BLS) in its Current Population Survey (household survey), which provides information on the labor force, employment and unemployment. As the BLS defines it, "The civilian labor force is the sum of employed and unemployed persons. Those not classified as employed or unemployed are not in the labor force. The unemployment rate is the number unemployed as a percent of the labor force. The labor force participation rate is the labor force as a percent of the population..."

NTID's labor force is the sum of those graduates who are employed and those who want to be employed. Those who do not want to be employed because they choose to continue to pursue bachelor's and master's degrees at RIT or at some other institution of higher education, or choose to become homemakers, or to be idle temporarily while traveling, etc., are not in the labor force. During FY 2012*, 296** deaf and hard-of-hearing students graduated, and 133 chose to enter the labor force. One hundred twenty-four were employed, while nine were unable to find employment. Therefore, 93.23 percent (124/133) found employment. NTID's employment rate over the past five years as calculated above is 91 percent. Of the 163 remaining graduates from 2012, 124 are continuing their education toward advanced degrees either at RIT or elsewhere, 14 are not looking for employment, and 25 have an unknown status.

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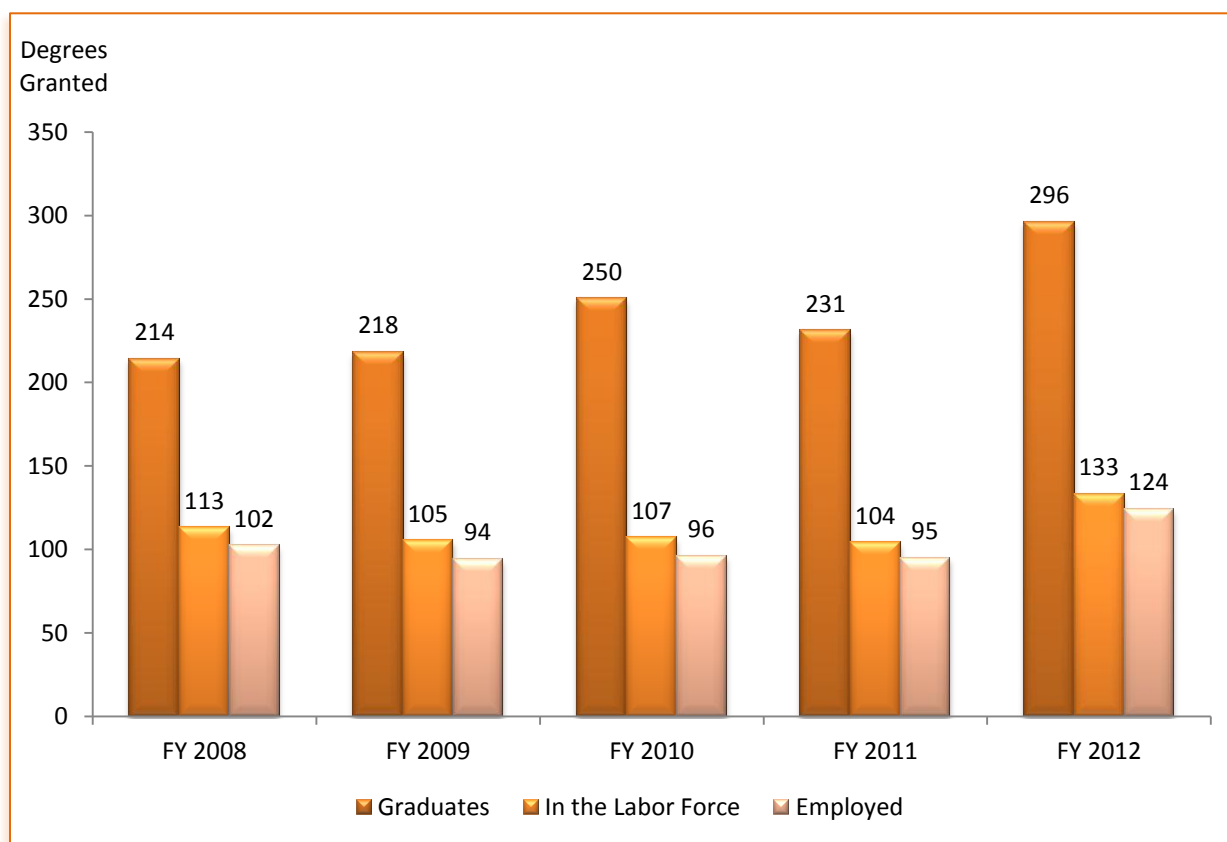
* As of the writing of this report, the employment information for 2013 is incomplete; therefore, NTID reports employment rates of 2012 graduates.

** Students are only counted once in the case of multiple degrees, and the total number of graduates does not include degrees in the ASL-English Interpretation program, the Master of Science program in Secondary Education or any certificates awarded.

Employment Services for Deaf and Hard-of-Hearing Students and Graduates

Prior to students' cooperative work experiences, NTID's Center on Employment (NCE) offers a Job Search Process course to support student learning about how to organize and conduct job search activities. Students utilize the extensive NCE website and print resources to research prospective employers, identify appropriate employment opportunities and obtain information about applying for a job and working. During the academic year, employment advisors meet with students at different locations on campus and reach out to students at different NTID events. NCE staff also provide job-seeking advice to students and graduates through email, instant messaging and videophone.

During FY 2013:

- One-hundred thirty-six NTID students were enrolled in 10 sections of Job Search Process.

- NCE personnel provided more than 3,000 hours of student and graduate employment advising.

- Students sought individualized job search assistance at various campus locations.

- Eighteen students took advantage of two sessions offered to review and advise on résumés.

- The 12th annual NTID Job Fair was held in October 2012 with 38 employers attending and more than 300 students and alumni participating.

- To inform students about NCE services, NCE participated in several interactive events each quarter for students, along with other NTID departments and student groups.

- Four students from various baccalaureate programs went to Dow Chemical Company in Midland, Mich., to talk about their cooperative work experiences with senior managers who are candidates for the company's top global positions.

Catholic Health Initiatives, IBM and the Federal Deposit Insurance Corporation are just some of the featured employers at the NTID Job Fair, representing both the private and public sectors.

Persistence, Graduation & Employment
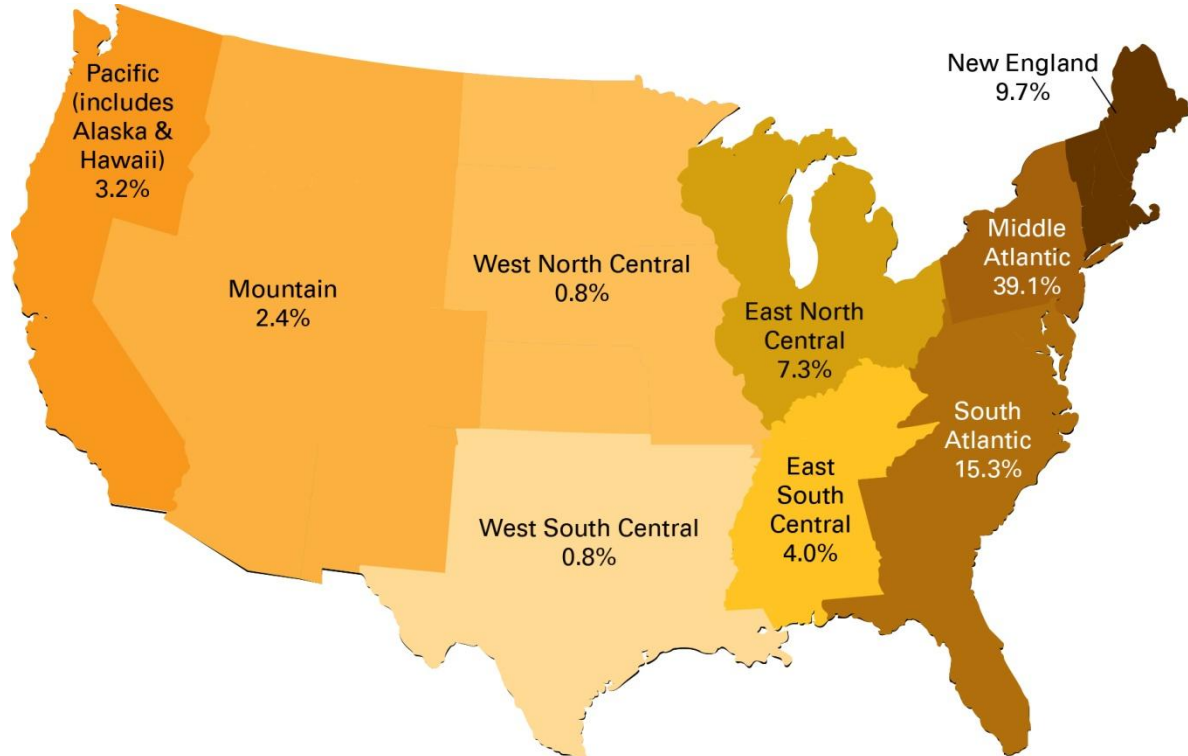
Where Recent Graduates Are Working

In FY 2012, 38 percent of U.S. NTID graduates accepted jobs in their home states as their first jobs after graduation, while 23 percent found employment in the Rochester area and 39 percent in other areas of the country. The majority of graduates are employed in the eastern parts of the country, areas that have been strong sources of applicants for NTID.

	Percent of Placed Graduates				
	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012*
Area					
Rochester	21%	18%	17%	17%	23%
Home State	29%	33%	24%	43%	38%
Other	50%	49%	59%	40%	39%
Total	**100%**	**100%**	**100%**	**100%**	**100%**
Number of Graduates Placed	102	94	96	95	124

FY 2012 Graduate Placement by Region**

Pacific (includes Alaska & Hawaii) 3.2%

Mountain 2.4%

West North Central 0.8%

East North Central 7.3%

New England 9.7%

Middle Atlantic 39.1%

South Atlantic 15.3%

West South Central 0.8%

East South Central 4.0%

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* Placement numbers for FY 2013 graduates are incomplete and will be reported next year.
** In addition, 2.4 percent are working internationally and 15.3 percent are working in unknown locations.

Employment by Sector of the Economy

Of the last cohort of graduates tracked for employment, 65 percent have acquired jobs in business and industry, 24 percent in education/non-profit and 11 percent in government.

Sector	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012*
Business/Industry	71%	59%	57%	54%	65%
Education/Non-Profit	20%	21%	27%	31%	24%
Government	9%	20%	16%	15%	11%
Total	**100%**	**100%**	**100%**	**100%**	**100%**

Paul De Sanctis from Orbital Sciences Corporation talks with Zachary Meadors, an Electrical Engineering Technology major from Thiensville, Wisc., about various employment opportunities.

* Placement numbers for FY 2013 graduates are incomplete and will be reported next year.

Occupations of Recent Graduates: Entry Status by Labor Category

FY 2012 deaf and hard-of-hearing graduates entered a wide variety of jobs. The following table reports on the occupations of employed alumni using the Standard Occupational Coding system (SOC) used by the U.S. Department of Labor. Occupations are grouped into 22 categories plus military.

Percentages among the various categories are somewhat different than seen in the *FY 2012 Annual Report*. This year shows a large increase relative to previous years for employment in the Office and Administrative Support and Life, Physical and Social Science categories of occupations. There was also a substantial increase this year in the percentage employed in Architecture and Engineering. However, there was a sizable decrease in percentages employed in Computer and Mathematics occupations.

SOC Categories of Working 2012 Graduates*	%	Sample Job Titles Held by 2012 Graduates within Category
Office & Administrative Support	28.92%	Office Clerk, Indexer, Program Assistant, Accounts Maintenance Clerk, Accounting Technician, Payroll Assistant
Arts, Design, Entertainment, Sports & Media	18.07%	Graphic Arts Intern, Design Intern, Product Designer, Graphic Design Assistant
Life, Physical & Social Science	12.05%	Research Lab Technician, Molecular Genetics Lab Intern, Researcher
Architecture & Engineering	10.85%	Designer EIT, Network Engineer, Design Engineer
Production Occupations	8.44%	Machine Tool Operator, CNC Operator, Machinist
Computer & Mathematics	7.23%	Web Developer, Help Desk Technician, Software Test Engineer
Business & Financial Operations	6.02%	Requirements Writer, Business Quality Analyst
Sales & Related	2.41%	Assistant
Education, Training & Library	2.41%	Camp Counselor

* Forty of the FY 2012 employed graduates had either unknown job titles or titles too ambiguous for categorization.

SOC Categories of Working 2012 Graduates*	%	Sample Job Titles Held by 2012 Graduates within Category
Installation, Maintenance & Repair	1.20%	Automation Technician
Management Occupations	1.20%	Kitchen Manager
Food Preparation & Serving Related Occupations	1.20%	Kitchen Assistant
Total	**100%**	

Luke Faxon-St. Georges earned a bachelor's degree in Marketing in RIT's Saunders College of Business and now is a business manager with Discovery Communications.

* Forty of the FY 2012 employed graduates had either unknown job titles or titles too ambiguous for categorization.

Occupations of Alumni by Gender and Labor Categories

NTID alumni from graduation years 1994–2009 were surveyed in 2010. The focus was on two distinct groups: those one-to-five years from graduation and those six-to-15 years from graduation. The gender percentages in each occupational category are of the total sample.

The following table reports on the occupations of employed alumni using the Standard Occupational Coding system (SOC) used by the U.S. Department of Labor. Occupations are grouped into 22 major categories plus military.

Percentages of alumni reporting employment in the occupational categories are essentially the same as in the 2007 survey with a few exceptions. Twice as many alumni in the 2007 survey reported employment in Arts, Design, Entertainment, Sports & Media. This is primarily due to the exclusion of interpreters in the 2010 survey. In 2010, the percentage of alumni working in Business & Financial Operations almost doubled compared with the 2007 alumni survey. Also, there were more alumni in Sales and Related, and fewer alumni in Management Occupations.

The shift toward more professional and technical post-graduation employment noted in the 2007 survey seems to be continuing. The next alumni survey will be completed in 2014.

Occupations of Working Alumni*	%	Sample Job Titles Held by Alumni within Category
Education, Training & Library		Professor, Practicum Coordinator, Science Teacher, Itinerant Teacher Assistant, Literacy Instructor, Substitute Teacher
All	20.4%	
One to Five	20.4%	
Six to 15	20.6%	
Male	31.2%	
Female	68.8%	
Computer & Mathematical		System Administrator, Webmaster, Software Developer, Support Technician, Software Test Engineer, Programmer/Analyst, Application Developer
All	13.2%	
One to Five	12.2%	
Six to 15	13.8%	
Male	83.3%	
Female	16.7%	
Business & Financial Operations		Tax Coordinator, Compliance Specialist, Fraud and Loss Analyst, VP Marketing, Deciding Officer
All	11.0%	
One to Five	9.8%	
Six to 15	11.7%	
Male	48.0%	
Female	52.0%	
Community & Social Services		Advocacy Officer, Case Manager, Clinical Coordinator, Independent Living Specialist, Job Coach, Career Consultant, Direct Care Staff
All	9.9%	
One to Five	7.0%	
Six to 15	11.7%	
Male	33.3%	
Female	66.7%	
Office & Administrative Support		Accounting Technician, Administrative Assistant, Inventory Clerk, Receipt Log Clerk, Project Assistant, Rural Letter Carrier, Assistant, Legal Associate, Scheduler Clerk
All	9.2%	
One to Five	8.7%	
Six to 15	9.6%	
Male	38.1%	
Female	61.9%	

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* There were several job categories not represented by any of the graduates: Protective Services; Farming, Fishing & Forestry; Construction & Extraction and Military Services.

Occupations of Working Alumni*	%	Sample Job Titles Held by Alumni within Category
Arts, Design, Entertainment, Sports & Media		Designer, Digital Video Specialist, Exhibit Graphic Designer, Industrial Designer, Media Specialist, Interpreter/Transcriptionist
All	6.2%	
One to Five	7.6%	
Six to 15	5.3%	
Male	32.2%	
Female	67.8%	
Architecture & Engineering		Aerospace Engineer, Machine Designer, Packaging Engineer, Senior Enterprise Architect, Test Technician, Transportation Engineer II, Quality Assurance Analyst
All	5.9%	
One to Five	7.6%	
Six to 15	5.0%	
Male	70.4%	
Female	29.6%	
Production Occupations		Cabinet Maker, Die Builder, Engraving Specialist, Typesetter/QC, Optical Technician, CNC Programmer, Machinist
All	3.7%	
One to Five	1.2%	
Six to 15	5.3%	
Male	82.4%	
Female	17.6%	
Management		Disability Policy Manger, Contracts Administrator, President/Owner, Program Control Officer, Executive Director
All	3.1%	
One to Five	2.9%	
Six to 15	3.2%	
Male	35.7%	
Female	64.3%	
Sales & Related		Customer Service Representative, Customer Service Associate, Representative/Beauty Consultant
All	3.1%	
One to Five	4.6%	
Six to 15	2.1%	
Male	28.6%	
Female	71.4%	
Healthcare Practitioners & Technical Occupations		Emergency Center Medical Coder, Laboratory Technician, Discovery Technologist, Registered Dietician, Sonographer
All	2.8%	
One to Five	3.5%	
Six to 15	2.5%	
Male	23.1%	
Female	76.9%	

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* There were several job categories not represented by any of the graduates: Protective Services; Farming, Fishing & Forestry; Construction & Extraction and Military Services.

Occupations of Working Alumni*	%	Sample Job Titles Held by Alumni within Category
Life, Physical & Social Science		Research Assistant, Project Manager, Research Associate, School Psychologist
All	2.6%	
One to Five	2.3%	
Six to 15	2.5%	
Male	25.0%	
Female	75.0%	
Building and Grounds Cleaning & Maintenance		Custodian, Gardener, Bank Cleaner, Environment Support Service, Rest Area Maintenance
All	2.0%	
One to Five	3.5%	
Six to 15	1.1%	
Male	77.8%	
Female	22.2%	
Personal Care & Service		Pit Crew Keeper, Overnight Residential Counselor, Residential Assistant, Coordinator of Student Programming
All	1.5%	
One to Five	2.3%	
Six to 15	1.1%	
Male	28.6%	
Female	71.4%	
Installation, Maintenance & Repair		PC Technician, Trainer/Installer, Field Technician, Support Technician
All	1.3%	
One to Five	2.3%	
Six to 15	0.7%	
Male	100.0%	
Female	0.0%	
Food Preparation & Serving		Food Production Worker, Chef, Busser/Support Staff
All	1.3%	
One to Five	2.3%	
Six to 15	0.7%	
Male	66.7%	
Female	33.3%	
Legal		Legal Assistant, Paralegal Specialist
All	1.1%	
One to Five	0.0%	
Six to 15	1.8%	
Male	20.0%	
Female	80.0%	

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* There were several job categories not represented by any of the graduates: Protective Services; Farming, Fishing & Forestry; Construction & Extraction and Military Services.

Occupations of Alumni by Gender and Labor Categories (continued)

Occupations of Working Alumni*	%	Sample Job Titles Held by Alumni within Category
Healthcare Support		
All	0.4%	Massage Therapist, Support Professional
One to Five	0.0%	
Six to 15	0.7%	
Male	0.0%	
Female	100.0%	
Transportation & Material Moving		
All	0.4%	Flight Controls Engineer, Assembly/Shipping
One to Five	0.6%	
Six to 15	0.3%	
Male	100.0%	
Female	0.0%	
Job Title Not Specified		
All	0.7%	
One to Five	1.2%	
Six to 15	0.3%	
Male	33.3%	
Female	66.7%	

Robb Dooling, a Computer Science major from Omaha, Neb., and Amie Sankoh, a Laboratory Science Technology major from Dallas, Ga., show off their invention, the Volta Tracker, second prize winner in the Next Big Idea competition, at Imagine RIT. *The Volta Tracker will help locate lost hearing aids or cochlear implants. The students were awarded $3,000 from ZVRS to pursue this invention.*
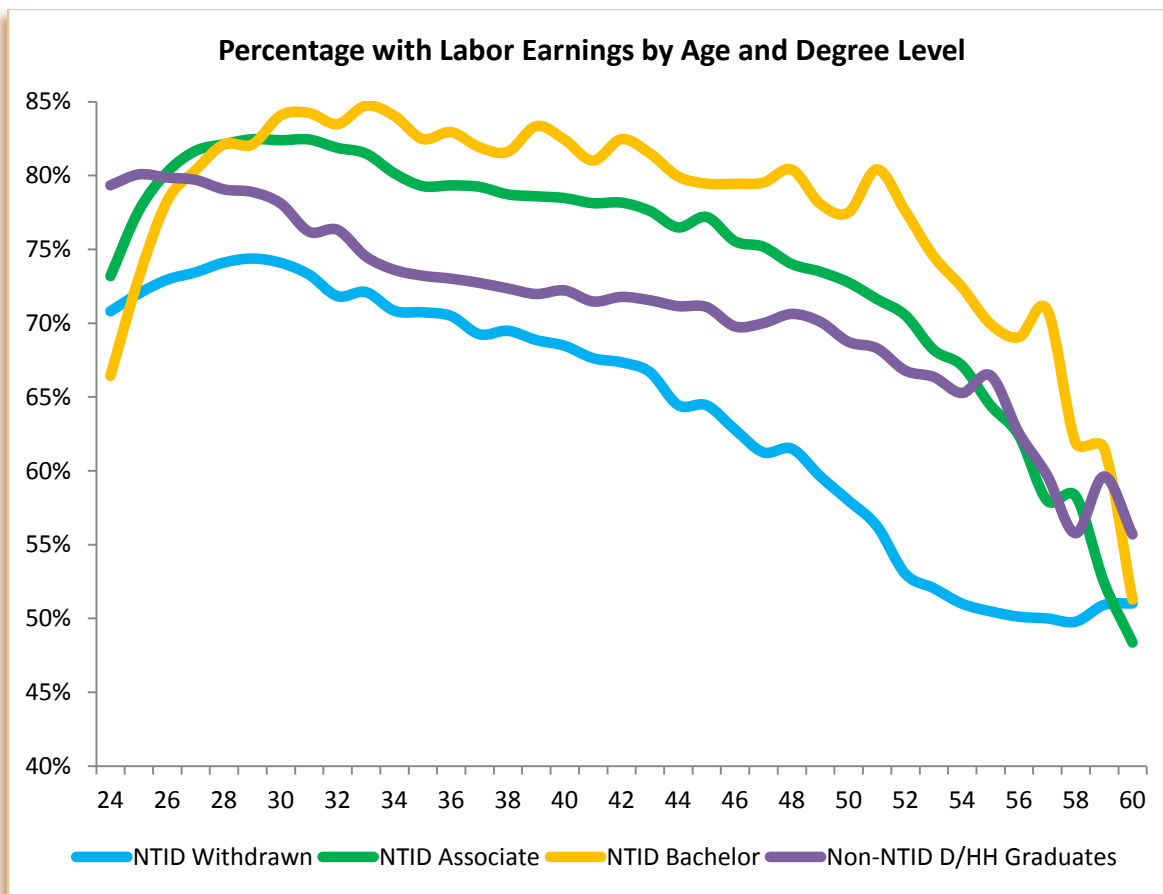

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* There were several job categories not represented by any of the graduates: Protective Services; Farming, Fishing & Forestry; Construction & Extraction and Military Services.

Persistence, Graduation & Employment

Labor Force Status and Earnings of Alumni

The figures below represent the changing employment conditions of deaf and hard-of-hearing alumni from age 24 to 60. Data represented in these figures are from a 2012 study with the Social Security Administration and Cornell University. Findings indicate that individual graduates benefit significantly from the curricula offered through NTID, regardless of graduating.

However, within the NTID alumni population, the magnitude of the benefit does depend on educational attainment. Deaf and hard-of-hearing graduates from RIT show the highest percentage generating income across the majority of working years, as compared with those deaf and hard-of-hearing graduates from other institutions of higher education.

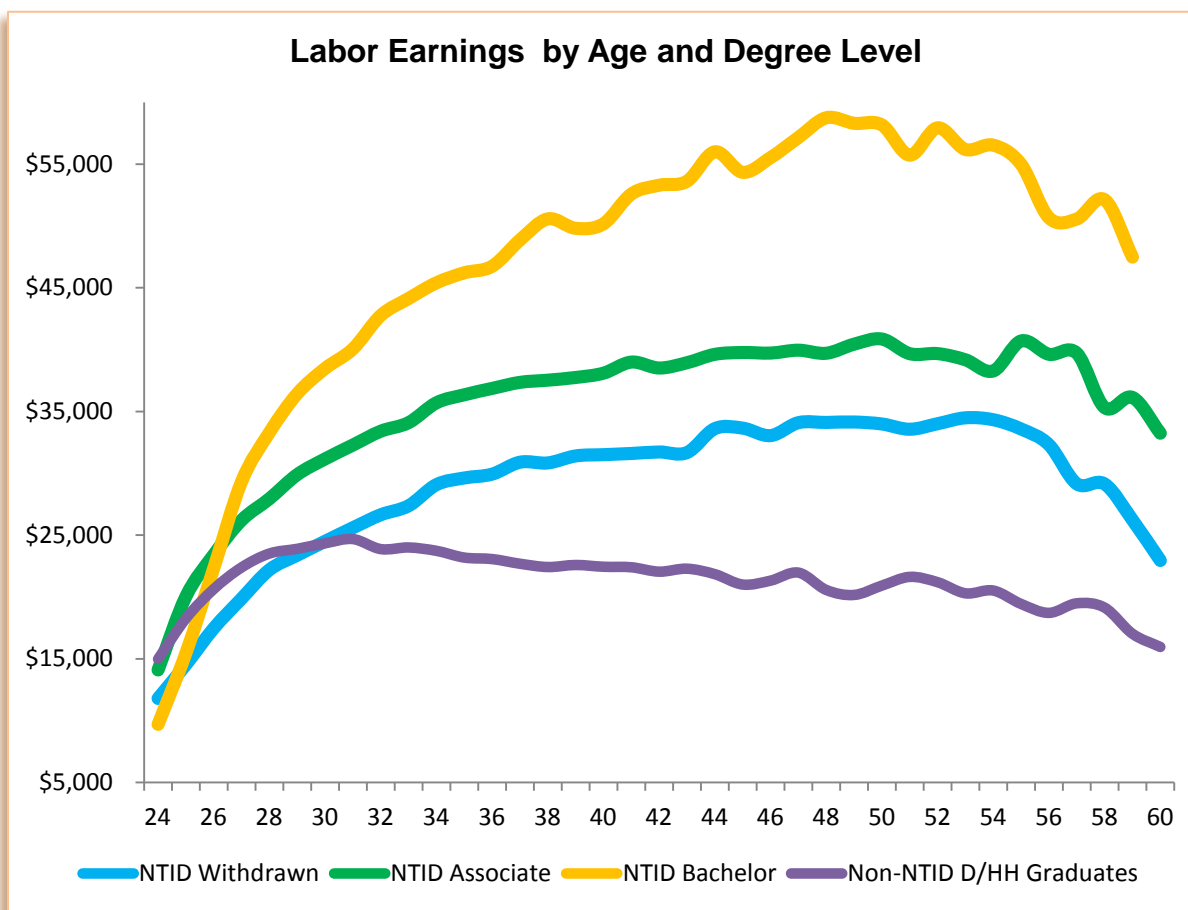**Percentage with Labor Earnings by Age and Degree Level**

Note: From a 2012 collaborative research study conducted with the Social Security Administration and Cornell University. To accomplish this, NTID forwarded a data file with approximately 16,000 cases to the Social Security Administration. Four study groups were defined by degree attainment: 1) Deaf and hard-of-hearing graduates who completed a bachelor's degree from RIT (NTID Bachelor); 2) Deaf and hard-of-hearing associate degree earners from NTID (NTID Associate); 3) Deaf and hard-of-hearing individuals who attended RIT/NTID, but withdrew prior to degree completion (NTID Withdrawn); and 4) Deaf and hard-of-hearing graduates from other institutions of higher education (Non-NTID D/HH Graduates).

Labor Force Status and Earnings of Alumni (continued)

Recent research in collaboration with the Social Security Administration and Cornell University demonstrates the impact that an RIT/NTID education has on producing income for various categories of individuals. At age 50, NTID deaf and hard-of-hearing bachelor's degree graduates earn on average $17,000 more than those with sub-bachelor's degrees; who in turn earn $7,000 more than those who withdrew prior to degree completion from NTID; who earn $13,000 more than deaf and hard-of-hearing graduates from other institutions of higher education. Increased earnings result in greater federal tax contributions.

Labor Earnings by Age and Degree Level

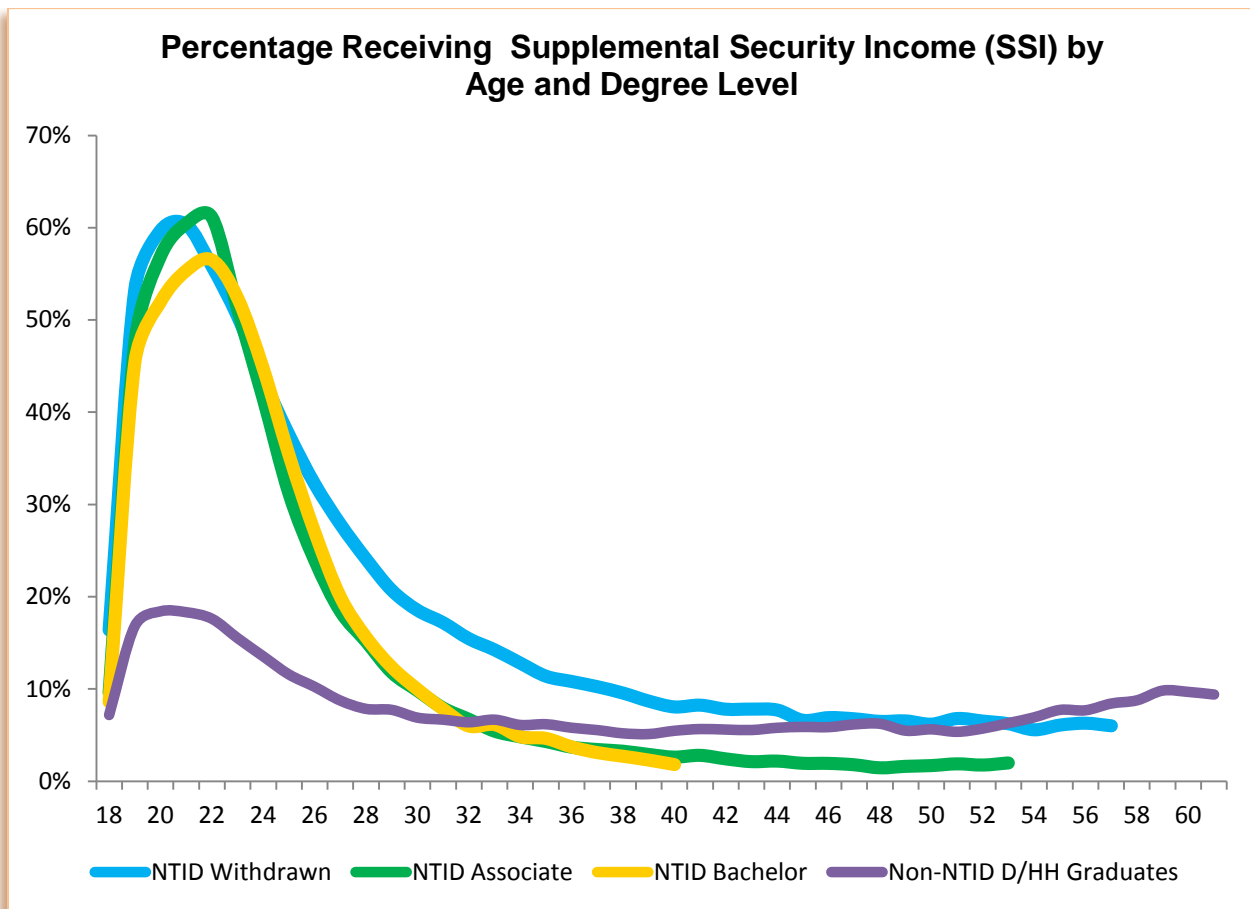Legend: NTID Withdrawn, NTID Associate, NTID Bachelor, Non-NTID D/HH Graduates

Note: From a 2012 collaborative research study conducted with the Social Security Administration and Cornell University. To accomplish this, NTID forwarded a data file with approximately 16,000 cases to the Social Security Administration. Four study groups were defined by degree attainment: 1) Deaf and hard-of-hearing graduates who completed a bachelor's degree from RIT (NTID Bachelor); 2) Deaf and hard-of-hearing associate degree earners from NTID (NTID Associate); 3) Deaf and hard-of-hearing individuals who attended RIT/NTID, but withdrew prior to degree completion (NTID Withdrawn); and 4) Deaf and hard-of-hearing graduates from other institutions of higher education (Non-NTID D/HH Graduates).

Effect of College Graduation on Reduction in SSI and SSDI Payments

Recent research in collaboration with the Social Security Administration and Cornell University shows the role that the completion of a college degree plays in reducing dependence on continuing federal support. These differences exist for both the Supplemental Security Income (SSI) and the Social Security Disability Insurance (SSDI) programs. At age 40, NTID deaf and hard-of-hearing graduates collect SSI at a rate of less than 2 percent, as compared to 8 percent for deaf and hard-of-hearing graduates from other institutions of higher education.

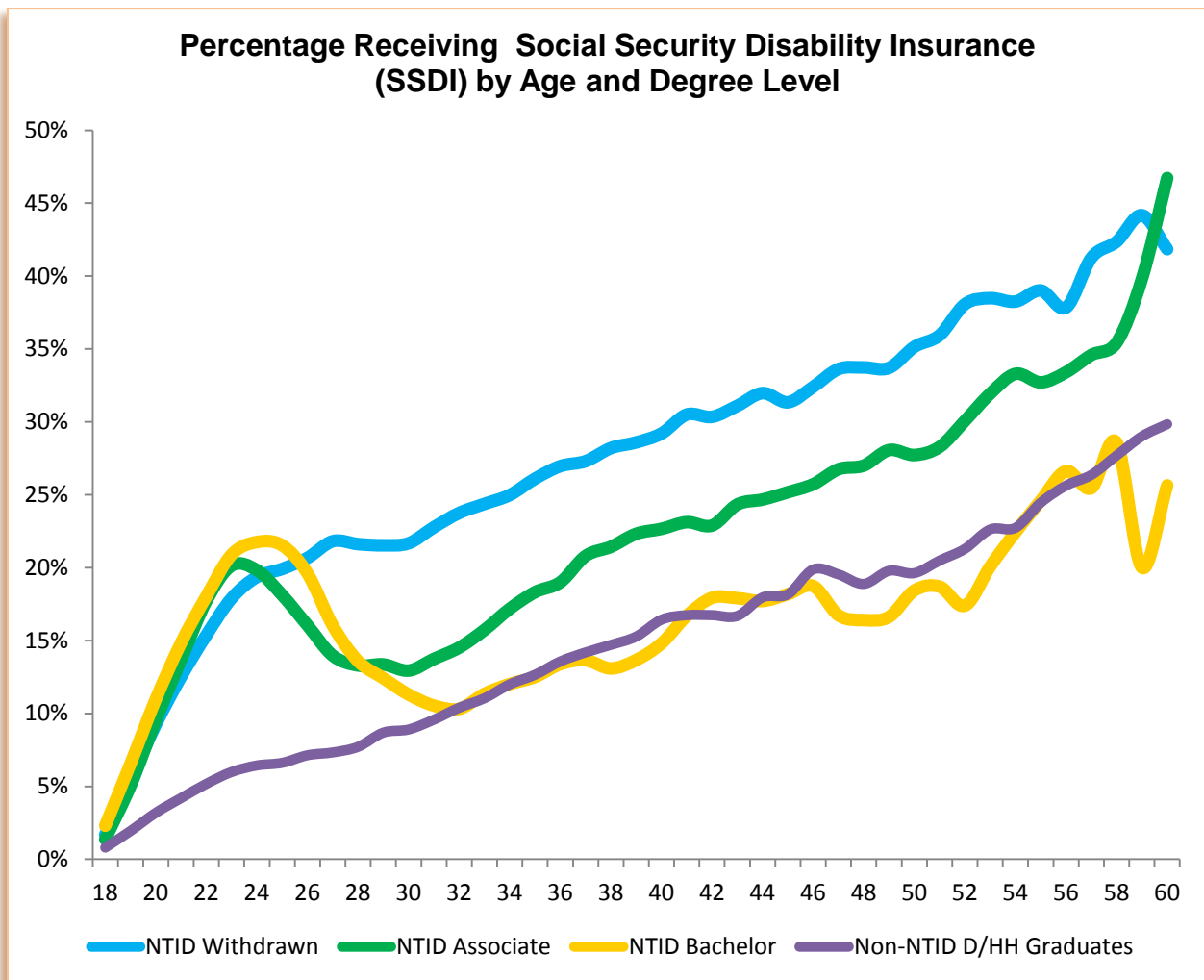**Percentage Receiving Supplemental Security Income (SSI) by Age and Degree Level**

Note: From a 2012 collaborative research study conducted with the Social Security Administration and Cornell University. To accomplish this, NTID forwarded a data file with approximately 16,000 cases to the Social Security Administration. Four study groups were defined by degree attainment:
1) Deaf and hard-of-hearing graduates who completed a bachelor's degree from RIT (NTID Bachelor);
2) Deaf and hard-of-hearing associate degree earners from NTID (NTID Associate); 3) Deaf and hard-of-hearing individuals who attended RIT/NTID, but withdrew prior to degree completion (NTID Withdrawn); and 4) Deaf and hard-of-hearing graduates from other institutions of higher education (Non-NTID D/HH Graduates).

Effect of College Graduation on Reduction in SSI and SSDI Payments (continued)

While a smaller percentage of deaf and hard-of-hearing students collect SSDI in their collegiate years, by age 50, 18 percent of NTID deaf and hard-of-hearing bachelor's degree graduates collect SSDI, as compared with 20 percent of deaf and hard-of-hearing graduates from other institutions of higher education. As made evident by the chart below, the impact that a degree has on SSDI payment collection is substantial.

Percentage Receiving Social Security Disability Insurance (SSDI) by Age and Degree Level

Legend: NTID Withdrawn — NTID Associate — NTID Bachelor — Non-NTID D/HH Graduates

Note: From a 2012 collaborative research study conducted with the Social Security Administration and Cornell University. To accomplish this, NTID forwarded a data file with approximately 16,000 cases to the Social Security Administration. Four study groups were defined by degree attainment:
1) Deaf and hard-of-hearing graduates who completed a bachelor's degree from RIT (NTID Bachelor);
2) Deaf and hard-of-hearing associate degree earners from NTID (NTID Associate); 3) Deaf and hard-of-hearing individuals who attended RIT/NTID, but withdrew prior to degree completion (NTID Withdrawn); and 4) Deaf and hard-of-hearing graduates from other institutions of higher education (Non-NTID D/HH Graduates).

Diversity and Pluralism

More than one-third of NTID's student body is from minority groups.

RIT/NTID students dance in the Frisina Quad during Apple Festival, an annual celebration hosted by the NTID Student Life Team to welcome students and introduce them to clubs and services on campus.

Diversity and Pluralism Highlights

Students

As of fall 2013, the number of U.S. deaf and hard-of-hearing minority students at NTID is 369*, one of the larger numbers in the past five years. FY 2014 highlights follow:

- Thirty-five percent of the fall entering class is from minority groups. The percentage in the total student body is 33 percent, which is more than triple what it was 18 years ago.

Faculty and Staff

In addition to seeking faculty and staff members who are experts in their field and well versed in teaching techniques for deaf and hard-of-hearing students, NTID has undertaken recruitment and persistence strategies to attract and keep qualified minority, deaf and hard-of-hearing and disabled employees. NTID's commitment to nurturing a multicultural community and providing role models for its increasingly diverse student body is positively reflected in the demographic composition of its faculty and staff.

Of 47 employees from ethnic minority populations, 23 are Black or African American, 11 are Hispanic of any race and 13 are other minorities.

Of 530 total number of employees, 100 are deaf or hard of hearing.

Of the 135 employees who are deaf or hard of hearing or are members of a minority group, 106 are in executive, faculty or exempt positions. Note that some individuals count in more than one category.

NTID continues to exercise a strong Affirmative Action posture with respect to external recruitment of faculty and staff, which is reflected in the fact that 29 percent of all hires over the past year were either minority individuals or individuals who are deaf or hard of hearing.

NTID's commitment to Affirmative Action and diversity has become an integral component of the college's plan of work. Department heads and faculty and staff members are making concerted efforts to recruit, hire and retain individuals from these categories.

Tao Eng, a senior lecturer in Information and Computing Studies, assists a young participant in Explore Your Future, a week-long career exploration and evaluation summer program for deaf and hard-of-hearing students about to enter their junior or senior year of high school.

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* Does not include students enrolled in ASL-English Interpretation programs or the Master of Science in Secondary Education program.

Diversity and Pluralism Philosophy

NTID provides educational programs that prepare graduates to live and work in a changing global community and to enhance their lifelong learning. To succeed in the global workplace, students need to develop a solid understanding of the diversity of the workplace and possess the knowledge, skills and attributes to thrive in such an environment. The composition of the student body and of the faculty and staff who encounter students needs to reflect that diversity.

Diversity continues to be a focus in higher education and, more significantly, in society at large. Diversity adds richness to educational endeavors, particularly as the college strives for pluralism. Pluralism fosters a society in which members of diverse ethnic, racial, religious and other social groups are able to participate and develop individual traditions within the context of a community.

NTID prepares young people who are deaf or hard-of-hearing to be ready to enter a global community. With the continuing shifts in national and international demographics, fulfilling this commitment requires that students be prepared to enter a progressively more diverse society and workplace. Students need to develop the willingness, the knowledge and the skills to live and work in such an environment. This is critical if they are to gain the understanding necessary to participate actively in society and contribute in meaningful ways to their own success and that of the community in which they live.

In addition to preparing students to enter society and the workplace, NTID's academic environment must respond to the needs of people who are both deaf or hard of hearing and from minority backgrounds. NTID's commitment to recognize, celebrate and value cultural diversity and individual differences is grounded in the continuing efforts of this country to forge a pluralistic society. It does not arise merely from political pressure or rest solely on public law; instead, it is based on a composite of NTID's mission, on a changing student body and on the changing nature of the world. An educational institution has a responsibility not only to reflect society, but also to lead in promoting positive change within that society.

- RIT has an Office of Diversity and Inclusion whose core mission is to advocate for and advance the concerns and needs of the human, cultural and ethnic diversity of the RIT community. Persistent diligence is given to the specific needs of the underrepresented minority populations on campus. The goal is to increase partnerships that foster greater community understanding and appreciation for one another. The newsletter *DIVERSITY PERSPECTIVES* is published quarterly by the Chief Diversity Officer, in conjunction with the RIT President's Commission on Pluralism and Inclusion.

- The President's Commission on Pluralism and Inclusion, established in 1991, is a university-wide committee comprising RIT faculty, staff, students and administrators who regularly consult with RIT's president on issues of diversity. The commission organizes both formal and informal programs and dialogues about the multifaceted aspects of diversity—from celebrating cultural richness to developing interpersonal skills to interact better within the global village.

- In October 2013, NTID updated its diversity plan to address the needs of students, faculty and staff following the direction of the RIT Vice President for Diversity and Inclusion. The "NTID Inclusive Excellence Report" outlines diversity objectives, current status and strategies for achieving those objectives. NTID's Special Assistant to the President on Diversity continues to develop and help execute this plan within the college.

- RIT's Campus Week of Dialogue offers campus members an opportunity to acknowledge, better understand and offer resolution to the important challenges experienced by members of the RIT community. This event engages faculty, staff and students in dialogue that ultimately heightens their sense of awareness and comfort levels, enabling constructive dialogue while addressing difficult issues related to diversity.

- Diversity training is offered regularly through the RIT Center for Professional Development.

- A group of faculty and staff members associated with NTID formed the NTID Diversity Group in 2012, with the mission statement, "The NTID Diversity Group is committed to promoting the best possible learning, living and working experience for Black or African American, Hispanic of any race and American Indian or Alaska Native members of the RIT/NTID community." The group's areas of focus include: RIT/NTID community involvement, professional development and serving as a resource for NTID's Special Assistant to the President on Diversity. The group includes approximately 40 members.

Astrid Jones is interim chair of the NTID Diversity Group as well as coordinator for student life programming at NTID and coordinator for NTID's Step-Up program, an organization for first-year deaf and hard-of-hearing African American, Latino, Asian and Native American students who are undecided on a major. Deaf since birth, he has worked at NTID since 2004 and currently is pursuing a master's degree at RIT. He says, "I enjoy collaborating with different departments within NTID and RIT on student-centered projects, and planning and organizing cultural opportunities for deaf, hard-of-hearing and hearing students to come together and work in harmony."

Admissions Activity by Ethnicity

Forty-two percent (253) of this year's 833 deaf and hard-of-hearing applicants were students from minority backgrounds. The FY 2014 entering class of deaf and hard-of-hearing students included 127 minority students, who represent 38 percent of the newly admitted deaf and hard-of-hearing students.

	FY 2012*	Percent	FY 2013*	Percent	FY 2014*	Percent
Total Applicants	902		989		833	
Non-Minority	341	61%	296	51%	350	58%
Minority	220	39%	284	49%	253	42%
Acceptances	439		504		507	
Non-Minority	228	66%	202	55%	265	60%
Minority	119	34%	167	45%	177	40%
Registrations	345		381		381	
Non-Minority	174	64%	156	57%	205	62%
Minority	96	36%	117	43%	127	38%

Twenty-three deaf and hard-of-hearing Black or African American, Hispanic and American Indian or Alaska Native students in grades 7-9 and their family members attended the Steps to Success career exploration mini-camp in August 2013. Students participate in hands-on activities that are designed to help them identify possible career paths and introduce them to the programs at NTID. Here, students analyze a "crime scene."

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* Figures do not include admissions activity in the ASL-English Interpretation programs or the Master of Science program in Secondary Education. Percentages are of individuals for whom NTID has data, less those with international visa status.

Diversity and Pluralism

Ethnicity of Entering Students

The FY 2014 total entering class included 135 minority students, who represent 35 percent of the entire incoming class. The FY 2014 entering class of deaf and hard-of-hearing students included 127 minority students, who represent 38 percent of the newly admitted deaf and hard-of-hearing students.

	FY 2012	Percent	FY 2013	Percent	FY 2014	Percent
Deaf and Hard-of-Hearing Undergraduate and Graduate Students						
American Indian or Alaska Native	*		*		0	
Asian	12	4.4%	30	11.0%	34	10.2%
Black or African American	39	14.4%	27	10.0%	38	11.4%
Hispanic of Any Race	34	12.6%	52	19.0%	42	12.7%
Native Hawaiian or Other Pacific Islander	*		*		0	
White	174	64.4%	156	57.1%	205	61.7%
Two or More Races	8	3.0%	6	2.2%	13	3.9%
Non-Resident Alien (International)	6		15		14	
Unknown Race/Ethnicity	69		93		35	
Subtotal Minority Deaf and Hard-of-Hearing Undergraduate and Graduate Students	96	35.6%	117	42.9%	127	38.3%
Subtotal Deaf and Hard-of-Hearing Undergraduate and Graduate Students	**345**		**381**		**381**	

	FY 2012	Percent Minority	FY 2013	Percent Minority	FY 2014	Percent Minority
Other Enrollments						
ASL-English Interpretation	41	10.3%	45	25.0%	43	13.2%
Master of Science in Secondary Education	18	18.8%	19	8.3%	16	20.0%
Total Minority Enrollments	**102**		**125**		**135**	
Total Enrollments	**404**		**445**		**440**	
Overall Percent Minority		**32.4%**		**39.9%**		**34.7%**

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* Frequency counts small and not reported for confidentiality.

Ethnicity of Enrolled Students

Minority enrollment at NTID has increased steadily from 8 percent in FY 1988 to 33 percent in FY 2014, more than four times what it was 25 years ago.

Until FY 2000 the number of international students was limited to 10 percent by a federally mandated cap. As a result of the reauthorization of the Education of the Deaf Act in 1998, the cap on international students was increased to 15 percent. However, a significant decrease in support from Vocational Rehabilitation in Canada and limited resources of students from other countries have had a negative impact on international enrollment.

	FY 2012	Percent	FY 2013	Percent	FY 2014	Percent
Deaf and Hard-of-Hearing Undergraduate and Graduate Students						
American Indian or Alaska Native	*		7	0.7%	*	
Asian	77	7.1%	85	8.2%	88	8.7%
Black or African American	130	12.0%	135	13.1%	120	11.8%
Hispanic of Any Race	127	11.7%	127	12.3%	133	13.1%
Native Hawaiian or Other Pacific Islander	*		0	0.0%	*	
White	728	67.0%	652	63.1%	646	63.7%
Two or More Races	13	1.2%	28	2.7%	23	2.3%
Non-Resident Alien (International)	41		48		39	
Unknown Race/Ethnicity	201		224		184	
Subtotal Minority Deaf and Hard-of-Hearing Undergraduate and Graduate Students	358	33.0%	382	36.9%	369	36.4%
Subtotal Deaf and Hard-of-Hearing Undergraduate and Graduate Students	**1,328**		**1,306**		**1,237**	

	FY 2012	Percent Minority	FY 2013	Percent Minority	FY 2014	Percent Minority
Other Enrollments						
ASL-English Interpretation	160	22.4%	167	16.0%	147	14.9%
Master of Science in Secondary Education**	59	25.0%	56	13.5%	48	12.1%
Total Minority Enrollments	**380**		**406**		**388**	
Total Enrollments	**1,547**		**1,529**		**1,432**	
Overall Percent Minority		**30.3%**		**34.0%**		**32.6%**

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* Frequency counts small and not reported for confidentiality.
** Includes 4 to 15 non-matriculated students.

Diversity and Pluralism

First-Year Student Persistence and Graduation Rates by Diversity Categories

NTID enrolls students with diverse backgrounds. This diversity has increased significantly during the past decade. However, there are noticeable differences among the various groups in terms of persistence and graduation rates. In FY 2008, the Department of Education requested that NTID's performance indicators in the areas of persistence and graduation be consistent with IPEDS methodology. The information below follows this methodology.

First-Year Persistence Rates for First-Time Full-Time Freshmen*

Fall 2010-2012 Cohort	Black or African American	Asian	Hispanic of Any Race	Non-Resident Alien (International)	White
Cohort Count	82	45	105	17	368
Persisted to Second Year	57	36	79	15	263
First to Second Year Persistence Rate	**70%**	**80%**	**75%**	**88%**	**71%**

Six-Year Graduation Rates for First-Time Full-Time Freshmen*
Three-Year Moving Averages

Fall 2005-2007 Cohort	Black or African American	Asian	Hispanic of Any Race	Non-Resident Alien (International)	White
Cohort Count	54	61	52	12	443
Graduated Within Six Years	23	32	19	9	198
Six-Year Graduation Rate	**43%**	**52%**	**36%**	**75%**	**45%**

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* Figures reported do not include students in the ASL-English Interpretation programs or the Master of Science program in Secondary Education. Specific data for those two programs are included on separate pages for those programs.

Graduates by College and Program Areas: Minority Status

This table shows minority student graduates in the academic program areas.

	FY 2013 Number of Graduates			
	Minority	Non-Minority	Total***	Percentage of Total Graduates
NTID				
Career-Focused and Associate+Bachelor's Degrees	44	76	162	38%
ASL-English Interpretation	7	40	53	13%
Master of Science in Secondary Education	*	8	17	4%
Other Colleges of RIT**				
College of Applied Science and Technology	5	15	28	7%
Saunders College of Business	6	12	22	5%
Golisano College of Computing and Information Sciences	*	5	17	4%
Kate Gleason College of Engineering	0	4	4	1%
College of Health Sciences and Technology	*	3	10	2%
College of Imaging Arts and Sciences	5	15	24	6%
College of Liberal Arts	5	17	28	7%
College of Science	*	12	19	4%
University Studies	9	23	40	9%
Total***	**90**	**230**	**424**	**100%**

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*   Frequency counts small and not reported for confidentiality.
**   Includes bachelor's and master's degrees granted by the other colleges of RIT, as well as some sub-baccalaureate degrees.
*** Totals include small counts shown as asterisks (*), which are not displayed because of confidentiality. Also included are individuals with unknown race/ethnicity and international visa status. Neither are considered minority or non-minority.

Diversity and Pluralism

Affirmative Action Report: Faculty and Staff

NTID continues to emphasize and encourage the hiring, promotion and persistence of women, minorities and individuals who are deaf and hard of hearing. Appropriate representation in each category remains a priority for NTID, given the ever-increasing ethnic diversity in the student body. In the chart below, individuals may appear in more than one category. Minority status was unknown for twenty-four faculty and staff members.

FY 2013

	Total Employees	Female	Black or African American	Hispanic of Any Race	Other Minority	Deaf and Hard of Hearing
Faculty*	172	81	8	**	7	58
Percent		47%	5%	**	4%	34%
Exempt Staff*	113	66	6	**	**	27
Percent		58%	6%	**	**	24%
Executive/ Administrative Manager*	51	20	**	**	**	15
Percent		39%	**	**	**	29%
Non-Exempt Staff						
C-Print®	52	50	**	**	**	**
Percent		96%	**	**	**	**
Interpreter	114	100	**	**	**	**
Percent		89%	**	**	**	**
Technical/ Clerical	79	70	**	**	**	14
Percent		88%	**	**	**	18%
Total	**530**	**367**	**23**	**11**	**13**	**100**
Percent		**69%**	**5%**	**2%**	**3%**	**19%**

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* Of the 51 executive/administrative managers, 21 are included on the faculty line and 30 are included on the exempt staff line. Therefore the numbers in the Executive/Administrative Manager row are not included in the column totals, since they already are included on the faculty or exempt staff lines.

** Frequency counts small and not reported for confidentiality.

Affirmative Action Report: Faculty and Staff Applicants

RIT/NTID tracks minority status and gender of applicants via voluntary self-identification. A summary of those data are provided below. RIT/NTID does not solicit, track or maintain disability status on its applicants. Individuals may be counted in more than one category.

NTID Applicants for Posted Positions
October 1, 2012 – September 30, 2013

	Number of Positions Posted	Total Applicants	Number of Applicants by Category					
			Female	Black or African American	Hispanic of Any Race	Other Minority	White Male	Unknown
Faculty	6	46	34	1	5	0	8	8
Exempt Staff	1	15	8	1	0	1	7	0
Non-Exempt Staff*	8	192	144	14	8	7	31	15
Total	**15**	**253**	**186**	**16**	**13**	**8**	**46**	**23**

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* Includes C-Print® captionists, interpreters and technical and clerical positions.

Affirmative Action Report: Faculty and Staff Hiring Results

During FY 2013, individuals from an ethnic minority totaled 26 percent of all new hires, deaf and hard-of-hearing individuals totaled 19 percent and women, 71 percent. Individuals may appear in more than one Affirmative Action category. Thirteen new hires were individuals of unknown ethnicity.

FY 2013

	Total New Employees	Female	Black or African American	Hispanic of Any Race	Other Minority	Deaf and Hard of Hearing
Faculty	3	2	*	0	0	*
		67%	*	0%	0	*
Exempt Staff	4	3	*	0	0	*
		75%	*	0%	0	*
Executive/ Administrative Manager**	0	0	*	0	0	*
		0%	*	0%	0	*
Non-Exempt Staff						
Real-Time Captionist	6	6	*	0	0	*
		100%	*	0%	0	*
Interpreter	1	0	*	0	0	*
		0%	*	0%	0	*
Technical/Clerical	7	4	*	0	0	*
		57%	*	0%	0	*
Total	**21**	**15**	**1**	**0**	**0**	**4**
		71%	13%	0%	0%	19%

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*   Frequency counts small and not reported for confidentiality.
**   These individuals are not included in the total of this column since they all are included on the faculty or exempt staff lines.

Affirmative Action Report: Faculty and Staff Termination Results

During FY 2013, 12 percent of terminations were individuals from ethnic minorities and 65 percent were women. In the chart below, individuals may appear in more than one Affirmative Action category.

FY 2013

	Total Terminated Employees	Female	Black or African American	Hispanic of Any Race	Other Minority	Deaf and Hard of Hearing
Faculty	26	18	*	*	*	*
		69%	*	*	*	*
Exempt Staff	12	5	*	*	*	*
		42%	*	*	*	*
Non-Exempt Staff**	17	13	*	*	*	*
		76%	*	*	*	*
Total	**55**	**36**	**4**	**1**	**1**	**6**
		65%	8%	2%	2%	12%

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*　Frequency counts small and not reported for confidentiality.
**　Includes technical, clerical, C-Print® captionists and interpreters.

Research, Innovation & Creativity

Faculty, students and corporate partners will come together in the new Rosica Hall to develop technologies and research projects to advance innovation, access and the teaching and learning process.

Students congregate in Rosica Hall to explore new ideas that lead to the development of critical problem-solving and research skills.

Research

NTID Research Overview

NTID determines topics for research on the basis of research priorities derived from both internal and external sources, including the NTID National Advisory Group and the U.S. Department of Education. NTID also seeks public input on its deafness-related research priorities through direct mailings of questionnaires to individuals and stakeholder organizations, focus groups at national professional meetings, publications and websites. The results of these solicitations are used to identify strategically important research topics.

In addition to ongoing programmatic research, NTID faculty contribute to special institutional projects established in response to immediate needs identified by the NTID administrative team and long and short-term projects related to Performance Indicators established by the U.S. Department of Education. In an effort to develop a more inclusive research model and to respond to the budget cuts associated with the federal sequestration, the Department of Research was eliminated and research faculty were assigned more teaching responsibilities in academic departments. In conjunction with this change in faculty assignments, an internal call was put out for proposals for Strategic Research Centers and two new centers were established: Research Center for Teaching and Learning (RCfTL) and Research on Employment and Adapting to Change: Center for Studies on Career Success (REACH).

RCfTL and REACH are not bound by a single question, domain or approach, but its members share interests in a clearly definable topic that is judged to have applied implications for one or more NTID audiences as stated in the NTID mission. In addition to serving as an intellectual home within the new Rosica Hall, RCfTL and REACH will provide resources (e.g., expertise, mentoring, methodologies, equipment, supplies, space) during the early stages of project development and ongoing collaboration.

These centers join two existing research centers as well as two other research and training programs.

The NTID Center on Access Technology is charged to investigate, evaluate and report on the most effective and efficient use of access technologies and train individuals in their use in order to accelerate the widespread implementation of best practices within deaf education at the postsecondary level.

NTID's Center for Education Research Partnerships seeks to establish and join research partnerships concerning development and learning among deaf and hard-of-hearing students across the lifespan and in various educational settings.

The Deaf Studies Laboratory investigates cognitive, language and social aspects of the Deaf Experience. It aims to bring more deaf individuals into a variety of fields of research in an American Sign Language-based student-centered environment, partnering with many universities and centers nationally and internationally.

The Collaboratory on Economic, Demographic and Policy Studies seeks to describe the demographic and economic conditions of the deaf and hard-of-hearing population in the U.S., with emphasis on the impact education has on improving these conditions. Projects will use data from the Social Security Administration, the Bureau of the Census and the Department of Education to define the status of the population of deaf and hard-of-hearing people in the U.S. and collaborate with other organizations in this goal.

NTID Research Units

Research Center for Teaching and Learning (RCfTL)

The RCfTL was established as a result of internal competition for research centers within NTID in 2012. Rather than follow the traditional model of one director and several co-directors, three faculty share equally in the work of the center as co-directors. The vision statement of the center is as follows:

The primary mission of the RCfTL is to create a sustainable setting in which diverse teams of faculty and

students conduct research that will improve deaf education, expose students to research practice and prepare a future generation of NTID educational researchers and scholars. A secondary mission is to facilitate the development of collaborative partnerships between NTID faculty and faculty in the other colleges of RIT focused on education of deaf and hard-of-hearing students. The primary and secondary missions include four goals:

- Identify and support applied research focused on (1) learning styles of the increasingly diverse population of deaf and hard-of-hearing students, and (2) best practices for instruction of these students. Research will address these topics across all ages of students and instructional and learning environments, with a primary focus on middle, secondary and postsecondary settings.

- Develop teams that draw faculty from across the university and, when possible, other universities nationally and internationally. Teams reflecting diverse levels of experience and methodologies are encouraged.

- Engage RIT/NTID students in research teams to expose them to the field of applied research and possible careers as researchers.

- Implement a cyclical "seed to harvest" model of growth and sustainability. Project teams supported with initial start-up funds will be expected to secure external funding within three years, which in turn will provide funding to maintain the initial projects and contribute seed funds to support new teams and start-up projects.

Following the model the center put out solicitations for proposals (June 2012, May 2013). Four of the submissions were selected for funding during AY 2012-2013 (Y1), and five for AY 2013-2014 (Y2). For each cohort, the projects have been supported through mentoring, collaborative events and budget oversight. Each of the co-directors was assigned to consult at least one project team per year. Each of the projects met the center goals as follows:

- Six of the nine projects formed collaborative teams between NTID and other RIT colleges, including the College of Science, the College of Engineering, and the College of Liberal Arts. The remaining three teams are made up entirely of NTID faculty. Here, RIT Associate Professor of Statistics Carol Marchetti (second from left) discusses her project with RC*f*TL on "Improving Communication in Mainstream Classrooms – A Multifaceted Approach" with NTID President Gerry Buckley (third from left), RIT Provost Jeremy Haefner (fifth from left) and other students and staff.

- All teams include one or more deaf and hard-of-hearing students in active roles such as research assistants or peer mentors.

- All teams include NTID faculty as principal investigator or co-principal investigator, and five teams include one or more deaf and hard-of-hearing faculty as principal investigator, co-principal investigator, senior personnel or consultant.

- All teams identified realistic and appropriate sources for external funding and have agreed to complete a proposal for a specific funding competition over the next three years.

Research (continued)

Additional tasks completed by the center during the past year and a half include establishing a website and developing a plan for sustainability as well as for identifying and connecting with stakeholders including center associates, NTID administration, student researchers and others.

Project teams (including students) have presented on their projects both within and outside of RIT/NTID. Examples of venues include an article in the *Athenaeum*, RIT poster session at the RIT Celebration of Research, NTID Brown Bag Research Presentation, Effective Access Technology Conference, Convention of American Instructors of the Deaf, presentation and Conference Proceedings for the 2013 Conference of the American Society for Engineering Education (plus a juried proposal submission for the 2014 conference).

Current RC*f*TL projects include:

Understanding Motivations of and Best Practices for Instruction of Deaf and Hard-of-Hearing Students in Journalism – Andrea Hickerson (COLA) and Pamela Kincheloe (NTID)
In this project we seek to understand what draws deaf students to pursue journalism coursework, as well as the challenges faced by deaf students as they learn reporting and news writing. Through interviews with journalism instructors and focus groups with deaf journalism students, we seek to develop a set of "best practices" for deaf journalists. We intend to publish these on an RIT-hosted website with the intention that these can be a national resource for the journalism field at large as it seeks to engage more diverse groups, including the deaf community.

Increasing Access to Complex Concepts for Deaf and Hard-of-Hearing Students – Carol Marchetti (COS), Jane Jackson (NTID) and Penny Arndt (NTID)
This proposal combines two previously separate projects and seeks to build on successes, learn from challenges, engage a larger and more diverse group of collaborators and create widely applicable strategies to improve learning and learning environments for students in STEM fields: (1) Strategic use of whiteboards to facilitate cooperative learning in student workgroups comprised of hearing and deaf and hard-of-hearing students; and (2) Communication strategies to help deaf and hard-of-hearing students better understand introductory statistics concepts. We will hold workshops, enlist collaborative partners, evaluate the effectiveness of these strategies in different settings and continue to build resources and enhance best practices.

Montessori Deaf Project: Children's House Pilot Study – Susan Lane-Outlaw (NTID)
Deaf education's primary focus is on communication and language needs of students without much emphasis on curriculum, materials and instruction. While communication and language development are critical, they are not the only aspect of a child's education. In addition, this heavy focus on communication and language has not produced better results for deaf and hard-of-hearing students. Seventeen three-hour Montessori Children House sessions will be held once a week with deaf children 3 to 7 years of age. The goal of this exploratory study is to provide rich descriptions of Children's House Montessori educational sessions for 3- to 7-year-old deaf and hard-of-hearing students. Parent observations will be collected during informational meetings and a parent focus group will also be included in these descriptions. The findings will inform future studies where entire deaf early childhood programs convert to a Montessori educational approach.

Universal Design of Educational Media for an Inverted Engineering Classroom – Michael Schrlau (KGCOE), Gary Behm (NTID) and Laura Braggiotti (NTID)
This project addresses information access issues for all engineering students, particularly deaf and hard-of-hearing students, with accessible electronic media. Our hypothesis is that electronic media, designed with hearing and deaf and hard-of-hearing pedagogy, will improve the comprehension of course concepts and enhance the performance of all students. The objective of the project is to create and evaluate universally designed electronic media for an inverted *Heat Transfer* course in the 2013-2014 academic year. The benefits of the project include increasing student comprehension and performance and building a foundation for designing meaningful electronic media for all students and effective instructional aids for access services.

<u>Evaluating the Effects of Concrete-Representational-Abstract Instructional Approach for Deaf College Students in College Algebra Courses – Sharron Webster (NTID), ChongMin Lee (NTID) and Chris Kurz (NTID)</u>
The primary focus of this project is to develop and evaluate a course curriculum designed to improve retention and performance for "at risk" college students in introductory algebra courses. The curriculum incorporates CRA lessons where the students make algebraic connections from concrete experience to abstract experience. In this classroom action research study, the investigators examine student mathematics performance, student motivation and student attitude toward algebra while CRA instruction is implemented.

Research on Employment and Adapting to Change: Center for Studies on Career Success (REACH)

REACH is one of the two new NTID centers for research established January 2012 as the result of an internal competitive proposal process. The primary goal of REACH is to conduct research on employment and factors of change, as well as career success for deaf and hard-of-hearing people. This includes conducting scholarly research on the employment and career outcomes of deaf college graduates including the examination of multiple factors that contribute to their career and life success. These factors include readiness for college, academic performance in college, personal characteristics, career growth, career change and related decision-making activities.

Accomplishments in FY 2013 include the following:

- Prepared two grant proposals to the National Science Foundation (NSF):
  - Submitted January 17, 2013 NSF Proposal #1325168. *An Examination of Deaf Adult's Decision Making in Life and Career Situations Relative to Inaction Inertia,* Requested $292,286, not funded. R. Kelly, PI.
  - Submitted February 27, 2013 NSF Proposal # 1338436. *Collaborative Research BCC: A Sustainable Multidisciplinary Research Community, Agenda, and Database to Improve Deaf and Hard-of-Hearing Learners' Literacy and Mathematics Skills (pre-K through Career Outcomes)*, requested $496,862, under review and still pending. R. Kelly PI and Director, Co-PIs, G. Berent, S. Schley, C. Pagliaro (UNC Greensboro)

- Provided mentoring and related professional development on conducting research to faculty and staff:
  - *The Scholarship Enterprise.* Presentation targeted for college faculty and department chairs, January 25, 2013.
  - A three-session workshop on *Conducting Research: from Planning to Publication*. Dates of each two-hour session were February 13, 2013, March 6, 2013 and March 20, 2013.

- Completed the Innovation Project on Career Success:
  - Conducted video interviews of eight deaf people with successful careers. Six were RIT graduates (five baccalaureate and one associate degree), including one international student entrepreneur who started her own business while a college student. All video interviews were posted to the REACH website.
  - A Career Success panel presentation was scheduled on April 11, 2013, where five of the interviewees conducted a presentation and question/answer session for 55 deaf RIT/NTID students who were nearing graduation and preparing to enter the world of work.

- Provided two cooperative work experiences for deaf undergraduate students on research. These co-op experiences provided valuable learning opportunities for literature searches/reviews pertinent to preparing research grant proposals and research manuscripts, as well as experience related to various database formats, and in setting up and conducting video interviews, as well as organizing events such as the Career Success Panel.

Research (continued)

- Disseminated research results related to career outcomes of deaf alumni:

  - Kelly, R.R. (2013, February). Deaf college graduates' career advancement relative to their hearing peers: Implications for education. Paper presented at the 2013 Annual Conference of the Association of College Educators—Deaf and Hard of Hearing in Santa Fe, N.M.

  - Kelly, R. R., & Quagliata, A. B. (2013, April). Deaf college graduates' career outcomes: Is there a glass ceiling for advancement into management? Paper presented at the Special Interest Group for Research on the Education of Deaf Persons at the AERA Annual Meeting 2013, San Francisco, Calif.

  - Kelly, R. R., & Paradis, J. L. (2013, June). Deaf college graduates' career outcomes relative to their hearing peers? Paper presented at the 2013 National Conference of the Convention of American Instructors of the Deaf (CAID) in Rochester, N.Y.

  - Kelly, R. R., Quagliata, A. B., DeMartino, R., & Perotti, V. (2013). Career outcomes of deaf college graduates relative to their hearing peers: What factors hinder the advancement of deaf employees? Manuscript submitted for publication.

Center on Access Technology (CAT)

The Center on Access Technology (CAT) was established in March 2006 to address the challenges of utilizing, developing and/or adapting new technologies for use by people who are deaf or hard of hearing to improve access to personal communication within educational environments, social settings and the workplace (www.rit.edu/ntid/cat). CAT is charged to investigate, evaluate and report on the most effective use of access technologies and to train individuals to accelerate the implementation of best practices within postsecondary deaf education. The center's main strands of research include cyber-infrastructure and provision of remote services, classroom access technologies, mobile and personal communication technologies, training and evaluation services and audio technologies of particular interest to hard-of-hearing people.

Examples of research activities include:

An Investigation of Cisco Technologies and Access Solutions. The Cisco Accessibility Team made a significant donation of two major TelePresence systems to NTID in order to provide a platform for research and advanced high definition communication for the community. CAT will be evaluating Cisco TelePresence technologies for classroom and remote communication for deaf and hard-of-hearing users and making recommendations on best practices and product design. Research continued this year on the determination of best practices when using professional interpreters within a videoconference environment.

CAT Innovation Lab. The NTID CAT Innovation Laboratory (CAT Lab) is a first-of-its-kind initiative, providing a place for student involvement in the innovation process. The CAT Lab brings together faculty and associate degree-level deaf and hard-of-hearing students to collaborate on multidisciplinary projects related to developing and adapting access and instructional technologies, health care technologies and services and more. A multi-year collaboration with a business partner continued in FY 2013 to conduct research and assessment on innovative uses of technology. Projects include:

- Designing and Building a Smart Cane Prototype for People who are Deaf-Blind. Develop a "Smart Cane" device that aids a deaf-blind person to navigate surroundings. The advanced cane provides real-time force feedback guidance. The novelty of Gary Behm's IBM invention (US 8,077,020 B2 - Method and Apparatus for Tactile Haptic Device to Guide User in Real-time Obstacle Avoidance) relies on exploiting the features of a tactile haptic device to enable real-time obstacle avoidance by deaf-blind users. Any blind person may benefit from it as well.

- See-through Life-size Interactive Monitor (SLIM). To develop a solution that is to allow the instructor to communicate and write/display information on the monitor board at the same time without losing eye contact with deaf and hard-of-hearing students in the classroom.

- Making Laboratory & Medical Instruments More Friendly for Deaf and Hard-of-Hearing Students. To develop a prototype sound recognition system that would discriminate sounds from different laboratory and/or medical instruments and send alert messages via email or text messaging.

- Notification Device and System. To develop a light-weight, portable device for a smartphone to allow deaf or hard-of-hearing students to use it for notifications (phone, email, text) and wake-up calls through Bluetooth technology.

Deaf STEM Community Alliance: Supporting Postsecondary Deaf and Hard-of-Hearing Students in Science, Technology, Engineering and Mathematics. Investigators: Elliot, L., DeCaro, J. and Clymer, E.W. Funded by the NSF, this project completed its third year of funding during FY 2013. The project is creating a unique Virtual Academic Community (VAC), a cyber infrastructure that will host remote access and support services, an electronic resource library and a communication network for deaf and hard-of-hearing students, their faculty and access and support service providers. Many features of the VAC were in development and prototype testing during FY 2013 including an AAA-rated accessible website (www.dhhvac.org), more than 80 remote tutoring sessions and recruitment of a core of deaf and hard-of-hearing professionals in STEM careers to serve as mentors for the students. The program is designed to increase graduation rates of deaf and hard-of-hearing STEM majors in postsecondary education in the long term. Grant team members are creating a model that demonstrates how an online environment can support deaf and hard-of-hearing students in mainstream settings. Cornell University (Ithaca, N.Y.) and Camden County College (Blackwood, N.J.) are working with NTID to pilot a national model.

Analyzing the Use of C-Print® Mobile Technology in STEM Lab Settings across Multiple Postsecondary Sites: Year 3 Investigators: Stinson, M., Elliot, L., & Francis, P. The purposes of this project are: (a) to expand the types of venues in which the C-Print® mobile technology-based service is used at RIT, other universities and a community college; and (b) to conduct experimental investigations to evaluate the extent to which the service aids students' access and learning in STEM labs at the postsecondary level. The research goal is to examine the effects of the use of C-Print® mobile on the academic performance of deaf and hard-of-hearing students in laboratory sections of STEM courses and on their confidence and interest in their STEM major. A grant of $395,000 has been awarded from NSF for this project. In the past year, six students participated in five-to-seven-week trials where they viewed C-Print® captions on a Smartphone or other mobile device in a STEM laboratory, and 11 students participated in the control (standard support service) condition. Student comments on open-ended questionnaire items indicated that students tended to regard the mobile device as a conveniently portable, easy-to-use means for viewing captions in the lab setting. Students also reported that using the mobile device helped them feel more confident that they would succeed in the laboratory class. These results were presented at the conference of the Association on Hearing Education and Disability in July 2013.

Center for Education Research Partnerships (CERP)

The Center for Education Research Partnerships (CERP) is charged with establishing and joining research partnerships concerning development and learning among deaf and hard-of-hearing students across the lifespan and in various educational settings (www.rit.edu/ntid/cerp/home). Primary activities include promotion of related collaboration among individuals, educational institutions and organizations, both nationally and internationally. These and other activities focus on bridging research and practice to optimize educational opportunities and success for students who are deaf or hard of hearing. This notion of serving as a collaborator and an incubator for new ideas lies at the heart of the center.

CERP was established to contribute to the education of deaf and hard-of-hearing students of all ages through the sharing of findings and expertise with others. The success of this initiative is evidenced in CERP members making more than 30 invited presentations this academic year and collaborating with more than 10 schools and universities in the U.S. and abroad on research into deaf education. Beyond this sharing of knowledge, these efforts bring greater visibility to RIT/NTID and CERP, thus creating additional opportunities for both collaborations and funding. This year, CERP responded to more than 500 requests for information and/or assistance, and the www.educatingdeafchildren.org website has had more than 71,000 hits. Over this past academic year, CERP members have published (or have in press) two peer-reviewed journal articles (three more are under review) and three chapters. One book was published, two are in press and two more books are being prepared, both under contract.

This year, CERP received a $2.3 million research grant from the National Institute for Deafness and Other Communication Disorders (NIDCD) for a project entitled "Language, Learning, and Cognition among Deaf Students with and without Cochlear Implants." CERP holds a subcontract from SRI International, partnering in a project for the U.S. Department of Education on transition of deaf and hard-of-hearing high school students. In addition, CERP received a $5,000 grant from the McGowan Charitable Trust to begin a new project in collaboration with Oxford University Press entitled "Raising and Educating Deaf Children: Foundations for Policy, Practice, and Outcomes." On a quarterly basis, the project will disseminate free e-bulletins focusing on deaf education to legislative, business, medical, educational and research communities. In addition to "push" dissemination through Oxford University Press international outlets, the project will have a dedicated website to provide broad-based information for decision-making with regard to deaf education.

Examples of research activities include:

Expansion of Information Source for Educators and Parents of Deaf Children. Using center expertise and collaborating with colleagues around the world, CERP hosts the Raising and Educating a Deaf Child website (www.ntid.rit.edu/educatingdeafchildren and www.educatingdeafchildren.org). CERP responds to submitted questions (in English, Spanish and ASL) with research-based information and references. The new "Raising and Educating Deaf Children: Foundations for Policy, Practice, and Outcomes" project will disseminate free e-bulletins on a quarterly basis focusing on deaf education to educators and parents as well as legislative, business, medical and research audiences.

CERP Research Findings. A center for education research partnerships obviously has, at its heart, research. Easily the most important accomplishments this year are new and exciting findings concerning the cognitive foundations of learning by deaf and hard-of-hearing students and ways of potentially "leveling the playing field" in educational settings. The new $2.3 million grant from NIDCD will allow in-depth and longitudinal exploration of ways in which spoken language and sign language interact with cognitive abilities to affect student learning and academic outcomes. Results have implications for K-12 programming as well as college-level settings; indeed, they pertain to lifelong learning by deaf, hard-of-hearing and hearing students of all ages. As noted on the CERP website, dissemination efforts (invited presentations and publications) and ongoing research seek "simply to change the world through better understanding and improving the education of deaf students."

Deaf Studies Laboratory (DSL)

The Deaf Studies Laboratory's (DSL) mission is to produce innovative research on the cognitive, language and psychosocial aspects of the deaf experience. DSL aims to widely disseminate basic science and translational research in order to enhance the academic performance and psychological well-being of deaf individuals. DSL also aims to provide an active learning environment that offers mentoring and collaborative opportunities to faculty and students to ultimately increase the number of deaf and hard-of-hearing individuals in biomedical and behavioral science careers.

This laboratory originally was established in 2003 at RIT's College of Liberal Arts to provide deaf and hard-of-hearing students with hands-on social science research experiences in an accessible American

Research (continued)

Sign Language environment. The laboratory moved to NTID in 2006 and has received over $3.5 million in grant funding since then.

DSL accomplishments throughout FY 2013 include:

- DSL has continued its NSF-funded research on the effects of early sign language acquisition on cognitive development. Preliminary results have shown that those who learn ASL early in life develop better executive function skills that are important for optimal academic achievement and social behavior. The effect of early ASL acquisition, compared to late ASL acquisition, on the executive functions was evident in both deaf children and adults including NTID students.

- DSL continues to develop three ASL competency assessment instruments to be used in research and in schools. The American Sign Language Sentence Reproduction Test (ASL-SRT) now has a normative sample of over 800 signers and has demonstrated excellent reliability and validity. Universities in Europe have borrowed the test and adapted it to German Sign Language and British Sign Language. It is currently being adapted for Swedish Sign Language, Switzerland Sign Language, Brazilian Sign Language and Japanese Sign Language. The ASL Discrimination Test (ASL-DT) that DSL has developed in collaboration with the NTID Department of Cultural and Creative Studies and the Department of ASL and Interpreting Education has shown to be an excellent tool for determining the ASL receptive skills of hearing adult signers (NTID faculty, staff and students).

- The preliminary results of the NTID Innovation Fund project has shown that deaf students who are resilient to life's adversities are those who accept themselves as deaf rather than viewing themselves as "broken" or "bad." Further examination revealed that the NTID students who are most resilient are those with better sign language skills and who acculturate more within the deaf community. There were no differences between the high-resilient and low-resilient groups based on how much they acculturate in the larger hearing community. It is theorized that ASL and deaf acculturation provides these students with deaf capital on how to navigate academia and life as deaf individuals.

- DSL continues to be the hub for science mentoring for deaf, hard-of-hearing and hearing undergraduate and graduate students who wish to conduct biomedical and behavioral science research. DSL's director, Dr. Peter Hauser, is the national science mentorship leader for the NSF Science of Learning Center on Visual Language and Visual Learning. DSL hosts a weekly videoconference seminar that involves students from seven different universities. In the seminar, the students discuss research ethics, methods, statistics and grant writing.

- DSL received a $37,000 award from NSF to recruit and train the top U.S. deaf students who are interested in sign language research. These students, including two NTID students, attended the Sign Language Researchers Workshop offered by the University College of London and presented at the Theoretical Issues in Sign Language Research (TISLR) Conference. Some of this funding was used to provide ASL interpreting at TISLR in London for these students and the other U.S. deaf participants.

- DSL has collaborated with CAT and the University of Rochester on a grant to bring more deaf and hard-of-hearing students into biomedical and behavioral science careers in response to the needs identified by the Task Force on Health Care Careers for the Deaf and Hard-of-Hearing Community. They received a $2.1 million grant from the National Institute of General Medicine Sciences.

During FY 2013, DSL have presented at professional conferences around the world. For example, three students have presented at the Inter-Science of Learning Center Conference (Philadelphia), Association of Psychological Science (Washington, D.C.), Theoretical Issues in Sign Language Research (London, UK), and Deaf Academics Conference (Lisbon, Portugal). Dr. Hauser has given 20 international presentations and 11 national presentations. This past year, the team has also produced four peer review publications, two in-press peer review journal publications and four additional manuscripts submitted for publication. They also have produced two book chapters with three more in press.

Collaboratory on Economic, Demographic and Policy Studies

The NTID Collaboratory on Economic, Demographic and Policy Studies was established in 2012, and seeks to describe conditions of the deaf and hard-of-hearing population in the United States, with emphasis on the impact that education has on improving these conditions. Projects will use data from a variety of sources to define the status of the population, and will seek to collaborate with other organizations to meet its goals.

Accomplishments to date include the following:

- Prepared a report for the North Carolina School for the Deaf at Morganton Foundation Inc., who in collaboration with Life Enriching Communities is exploring the viability of developing a senior living community for deaf and hard-of-hearing residents of North Carolina and surrounding states.

- Released the first report in history that accurately described the size of the deaf and hard-of-hearing population in the Rochester Metropolitan Area, in comparison with similar-sized metropolitan areas.

- Released a report identifying the economic benefits of completing a degree from the National Technical Institute for the Deaf. This report has been cited by *InFocus* Magazine, the *Rochester Business Journal*, and the *Democrat and Chronicle*.

- Gerard G. Walter and Richard Dirmyer. "The Effect of Education on the Occupational Status of Deaf and Hard of Hearing 26-to-64-Year-Olds." *American Annals of the Deaf* 158.1 (2013): 41-49.

- Assisted in the preparation and submission of a research proposal to the Social Security Administration's competition for a Disability Research Consortium. A collaborative proposal was submitted with RAND and Cornell University. ($50,000)

- Prepared and submitted a research proposal to the National Science Foundation: 12-545 – Research on the Science and Technology Enterprise. ($174,793)

Innovation and Creativity at NTID

Under the leadership of RIT President William W. Destler, the university is increasing its emphasis on innovation and creativity, both in the curriculum and in other activities across campus.

The sampling of projects below reflects the innovative and creative activities underway within the National Technical Institute for the Deaf.

RIT/NTID Electric Bike Fleet

Through an NTID-funded Innovation Grant, NTID and RIT students worked together to build a fleet of Electric Bicycles (Ebikes) for shared use by students, faculty and staff at RIT. These Ebikes are light plug-in electric vehicles designed to incorporate battery, motor and controller innovations with zero point-of-use carbon emissions. The grant allowed for giving credit bearing co-op experience to seven students – both hearing and deaf. The team successfully prototyped, designed and built a small fleet of 10 Ebikes as a pilot program. A grid-tied solar Park & Charge station was designed and installed at one of the covered bicycle parking stalls south of the library. The fleet is up and running and customers have logged more than 1,200 miles collectively.

Laboratory Science Technology (LST) Undergraduate Research: Health Impact of Electronic Cigarettes

The research group received a National Institutes of Health (NIH) grant to study the health impact of electronic cigarettes. While much more is known about the health impact of traditional tobacco cigarettes, little is known about electronic cigarettes. Cigarette vapor was generated using a custom-made smoking machine. Samples were collected in special sampling bags and run through a detailed extraction procedure before being analyzed by gas chromatography-mass spectrometry (GC-MS). The analytes of interest are seven suspected carcinogens/polyaromatic hydrocarbons and nicotine. One article has been submitted for publication by the group and another NIH grant proposal has been submitted to extend the work.

LST Undergraduate Research: Nutritional Value of Native and Invasive Wild Fruits

This research project focuses on the nutritional value of native versus invasive wild fruit species for migratory songbirds. Fruits contain a variety of polyphenolic compounds that may serve as antioxidants and avian consumers may benefit by seeking out these foods during periods of high oxidative stress including seasonal migrations between breeding and wintering grounds. Food resources that can serve as an antioxidant defense could potentially be beneficial for the condition of birds at migration stopover sites. Many songbird species consume large amounts of fruit during autumn migrations and these fruits can differ in nutritional quality. However, very little is known about how the total phenol content of wild fruits varies among species, particularly between native and invasive fruits, and whether total phenol content of fruits is correlated with increased antioxidant capacity in birds during stopovers. Linking fruit phenol content to avian fruit consumption may provide useful information about the nutritional and physiological impacts of frugivory in migrating birds. Several presentations, most involving students, have been presented this past academic year on this research project and one article was published in "Northeast Naturalist" and cited by the Audubon Society.

LST Undergraduate Research: Antioxidant Capacity of Teas

The research group recently published an article on a novel method for the detection of phenols in samples. The multidimensional fluorescence method with advanced chemometric analysis is now being investigated as a method for measuring the antioxidant capacity in tea samples. For dosing, health and diet reasons, the total phenol concentration is often measured, but we believe that our method is superior for more complete characterization of the tea samples. Preliminary studies have shown that the method is effective in the tea study, and can even work toward predicting the geographic origin of the tea leaves. A student will present the first results of this work at the upcoming national meeting of the American Chemical Society in Dallas, Texas.

Digital Language Laboratory for Interpreting Instruction

The NTID American Sign Language and Interpreting Education Department uses a computer-based digital laboratory for ASL-English interpreting instruction. There are three multimedia labs with 10 stations in each. Each student station is equipped with a computer, dual monitors, a camera and a headset with microphone. Each lab is equipped with two digital control racks that connect to a 2TB server, two ceiling-mounted robotic video cameras, a microphone, six speakers, an LCD projector and a separate instructor's station with room controls.

Interpreting students use digital technology to record their interpreting between American Sign Language and spoken English. The labs allow them to review their work easily and improve their interpreting skills. When finished with an assignment, the students can save their work to their own digital folder on the server, or they can save it to a USB stick. They also can drop their files into their instructor's digital folder for assessment. The faculty have use of a digital feedback system in their offices that can record faculty comments, which are then synched to the student's original file. The ability to digitally capture, store and receive video and audio files on the network, enables students and faculty to assess interpreting work immediately. The system provides secure anytime, anywhere access to the files from any computer on the RIT/NTID network or from home.

Deaf Initiative in Technology

The Deaf Initiative in Technology (DiiT) offers workshops that provide computer, graphic communication and business-based training for deaf and hard-of-hearing adults. Faculty members from NTID's Information and Computing Studies, Arts & Imaging Studies, Engineering Studies, Business Studies and Liberal Studies departments offered workshops on a wide range of topics during the 2012-2013 academic year. To date, 795 deaf and hard-of-hearing individuals have attended 104 different DiiT workshops.

Cochlear Implant Support

The number of students at RIT/NTID with cochlear implants has grown exponentially, from 29 students in 1999 to 360 in the fall of 2013. To accommodate the needs of these students, in 2008 NTID added two additional individual sound-dampened therapy rooms to the Cochlear Implant Center. The therapy rooms contain six new computer stations equipped with innovative aural educational software programs and telecommunications equipment that students use to improve their spoken English Language recognition.

Distance Learning Advances

Through a grant from The Sprint Foundation that was matched with internal funds, NTID has taken a major step in supporting distance learning for deaf and hard-of-hearing remote learners. A classroom in the NTID Learning Center was converted to The Sprint Relay Experimental Distance Learning/Access Demonstration Lab in summer of 2007. The lab is being used as a beta testing site for adapting and evaluating alternative instructional and access technologies in support of remote learners who are deaf or hard of hearing. It also provides a forum for information exchange among RIT/NTID faculty, students, instructional designers, technologists, researchers and access service providers. Projects have included:
- Flipped Classroom recordings of Math and English courses for distribution of pre-recorded lectures for students learning before attending classes;
- Classroom/Lecture Capturing recording of Math, English, Interpreting and Sign Language courses; and in-class exercises for archiving and providing anytime, anywhere access for students outside of a classroom;
- Web and video conferencing with remote locations such as India, Mongolia, South Africa and Chile;
- Multi-points video and phone conferencing supporting faculty collaboration;
- Classroom collaboration using online software to support students in courses in the master's program in secondary education;
- Lecture capturing of graduate students instructing a group of students for practice and performance review;

- Recording mock/practice interviews to assist graduating students with real-world experiences; and
- Recruiting high school students at remote locations using application sharing and web conferencing.

The Sprint Relay Lab features:
- Desktop computers, wireless laptops and mobile tablets (iPad & Android-based);
- Mobile podium with touch-screen interactive monitor enabling instructors to maintain eye contact with students while "working" the whiteboard;
- Two wall-mounted HD video cameras (instructor and audience) streaming live videos and a third supplementary SD video camera to capture front-of-classroom activities such as student presentations or sign language interpreters;
- Multiple multi-type wireless microphones to capture audio from instructors, students, interpreters and visitors;
- Videoconferencing systems (Polycom HDX9004, and software based); and
- Two short-throw interactive wall-mounted projectors with computer-based display, featuring network capabilities, supporting real-time interactions among remote and onsite learners.

These distance-learning tools allow deaf and hard-of-hearing students from anywhere around the world to be part of one classroom. The innovative adaptation of current and emerging technology promises significant contributions in expanding conventional notions of where, how and with whom learning can happen.

Engaging the Millennial Student

Today's students are technologically savvy, since technology always has been a part of their lives—whether it's surfing the Internet, instant messaging, texting or video gaming. Because students are heavily influenced by interactive technology, NTID instructors are finding new ways to integrate it into the classroom using a Student Response System (SRS) known as "clickers," a small wireless unit much like a television remote control with a keypad of letters and numbers. Clickers allow students to respond in class by using the hand-held device that sends their information to a receiver attached to the instructor's computer. The computer records and displays student responses in real time. These wireless devices transform lectures into interactive learning experiences. Because the SRS gives the students a sense of anonymity, it can make them more eager to respond and participate. Instructors see the use of clickers generating enthusiasm that leads to student engagement and improved learning.

Enhancing the Notetaking Support Process: Utilizing Graphic Notes and New Technologies

In the past 40 years, notetaking has become an integral part of the support provided to deaf and hard-of-hearing students. RIT/NTID faculty and students have been experimenting with innovative enhancements to the traditional notetaking process that show promise for increasing the learning value of notetaking for deaf and hard-of-hearing students, as well as other students with special needs.

Their experimentation includes alternative enriched notetaking graphics and collaborative support technologies that could lead to greater learner independence. Specific techniques include graphic support technologies (e.g., hand drawn, digital pens and tablets), new speech-to-text and text-to-speech technologies, digital graphic options (e.g., clipart) and digital camera and cell phone options.

Innovative Teacher Education

The microteaching component of a methods course continues to be used by faculty members in NTID's Master of Science program in Secondary Education of Students who are Deaf or Hard of Hearing (MSSE). This is accomplished through the technical support from the NTID Learning Center as well as the NTID performing arts program. Four deaf actors have been hired to act out high school student behaviors in mock classroom settings. Two cameras capture both the MSSE teacher-candidate and the

actors, and split screen videos are uploaded to the Web, so the teacher-candidates can study and critique their own efforts. The plan is to have this activity occur in the experimental classroom in Rosica Hall when the required equipment has been installed.

The actors model behavior that the teacher-candidates likely will face in a high school classroom setting: everything from dealing with medical issues, addressing students being unprepared for class or not understanding the class materials, handling students arguing or falling asleep in class, to boundary issues between the teachers and students. The student actors do provide feedback to the teacher-candidates after the end of the lesson. The experience helps teacher-candidates learn how to manage situations before they face them in the teaching world. They have indicated that microteaching is a very valuable part of their learning experience.

In addition to microteaching, the teacher-candidates also are required to observe veteran teachers in live classroom situations as part of their practicum requirement. This provides the opportunity to allow the free flow of ideas and strategies between the seasoned teachers and teacher-candidates.

Speech-to-Text Services

C-Print® is a real-time captioning system developed at NTID with support from external and internal funding. It is an access service for students who benefit from a real-time display of English text more than from sign language interpreting. C-Print® currently is used by hundreds of postsecondary and secondary programs across the nation that offer services to deaf students and also is used extensively within RIT to provide more than 18,000 hours of classroom service per academic year. The system allows captionists to transcribe to text what teachers and students say in class. Research continues, currently focusing on the use of tablet PCs to allow the integration of graphical information along with the text and the use of mobile devices (e.g., smart phones) to transmit real-time captioning over a cellular network in non-traditional learning environments.

Online Access Services Request System

NTID has created an online Service Request and Assignment System for providing streamlined access to sign language interpreting, notetaking and real-time captioning services for students. This tool supported action on more than 29,000 requests and delivery of more than 230,000 hours of service in FY 2013. NTID operates the largest sign language interpreting, notetaking and speech-to-text service organization in the world, including 117 sign language interpreters, more than 400 student notetakers each quarter and 52 real-time captionists. In addition, unique access services are available for vision-impaired students.

Pre-College Education Network (P-CEN): Nippon Foundation Grants to NTID

The Pre-College Education Network (P-CEN), a five-year partnership with The Nippon Foundation, entered its third year during FY 2013. It has started by working with schools in the Philippines and Vietnam; schools in other developing regions in the Association of Southeast Asia Nations (ASEAN) are also expected to join. During this project year a delegation from two programs in Cambodia visited NTID and local secondary programs as part of a fact-finding effort sponsored by P-CEN. This project seeks to improve teaching, learning and curriculum and instructional development for deaf and hard-of-hearing students in the ASEAN region and to improve career education opportunities for them. P-CEN will share new technologies and teaching models to train faculty at participating schools. Through RIT/NTID's Center on Access Technology, educators from partner countries will participate in workshops in Rochester, and RIT/NTID experts will visit schools in foreign countries to assist in educating faculty and staff there.

NTID Performing Arts

For its 38th season in AY 2012-2013, NTID Performing Arts presented four main stage productions and a Workshop Series that involved more than 250 deaf, hard-of-hearing and hearing students, faculty/staff

and members of the Rochester community as actors, dancers, theatre technicians and front-of-house staff (box office and ushers). These performances were attended by more than 3,750 people from throughout New York State as well as schools and community groups from neighboring states. On-campus performances included *"8"*, *Arsenic and Old Lace*, *Royal Hunt of the Sun* and *Charlie and the Chocolate Factory*. The Workshop Series consisted of intense physical performances by the production company, PUSH, with a sold-out special performance in the early spring on the Panara Theatre stage. Additional performances included a senior project by Joey Ausanio, titled *Dog Sees God*, a dance workshop by ANAKI Dance Production, and a performance of *An Evening of One Acts*, by members of the RIT Players.

During AY 2012-2013, 332 students registered for and attended Performing Arts classes. Six students were awarded performing arts scholarships and five students were awarded performing arts certificates. In total, approximately 4,700 people were served by NTID Performing Arts activities during the 2012-2013 production season.

Showcasing Deaf Artists

A team of NTID faculty and staff developed a website that showcases and promotes the works of deaf and hard-of-hearing artists (www.rit.edu/deafartists). The site features art and biographical information on more than 100 professional deaf artists from around the world as well as streaming videos and articles related to deaf artists and deaf art. Also included on the site are the self portraits of a group of RIT/NTID students, along with video and/or written descriptions.

Preserving Deaf History

The experiences of deaf people during World War II are captured in a website developed by a team of NTID faculty and staff (www.rit.edu/deafww2). Designed for students, teachers, scholars, researchers and historians, the site features articles, scripts, video clips, testimonies, artwork, books and links to related sites. Also included is an award-winning NTID documentary, *Exodus: A Deaf Jewish Family Escapes the Holocaust* and a new documentary, *Worry: A Jewish Deaf-Blind Survivor Shares Her Story*.

The HeART of Deaf Culture: Literary & Artistic Expressions of the Deaf Experience

This multimedia interactive two-DVD set, produced and edited by Karen Christie and Patti Durr, explores deaf visual art, ASL and English literature, deaf theater and deaf cinema. It contains in-depth interviews with deaf scholars and creators from each genre, and features more than 300 artworks, poems, abc stories, performances and film clips. The interactive DVD was designed as a visual textbook to be used in Deaf Cultural Studies and ASL courses. In addition to an overview providing a historical context, each genre has its own interactive timeline, collection of sample works and accompanying video and text files. www.ntid.rit.edu/educational-materials/?controller=product&path=23&product_id=33

Deaf Studies Archive

The RIT/NTID Deaf Studies Archive (http://library.rit.edu/depts/archives/deaf-studies-archive) documents RIT's central role in educating people who are deaf or hard of hearing in the United States and draws from Rochester's significant deaf community. The main focus of the archive is deaf culture, studies, education, theater and artists. This significant archive of primary resources, artwork, videos and books documents the founding and growth of NTID and highlights the many remarkable contributions of deaf, hard-of-hearing and hearing individuals affiliated with NTID. The Rochester area enjoys a vibrant deaf community, and the Deaf Studies Archive represents the first time an effort has been made to preserve some record of this culture. From the papers of distinguished faculty to artwork by alumni to the records of a local deaf theater group, this growing archive showcases the many talented and dedicated individuals affiliated with NTID and beyond. The Deaf Studies Archive is located in the RIT Archives in the Wallace Center and is curated by the NTID Librarian and the RIT Archivist.

Imagine RIT: Innovation and Creativity Festival

Innovation and creativity were center stage on the RIT campus in May 2013, when the university held its sixth-annual *Imagine RIT: Innovation and Creativity Festival.* The event showcased RIT's unique blend of technology and the arts.

More than 30,000 people came to campus on May 4, 2013, for *Imagine RIT: Innovation + Creativity Festival*, a one-day celebration of RIT's unique blend of technology and the arts. As in years past, the festival, which hosted more than 400 student, faculty and staff exhibits, demonstrations and performances, featured a strong NTID presence. NTID students, faculty, staff and alumni created and staffed 34 exhibits across campus, with 124 exhibitors and 41 volunteers.

A sampling of NTID student, faculty and staff exhibits includes:

- **3D Printing from Home Made Printers** – assembled, tested and demoed by students.
- **Eye-Controlled Accessible Viewing Device**
- **NBC: Disabilities in the Business World** – provided a hands-on experience of how deaf people feel in business settings.
- **Smart Cane for the Blind** – an electronic white cane for the blind that assists users in navigating through everyday environments and guiding them away from areas that the traditional cane falls short.
- **MotionSavvy** – student group developed software that can recognize signs by using motion capture technology.
- **"Sound" Advice** – information and examples of the latest technology for protecting hearing and for those who are deaf.
- **Video Applications and Learning** – demonstration of an array of video applications with self-captioning tools designed to help students.
- **See-Through Interactive Communication Technology** – an interactive technology that allows two-way communication, drawing and demonstration.
- **Deaf Studies Laboratory: The Signing Brain** – an exhibit exploring how the brain and experience of ASL users differ from non-ASL users.
- **NCDHR: Working Toward a Healthy Deaf Community** – a partnership between NTID and the University of Rochester Medical Center's National Center on Deaf Health Research.

RIT/NTID also provided sign language interpreting support for the festival to ensure the event was accessible to deaf and hard-of-hearing attendees.

All of the exhibits, activities and performances demonstrated the innovative thinking and creative spirit and energy that are uniquely RIT and that have shaped RIT President William W. Destler's vision of RIT as a hub for innovation and entrepreneurship.

Here, Tom Simpson, a lecturer in NTID's Information and Computing Studies Department, shows off his exhibit to attendees at Imagine RIT*.*

Intellectual Property: Licensed Educational Materials, Patents and Inventions

NTID educational materials are categorized into two groups. Those materials developed before the October 1997 RIT Intellectual Property Policy was implemented are unlicensed materials. Those materials developed after RIT implemented the policy are licensed, and the sales revenue is shared by the creator(s) of the materials and NTID per the requirements of the policy. All materials are copyrighted to Rochester Institute of Technology and are available through a variety of vendors.

Below is a summary of the materials in both categories and distribution information.

There is an existing pending patent which came to RIT/NTID via assignment from IBM. It is ID 10-12 titled "See-Through Mask to Facilitate Communication in Environments Requiring the Wearing of a Mask," Application no. 11/550,509.

Unlicensed Educational Materials

- *From Dream to Reality* (NTID's history book)
  Distributed through NTID Communications Marketing and Multimedia Services

- *Let's Communicate* (brochure)
  Distributed through NTID Communications Marketing and Multimedia Services

- *Tips for Communicating* (brochure)
  Distributed through NTID Communications Marketing and Multimedia Services

- *Project Access Workshop Planner's Guide*
  Distributed through NTID Communications Marketing and Multimedia Services

Licensed Educational Materials

- *Attention Deficit Scales for Adults - Sign Language Version*
  Distributed through NTID Communications Marketing and Multimedia Services

- *ASL at Work*
  Distributed by Dawn Sign Press

- *ASL Dictionary and Inflection Guide* (CD)
  Distributed through Harris Communications, HearMore, Captioned Media Program, various college bookstores and NTID Communications Marketing and Multimedia Services

- *ASL Dictionary and Inflection Guide* (online subscription)
  Order online at www.ntid.rit.edu/dig

- *ASL Dictionary and Inflection Guide (iOS application)*
  Order online through the Apple Store at https://itunes.apple.com/us/app/id510152499

- C-Print® Pro Software and C-Print® online training
  Distributed through NTID College Operations

- *Educational Interpreting* (DVDs and companion booklet)
  Distributed through Harris Communications, Butte Publications and NTID Communications Marketing and Multimedia Services

- *Interpreter Discourse* (CDs)
  Distributed through Barnes & Noble @ RIT, Dawn Sign Press and NTID Communications Marketing and Multimedia Services

Research, Innovation & Creativity

Intellectual Property (continued)

- *NTID Speechreading* (DVD and supplementary materials)
  Distributed through AUDiTEC

- *Processing Skills Development* (ASL texts)
  Distributed through Barnes & Noble @ RIT and NTID Communications Marketing and Multimedia Services

- *The Heart of the Hydrogen Jukebox* (DVD)
  Distributed through NTID Communications Marketing and Multimedia Services

- *The HeART of Deaf Culture* (Two-DVD set)
  Distributed through Dawn Sign Press, Harris Communications and NTID Communications Marketing and Multimedia Services

Gary Behm, director of the NTID Center on Access Technology's Innovation Lab, has a patent pending application for a see-through facemask that can be used in clean rooms and hospitals. Though the patent was filed during his time at IBM, he hopes that the work being done now in the Innovation Lab will refine those early prototypes with new polymers, enabling the commercialization of the see-through surgical mask. These masks would facilitate better communication with people who are deaf as a result of being able to see mouth movements and assess emotions more clearly.

Outreach

A primary goal of NTID's pre-college outreach programs is to better prepare deaf and hard-of-hearing middle and high schools students for college.
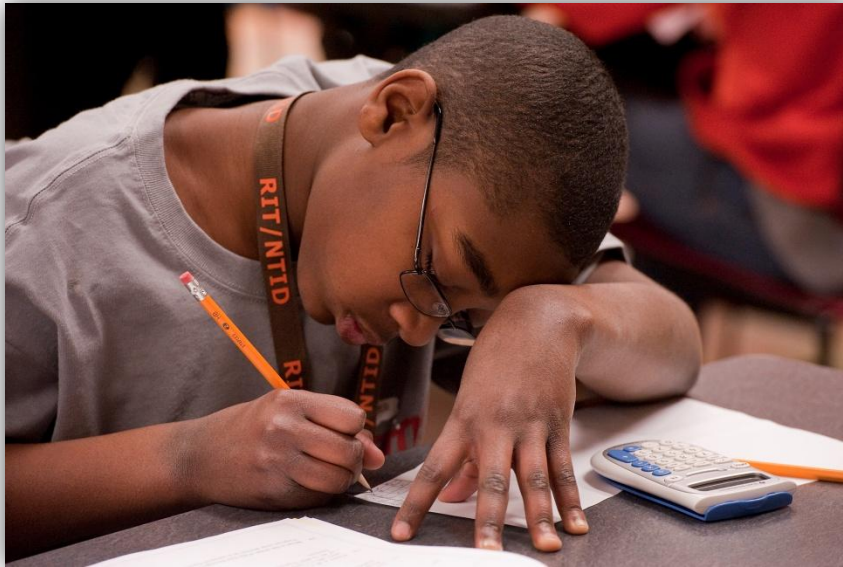
A student concentrates during RIT/NTID's national Math Competition for deaf and hard-of-hearing middle school students. In April 2013, 83 students from 24 middle schools participated in the competition.

Outreach Highlights

NTID's educational outreach efforts include a number of innovative programs designed to share educational information and provide technical assistance to alumni, other deaf and hard-of-hearing adults, teachers of deaf and hard-of-hearing students, employers, Vocational Rehabilitation personnel, secondary and middle school students and parents of deaf and hard-of-hearing children. FY 2013 outreach program highlights include pre-college, college, post-college and other outreach activities.

Pre-College Outreach Programs

- NTID's *Strategic Vision 2010* called for an increase in outreach efforts aimed at deaf and hard-of-hearing middle school and high school students. The purpose was to provide educational experiences for these students that would enable them to envision a place for themselves in a college environment after their high school graduation. A special focus of this effort was young women and Black or African American, Hispanic of any race and American Indian or Alaska Native students. During FY 2013, NTID faculty and staff conducted nine outreach programs: the SpiRIT Writing Contest for students in grades 10–12; the RIT National Science Fair for students in grades 6–12, with one young exhibitor shown here; Explore Your Future, a summer program for students in grades 10–11; TechGirlz, a summer camp for girls in grades 7–9; TechBoyz, a summer camp for boys in grades 7–9; Steps to Success, a weekend camp for Black or African American, Hispanic of any race and American Indian or Alaska Native students in grades 7–9; a math competition for middle school students using problems from MATHCOUNTS®; the Digital Arts, Film and Animation Competition for students in grades 9–12; and FutureQuest transition training workshops for high school students in grades 9–12 and their parents.

- Explore Your Future (EYF), a week-long career exploration and evaluation program for deaf and hard-of-hearing students about to enter their junior or senior year of high school, is one of NTID's most successful outreach programs. EYF provides opportunities for high school students to learn about themselves and their educational and life/career choices, and is based on the idea that people have differing interests in six areas: Realistic, Investigative, Artistic, Social, Enterprising and Conventional. Students participate in hands-on career exploration classes and personal awareness instruction. Myriad social activities and dorm-living opportunities give the students a taste of college life. A total of 5,584 students have participated in EYF over the past 28 years. Fifty-three percent of the summer 2012 participants subsequently enrolled at NTID. Two sessions were offered in summer 2013. This year's participants came from 30 states.

College Outreach Programs

- NTID's Project Access is designed to help educators incorporate basic strategies to foster better learning for mainstreamed deaf and hard-of-hearing students. NTID faculty have led workshops for teachers and other professionals from across the country and have established a resource website for educators called Class Act (www.rit.edu/classact). The site includes ready-to-use classroom handouts, information on universal design for education and videotaped faculty and student input. The site is organized into teaching, communication, support services and environment categories.

Instructors may use the site for strategies and tips to address the challenges they face and ultimately foster better learning for deaf, hard-of-hearing and hearing students. Of particular interest are three online interactive instructional modules: *Working with Interpreters*, *Pace of Instruction* and *First Day of Class*. In addition to orientation for new faculty and graduate teaching assistants, information about Project Access is shared with adjuncts and other faculty groups through the RIT Faculty Learning Communities and New Faculty Orientation. In FY 2013, new videos of students and faculty discussing classroom challenges, and strategies they use to overcome these challenges, were added.

Post-College Outreach Programs

- The Deaf Initiative in Information Technology (DIIT) project was established with two continuing grants from the National Science Foundation. During the six years of NSF funding (2000-2006), DIIT focused on the area of information technology. Since the end of NSF funding in 2006, NTID has supported the project, expanding the DIIT model to other disciplines and changing the name of the project to Deaf Initiative in Technology (DiiT). Faculty members from NTID's Information and Computing Studies, Arts & Imaging Studies, Engineering Studies, Business Studies and Liberal Studies departments offered workshops on a wide range of topics during the 2012-2013 academic year. During AY 2012-2013, the DiiT project offered four workshops to 23 deaf and hard-of-hearing participants. These included:

    o Two workshops offered on the RIT/NTID campus.
    o Two workshops offered in Pittsburgh.

    This brings the 13-year total for the DiiT project to 104 separate workshops offered to 795 deaf and hard-of-hearing attendees.

- NTID produces sign language books for technical communication that are available through ADCO in Colorado, Butte Publications in Oregon, Harris Communications in Minnesota and at www.ntid.rit.edu/educational-materials/.

Other Outreach Activities

- In AY 2012-2013, NTID's Center on Employment (NCE) served a total of 413 employer representatives through 28 training sessions and outreach workshops such as *Working Together: Deaf and Hearing People*. NCE successfully completed the seventh year of the Max Factor Family Foundation grant-supported California trip, which included four Working Together workshops and four employer orientations. NCE completed the second year of the Central Florida trip, which included two Working Together workshops, three employer orientations to promote the hiring of deaf and hard-of-hearing RIT/NTID students and NCE services and one alumni event.

- Sign Language Proficiency Interview (SLPI) workshops provide training for school personnel and others to implement and conduct sign language communication skills assessment, as well as development services for people who work with deaf and hard-of-hearing individuals. Project efforts include support for development of sign language program policies and procedures and annual reports to guide implementing SLPI use within the context of sign language communication skills.

    During FY 2013, SLPI training and services included:

    o A week of consulting and training at the National Institute for the Deaf in Worcester, South Africa
    o A workshop on ASL Role Shifting at the Conference of Interpreter Trainers convention, Charlotte, N.C.
    o Data collection videography for the Science, Technology, Engineering and Math (STEM) Signs Dictionary Project at six institutes for deaf students in Florida, Texas and California
    o Chairing a meeting of the National SLPI: ASL Leadership Board (NSLB) at the American Sign Language Teachers Association (ASLTA) conference in Charlotte, N.C.

Outreach Highlights (continued)

    o   A two-day SLPI refresher training workshop at the Atlanta Area School for the Deaf in Clarkston, Ga.

    o   Meetings and informational presentations about the SLPI at the biennial conference of the American Sign Language Teachers Association in Seattle, Wash.

The SLPI website provides responses to frequently asked questions about the SLPI, guidelines for establishing an SLPI team, model documents for implementing and monitoring SLPI use, SLPI workshop training materials and information from NTID's ASL Training and Evaluation (ASLTE), which coordinates provision of SLPI services at the college. Additionally, NTID's SLPI coordinator serves as the coordinator for the National SLPI: ASL Leadership Board (NSLB) and responds frequently to a wide range of national and international inquiries.

- C-Print® software, developed at NTID, is used by real-time captionists to produce text of spoken content. C-Print is an access service option for deaf and hard-of-hearing students in educational environments. Inquiries about C-Print come via email, phone calls and website visits. From October 2012 through September 2013, there were approximately 2,695 email dialogues and 436 phone call discussions with C-Print Product Development. The C-Print website received 8,827 visits from October 2012 to September 2013. NTID conducts online real-time captionist training as a distance-education program designed to give individuals the core preparation necessary to provide speech-to-text services, primarily in a classroom setting. Orders for online training totaled 134 and for software totaled 106 from October 2012 through September 2013.

- For its 38th season in AY 2012-2013, NTID Performing Arts presented four main stage productions and a Workshop Series that involved more than 250 deaf, hard-of-hearing and hearing students, faculty/staff and members of the Rochester community as actors, dancers, theatre technicians and front-of-house staff (box office and ushers). These performances were attended by more than 3,750 people from throughout New York State as well as schools and community groups from neighboring states. On-campus performances included *"8"*, *Arsenic and Old Lace*, *Royal Hunt of the Sun* and *Charlie and the Chocolate Factory*, pictured here with student performers Daniel Brucker and Lauren Aggen and alumnus Matthew Moore as Willy Wonka. The Workshop Series consisted of intense physical performances by the production company, PUSH, with a sold-out special performance in the early spring on the Panara Theatre stage. Additional performances included a senior project by Joey Ausanio, titled *Dog Sees God*, a dance workshop by ANAKI Dance Production, and a performance of *An Evening of One Acts*, by members of the RIT Players.

During AY 2012-2013, 332 students registered for and attended Performing Arts classes. Six students were awarded performing arts scholarships and five students were awarded performing arts certificates. In total, approximately 4,700 people were served by NTID Performing Arts activities during the 2012-2013 production season.

Pre-College Outreach

NTID's *Strategic Vision 2010* called for development of an educational outreach consortium that would allow NTID to share its expertise to improve the education and career development of individuals who are deaf or hard of hearing. An outgrowth of this decision has been a series of new outreach initiatives designed to provide educational experiences for students in grades 6–12.

NTID's pre-college outreach focuses on empowering deaf and hard-of-hearing middle school and secondary students and their parents with information to help students' long-term career success. A special focus of this effort is young women and Black or African American, Hispanic of any race and American Indian or Alaska Native students.

In 2013, RIT/NTID welcomed more than 500 middle school and high school students and their parents from all over the country to eight pre-college outreach efforts—four were outreach competitions and four were summer camps. Participation is expected to grow annually as marketing and other promotional efforts continue.

Parents, students and teachers alike had high praise for the 2013 competitions and camps. With the success of these initiatives, RIT/NTID is well on the way to its goal of making outreach a central focus, and sharing 45 years of expertise in access services, program development and the application of technology to ensure that students will possess the skills and knowledge necessary to be active participants in the 21st century American workforce.

Digital Arts, Film and Animation Competition

Deaf and hard-of-hearing students in grades 9–12 submitted 63 entries to the 2013 Digital Arts, Film and Animation Competition in four different categories: Web page design, graphic media, photo illustration and film. Three winners were selected and invited, along with a parent, to attend the awards ceremony in July 2013, where they received cash prizes and plaques.

Math Competition

RIT/NTID's national Math Competition for middle school students challenges math skills, develops self-confidence and rewards achievements. In April 2013, 83 students from 24 middle schools participated in the competition at NTID. Cash prizes were given to the top three teams and individual winners. NTID worked in cooperation with the national office of MATHCOUNTS®, which operates a successful national competition that has had only very limited participation from deaf and hard-of-hearing students. The intent of the competition is to foster interest in mathematics, a national priority.

National Science Fair for Deaf and Hard-of-Hearing Students

In 2013, budding scientists in grades 6–12 from all over the United States were invited to submit science project abstracts for review by the science fair committee. The students whose projects were selected were invited to submit a full report on their project to NTID science faculty members, who served as judges. This was the eighth year for the science fair, which encourages students to pursue their interest in science.

Fifty-two students participated in 2013. Winners in the middle school and high school divisions received cash prizes and plaques.

SpiRIT Writing Contest

RIT's eighth annual SpiRIT Writing Contest for deaf and hard-of-hearing students attracted 38 10th–12th-grade students from around the United States in July 2013. Students and their teachers submitted portfolios of the students' best work. The winners received either a full scholarship to NTID's Explore Your Future program or a $500 cash prize.

Steps to Success

Twenty-three deaf and hard-of-hearing Black or African American, Hispanic of any race and American Indian or Alaska Native students in grades 7–9 and their family members attended the Steps to Success career exploration mini-camp in August 2013. The students attended classes designed to expose them to possible career choices and enjoyed hands-on activities using computers, working with robots, completing science experiments and more. Parents and guardians benefited from workshops that offered tips on supporting their students through the college decision-making and selection process.

TechGirlz and TechBoyz Camps

Twenty deaf and hard-of-hearing girls and 28 deaf and hard-of-hearing boys in grades 7–9 attended TechGirlz/TechBoyz in 2013 to explore their interests in science, technology, engineering and mathematics. This is the eighth year for TechGirlz and the third year for TechBoyz. The week-long summer camps held in August gave girls and boys the opportunity to learn more about careers in science and technology-related fields. They built their own computers, analyzed a "crime scene" and worked with computer-aided drafting equipment to create a telescope. The program included an hour-long workshop for parents that focused on what colleges expect from high school students, how parents should encourage their students to prepare for college and how to access financial aid.

FutureQuest Workshops

FutureQuest is a free weekend workshop designed to help deaf and hard-of-hearing high school students and their parents plan for the future, whether it be the transition from high school to college or from high school to work. Students participate in fun self-awareness activities to explore their interests, learn what they are good at and how things they like to do could become their focus in college.

Parents participate in workshops to learn how to best prepare their children to have a successful future. They gather important information about financial aspects of college and the support and access services that will help their child succeed.

FutureQuest presenters are experienced education professionals who help parents and students focus on strengths and abilities as they consider options and make important decisions about the future.

Four FutureQuest events were held in AY 2012-2013 (San Diego, Calif.; Chicago, Ill.; Pittsburgh, Pa. and Seattle, Wash.) for a total of 118 students and 78 parents.

The chart on the next page summarizes participation in NTID outreach programs and lists the number of minority students participating in each event.

Pre-College Outreach AY 2012-2013			
	Total Participants	**Minorities**	
		Number	**Percent**
Explore Your Future	192	65	34%
National Science Fair	52	23	44%
SpiRIT Writing Contest	38	6	16%
Digital Arts, Film and Animation	63	29	46%
Math Competition	83	13	16%
Steps to Success	23	23	100%
TechGirlz/TechBoyz Camp	48	11	23%
FutureQuest (students only)	118	44	37%

DeafTEC

The National Science Foundation (NSF) Advanced Technological Education (ATE) National Center of Excellence, *DeafTEC: Technological Education Center for Deaf and Hard-of-Hearing Students,* was awarded in August 2011. The largest NSF award in RIT's history, DeafTEC establishes the first ATE center to support individuals who are deaf or hard of hearing.

DeafTEC's goal is to successfully integrate more deaf and hard-of-hearing individuals into the workplace in highly skilled STEM technician jobs in which these individuals are currently underrepresented and underutilized. Through regional partnerships in California, Texas and Florida among high schools, community colleges and industry and a comprehensive clearinghouse of online resources, DeafTEC provides deaf and hard-of-hearing individuals, as well as their teachers, counselors, employers and co-workers, with the resources that will help those individuals succeed, both in the classroom and on the job.

DeafTEC's regional partners are:

California
    California School for the Deaf, Riverside
    Ohlone College, Fremont
    Cisco Systems Inc., San Jose
    Solar Turbines Incorporated, San Diego
    Qualcomm, San Diego

  Florida
    Florida School for the Deaf and the Blind, St. Augustine
    St. Petersburg College, St. Petersburg
    ConMed Linvatec Corporation, Largo

  Texas
    Texas School for the Deaf, Austin
    Austin Community College, Austin
    The Dow Chemical Company, Seadrift

DeafTEC accomplishments for this year include:

- **Website** The DeafTEC website went live on October 21, 2012 and contains sections related to the following resources:

- *STEM Career Awareness:* Materials related to Information Technology careers have been added to the website along with videos of deaf professionals in IT talking about how they prepared for their careers and how they succeeded on the job. The video highlighting Matt Martella, an RIT alumnus who is now working as a mobile applications programmer at Highmark in Pittsburgh, won a national Telly Award.

- *Best Practices for Instruction:* This section of the DeafTEC website is based on the work done by Project Access, originally funded by Department of Education and FIPSE grants in 2005. It focuses on helping instructors understand and address the challenges deaf and hard-of-hearing students face in mainstream classes. The original Project Access *Class Act* website has been fully migrated to the DeafTEC website and the content, look and functionality of the original site have been updated, expanded and greatly improved.

- *Math:* This section contains more than 40 math instructional videos on algebra concepts that provide instruction and practice problems for deaf and hard-of-hearing students as well as a math blog that teachers can use to share best practices with each other.

- *English:* These on-line resources support a *Writing in the Disciplines* approach to enable teachers in STEM disciplines to successfully add a variety of writing practice to their curricula, and give students constructive feedback on their writing within the context of a STEM classroom.

- *Employers.* Text-based employment resources are available on the site, including some basic information about deafness, suggestions on hiring and new employee orientation for deaf employees, accommodations and communication strategies.

- **Partner Activities** Trainers from DeafTEC partners in California, Florida and Texas have been trained to offer workshops for teachers on best practices in teaching for deaf and hard-of-hearing students (*Project Access*), and for employers on successfully hiring and integrating deaf and hard-of-hearing employees (*Working Together*) within the regions. During 2012-2013, DeafTEC partners began to offer workshops and disseminate DeafTEC resources:

  - 12 *Project Access* workshops have been offered by our educational partners to 319 participants from high schools and community colleges

  - 5 *Working Together* workshops have been offered by our industry partners to 62 employees

- **DeafTEC Summer 2013 Train-the-Trainer Professional Development Activities**

  - A *Train-the-Trainer Writing in the Disciplines* workshop was offered to 13 STEM and English teachers/faculty from our educational partners

  - A *Train-the-Trainer Math* workshop was offer as a preconference workshop to the Convention of American Instructors of the Deaf conference held at RIT. Twenty-one teachers attended the training including eight from DeafTEC educational partners

- **Project Fast Forward** Project Fast Forward originally was established in 2006 by a three-year grant from the National Science Foundation's Advanced Technological Education program under award DUE#: 0602761 and is now an integral part of DeafTEC. The goal of the project is to build a pathway for deaf and hard-of-hearing students to transition from high school to college in selected STEM disciplines by allowing deaf and hard-of-hearing high school students to take dual credit courses, earning RIT/NTID college credit, while they are still in high school.

  - **School Partners** During the academic year 2012-2013, dual credit courses were offered at three new schools and four established schools. Three additional schools were recruited to

teach dual credit courses beginning in academic year 2013-2014. Current partner schools are:

- o Florida School for the Deaf and the Blind, St. Augustine, Fla.
- o Lexington School for the Deaf, Jackson Heights, Queens, N.Y.
- o Vines High School, Plano, Texas
- o Plano Senior High School, Plano, Texas
- o Rochester School for the Deaf, Rochester, N.Y.
- o University High School, Irvine, Calif.
- o Eastern North Carolina School for the Deaf, Wilson, N.C.
- o Learning Center for the Deaf, Framingham, Mass.
- o Maryland School for the Deaf, Frederick, Md.
- o Texas School for the Deaf, Austin, Texas
- o WT Woodson High School, Fairfax, Va.
- o Mill Neck Manor School for the Deaf, Mill Neck, N.Y.
- o Murry Bergtraum High School, New York, N.Y.
- o California School for the Deaf, Fremont, Calif.
- o California School for the Deaf, Riverside, Calif.
- o Cypress Ridge High School, Houston, Texas
- o William Boone High School, Orlando, Fla.
- o Indiana School for the Deaf, Indianapolis, Ind.
- o New York School for the Deaf (Fanwood), White Plains, N.Y.
- o Western PA School for the Deaf, Pittsburgh, Pa.
- o McNeill High School, Round Rock, Texas

- **Dual-credit courses** For the 2013-2014 academic year, we added two new dual credit courses offered by the Department of Engineering Studies, Blueprint Reading and Engineering Graphics. The following courses have been developed for high schools to teach, earning their students RIT/NTID college credit:

  - o *Applications Software:* An introduction to word processing, spreadsheet, presentation and database applications
  - o *Web Development I:* An introduction to Web page development, including XHTML and Web graphics
  - o *Page Layout I:* An introduction to page layout applications to produce pages and documents to given specifications
  - o *Raster/Vector Graphics:* Introduces the skills needed for the successful production and manipulation of raster and vector images using image creation and production software
  - o *PC Hardware I:* An introduction to the fundamental hardware concepts of personal computer (PC) systems, including their structure and components
  - o *Blueprint Reading:* An introduction to the skills necessary to read and interpret fundamental engineering drawings of details, subassemblies and assemblies
  - o *Engineering Graphics:* Introduces basic skills needed to create professional 2D drawings using AutoCAD software for mechanical, architectural and civil drawings

- **Courses taught and credit earned** During 2012-2013,11 new courses were taught at our partner high schools, and 15 additional courses began being taught for the 2013-2014 academic year. The following is the record of the total number of dual credit courses taught and students served since the beginning of Project Fast Forward:

  - o 78 dual credit course sections were taught by 29 teachers in their high schools
  - o 394 registrations were recorded in Project Fast Forward courses
  - o 337 unique deaf and hard-of-hearing students participated in the program
  - o 57 of the 337 deaf and hard-of-hearing students took more than one course

- 72 percent of high school students taking the dual credit courses received passing grades
- 855 RIT/NTID credits were awarded to deaf and hard-of-hearing students

- **Professional development** Offered to high school teachers and guidance counselors from our partnering high schools. Teachers receive technical training on course content and teaching methodologies and on improving access for deaf students in mainstream classrooms. Both teachers and counselors also receive training on selected STEM career opportunities for deaf and hard-of-hearing individuals and on the dual-credit program.

  In July 2013, training was offered to five new Project Fast Forward high school teachers, three established teachers teaching new courses and two new guidance counselors. Over six summers, 2007-2013, the following teachers and counselors have participated in summer professional development:

  - 36 teachers attended the summer training to prepare to teach dual credit courses in their high schools, with some teachers coming multiple times
  - 61 training sessions on course content have been offered
  - 22 guidance counselors attended summer professional activities to work with students taking the dual credit courses in their high school

Explore Your Future

Explore Your Future (EYF) is a week-long career exploration and evaluation program conducted at NTID each summer for deaf and hard-of-hearing students about to enter their junior or senior year of high school. It is one of the college's most successful outreach programs. The program provides high school students with the opportunity to learn about themselves and their educational and life/career choices. It incorporates the framework that people have differing interests in six areas: Realistic, Investigative, Artistic, Social, Enterprising and Conventional. Students participate in hands-on career exploration classes and personal awareness instruction. Myriad social activities and dorm-living opportunities give participants a taste of college life. A total of 5,584 students have participated in EYF over the past 29 years. Fifty-three percent of the summer 2012 participants subsequently enrolled at NTID. Two sessions were offered in summer 2013. This year's participants came from 30 states.

	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Number of Participants	196	217	228	191	192
Percentage of Minorities	30%	33%	29%	30%*	34%
Percentage Enrolling at NTID	61%	59%	47%	53%	N/A**

An EYF student operates a mill machine. The mill machine cuts metal into a specific shape, which then can be engraved later with the student's name.

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* Twenty percent of students enrolled in EYF 2012 did not indicate their ethnicity on the registration form.
** Students from EYF 2013 currently are in the process of applying to NTID.

Explore Your Future – Enrollment by Location

Summer 2013 EYF students represented 30 states.

Home State or Country	Number in EYF Summer 2013
Alabama	2
Arizona	5
California	32
Colorado	4
Connecticut	5
Delaware	1
Florida	5
Illinois	23
Indiana	4
Maine	2
Maryland	11
Massachusetts	11
Michigan	9
Minnesota	3
Missouri	5
Montana	1
New Hampshire	4
New Jersey	10
New Mexico	2
New York	11
North Carolina	4
Ohio	1
Pennsylvania	18
Tennessee	1
Texas	7
Vermont	3
Virginia	3
Washington	2
West Virginia	2
Wisconsin	1
Total	**192**

Deaf Initiative in Technology

The Deaf Initiative in Technology (DiiT) project was established with two continuing grants from the National Science Foundation (NSF) Advanced Technological Education (ATE) program, which funded the project from July 2000 through September 2006 with a total of $1,213,024. The project now has moved into an expanded phase and is funded by NTID.

Continuation and Expansion of the DIIT Model

Since the end of NSF funding in 2006, NTID has supported the project, expanding the Deaf Initiative in Information Technology (DIIT) model to other disciplines and changing the name of the project to Deaf Initiative in Technology (DiiT). DiiT offers workshops that provide computer, graphic communication and business-based training for deaf and hard-of-hearing adults. Faculty members from the Information and Computing Studies, Arts & Imaging Studies, Engineering Studies, Business Studies and Liberal Studies departments offered workshops on a wide range of topics during the 2012-2013 academic year.

During AY 2012-2013, the DiiT project offered four workshops to 23 deaf and hard-of-hearing participants, including two workshops offered on the RIT/NTID campus and two workshops in Pittsburgh supported by the Bank of New York Mellon gift. This brings the 13-year total for the DiiT project to 104 separate workshops offered to 795 deaf and hard-of-hearing attendees.

Bank of New York Mellon Foundation Gift

In August 2009, NTID received a gift of $25,000 from the Bank of New York Mellon Foundation to provide skill-building and employer-development workshops for deaf and hard-of-hearing adults in the Greater Pittsburgh, Pa., area during the 2009-2010 academic year. Using the model developed with a Max Factor Family Foundation gift, the goal was to combine NTID's expertise in education and technology with BNY Mellon's strong presence and community influence in the Pittsburgh area to improve the career preparation of deaf and hard-of-hearing community members and their subsequent successful integration into the workplace.

During April 2010, four employer awareness workshops were offered in the Pittsburgh area to 64 representatives from several companies, and a five-day Microsoft Office workshop was offered to 16 deaf and hard-of-hearing adults during August 2010.

A second series of workshops were offered in Pittsburgh during spring and summer 2011. Seven career-building workshops were offered to 151 representatives from several companies. Two technical workshops were offered–a five-day Excel 2010 workshop was offered to 10 deaf and hard-of-hearing adults and a five-day Computer Basics for Senior Citizens workshop was offered to eight participants.

Another gift of $25,000 was received from the Bank of New York Mellon Foundation to continue the skill-building and employer-development workshops for deaf and hard-of-hearing adults in the Greater Pittsburgh area. During spring 2012, eight employer awareness workshops/meetings were held in Pittsburgh with 62 representatives from several companies including BNY Mellon, WESCO International, Heinz Company, University of Pittsburgh Medical Center and Highmark Corp. This gift supported a second round of workshops in Pittsburgh. In February 2013, two technical workshops were offered at the Western Pennsylvania School for the Deaf (WPSD) in Pittsburgh: a four-day Intermediate Microsoft Excel workshop to 11 deaf and hard-of-hearing professionals and a one-day workshop on Microsoft Excel to six teachers/staff from WPSD. In August 2013, two employer awareness workshops were held at Highmark Corp. with a total of 59 Highmark employees attending the workshops.

Employer Outreach

NTID initiates and delivers consultation, training, follow-up and other support services to employers. Through these services, employers become aware of the needs of deaf and hard-of-hearing people for employment and, in partnership with NTID, facilitate graduates entering the workforce and continuing their career development. A total of 413 employer representatives received training through the NTID Center on Employment (NCE) in AY 2012-2013.

Employer Training and Educational Programs

NCE conducted, delivered and presented 28 programs for 413 human resources professionals and company representatives.

NTID Job Fair

The 12th annual NTID Job Fair was held in October 2012 with 38 employers (including eight new employers) attending and more than 300 students and alumni participating. During this fair, six employers participated on a panel attended by student job seekers to explain the job search process from their company's perspective and answer questions from student attendees.

Co-op Visitation Program

Fourteen NTID faculty and staff visited 30 students on cooperative education assignments and their supervisors in eight states and Washington, D.C.

Outreach to Employers, Alumni and Other Deaf and Hard-of-Hearing Adults

- Accommodated 10 employers in recruitment visits and seven on-campus orientations; there were 24 résumé packages requested
- Consulted with 120 alumni and other deaf and hard-of-hearing adults seeking job search assistance
- Successfully completed the seventh year of the Max Factor Family Foundation grant-supported California trip, which included four Working Together workshops and four employer orientations
- Completed the second year of the Central Florida trip which included two Working Together workshops, three employer orientations, and one alumni event

NCE Marketing Highlights

- Conducted marketing and media campaign to promote the 2013 NTID Job Fair to local employers.
- Exhibited at the National SHRM Diversity Conference in October 2012 in Chicago, Ill.
- Completed NCE tabletop exhibit for use in conferences
- Contributed content to *FOCUS* magazine on employer awards
- Added section to website for international students and added other content for website, such as employer awards
- Created content for NCE Bulletin Board
- Continued quarterly e-blasts to employers

Faculty and Staff

As of fall 2013, 34 percent of NTID's workforce was eligible for retirement.

In 2013, as a result of a one-time voluntary retirement incentive program necessitated by budget cuts, NTID bid farewell and good luck to 22 faculty and staff, many of whom had shaped NTID for more than 25 years.

Faculty and Staff Highlights

Attracting and retaining the most capable and dedicated faculty and staff to provide an exceptional learning environment for deaf and hard-of-hearing students is central to fulfilling NTID's mission and purpose. NTID's highly qualified faculty and staff bring to the institute a wide variety of experiences, skills and backgrounds. Some are veteran educators with many years of higher education teaching experience, while others bring to the NTID classroom a wealth of hands-on knowledge gained from working in business and industry. Among the latter group are alumni who, after gaining significant work experience away from NTID, have returned to their alma mater to share the expertise they have learned on the job with a new generation of students.

In 1987, NTID employed 687 faculty and staff. As of fall 2013, with high student enrollment, NTID employed 530 faculty and staff, down from 587 in fall 2011 and 565 in fall 2012.

Number of NTID Employees by Year
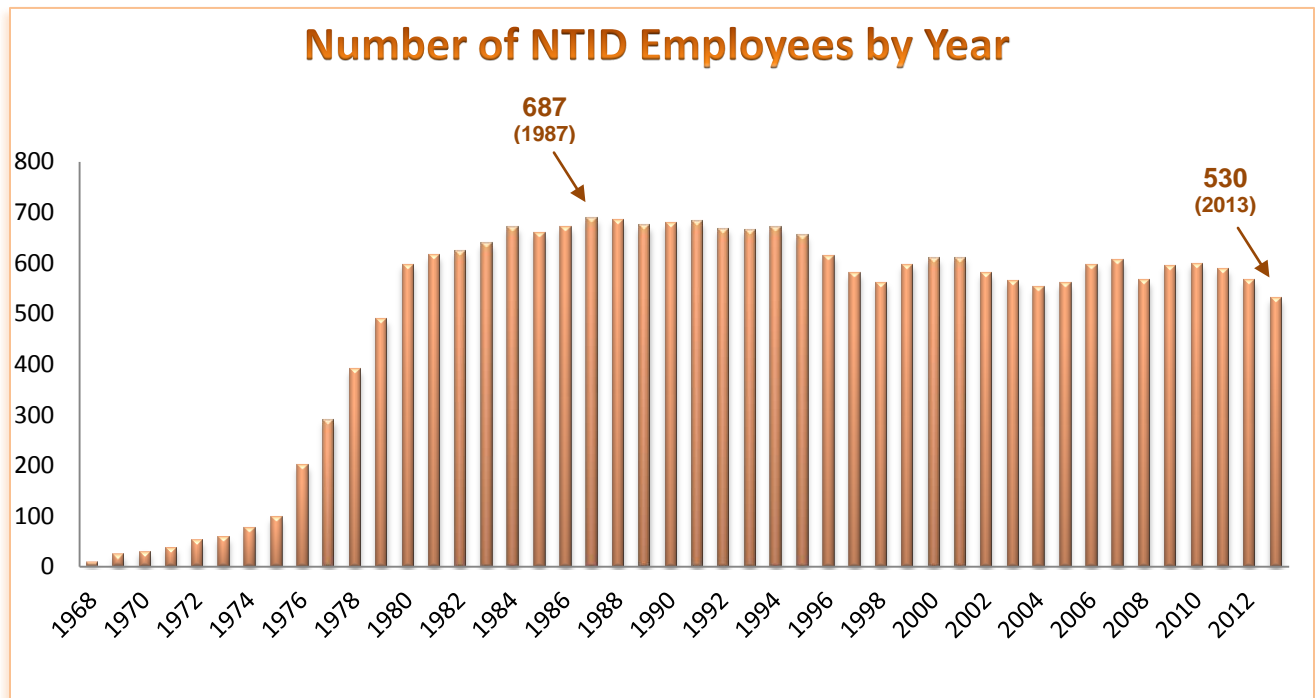
Average Salary: Faculty and Staff

RIT endeavors to maintain faculty salaries that are on par with the colleges and universities with which it competes. Similarly, RIT provides staff salaries that are competitive with other local and regional colleges and businesses. Annual pay increments for NTID faculty and staff are established by RIT.

	Total Number in Position	Average Salary October 2012 – September 2013
Faculty*		
Professor	31	$108,614
Associate Professor	50	$88,800
Assistant Professor	37	$69,210
Senior Lecturer	11	$62,374
Lecturer	43	$57,983
Subtotal Faculty	**172**	**$78,763**
Staff		
Exempt Staff**	113	$62,715
Non-Exempt Staff***	245	$44,533
Subtotal Staff	**358**	**$50,272**
Total	**530**	**$59,518**

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* Faculty are based on full-time, 9.5 month salaries; visiting faculty are noted within their rank.
** Based on full-time 12-month salaries.
*** Technical, clerical and C-Print® captionists are based on 35 hours per week/12 months per year. Interpreters are based on 40 hours per week/12 months per year.

Tenure-Track Positions and Faculty Rank

In FY 2013, senior-level faculty members (professor and associate professor) comprised 68 percent of all ranked tenure-track faculty as compared to 47 percent in FY 1985. Of the 117 tenure-track positions, 91 percent are tenured. The number of tenure-track positions has decreased from 244 to 117 over the past 29 years.

Rank	Number of Tenure-Track Positions*					FY 2013 Faculty with Tenure	
	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Number	Percent
Professor	40	35	35	34	31	31	100%
Associate Professor	57	55	56	52	49	49	100%
Assistant Professor**	52	53	51	48	37	26	70%
Instructor/Lecturer	1	1	1	4	0	0	0%
Total Positions	**150**	**144**	**142**	**138**	**117**	**106**	**91%**

Patti Durr (center), an instructional faculty member in NTID's Cultural and Creative Studies Department, and students in her Deaf Art/Deaf Artists class pose in front of their mural "We Are All Branches of the Same Tree" in NTID's Lyndon B. Johnson Hall.

*   Includes ranked administrators.
** Excluded are assistant professors not in tenure-track positions.

Degree Levels of Tenured and Tenure-Track Faculty

Faculty members join NTID with a wide variety of backgrounds, including those with substantial experience in the private sector. In FY 2013, 95 percent of full-time, tenure-track faculty members held graduate degrees. Four percent more tenure-track faculty held doctorate degrees than in FY 2012.

FY 2013 Highest Degree Level Achieved Tenure and Tenure-Track Faculty*		
	Number	Percent
Doctorate	56	48%
Master's	55	47%
Bachelor's	6	5%
Total	**117**	**100%**

* Includes ranked administrators.

Age, Length of Service and Retirement Status of NTID Faculty and Staff*

NTID's faculty and staff average 49 years of age with 15 years of service at NTID. As of October 2013, 34 percent are eligible for retirement.**

	Percent Full Time	Average Age	Average Length of Service	Age of Faculty/Staff					Currently in Retirement Transition
				< 54	55-61	62-64	65-69	>70	
Professor	100%	64.1	31.5	2	8	14	7	2	3
Associate Professor	96%	59.1	27.2	15	13	8	10	4	7
Assistant Professor	100%	51.4	15.7	21	11	2	3	0	1
Senior Lecturer	100%	50.6	12.6	6	4	1	0	0	0
Lecturer	98%	44.0	7.1	37	4	1	1	0	1
Exempt Staff	97%	46.4	12.8	87	18	5	3	0	2
Technical/Clerical	94%	51.1	12.9	51	14	5	7	1	1
Interpreter	86%	45.0	14.5	94	16	2	1	2	2
Real-Time Captionist	44%	47.3	5.6	41	7	2	2	0	0

Yolynn Valdez, a Laboratory Science Technology student from Philadelphia, Pa., hands a slice of cake celebrating NTID's 45th anniversary to NTID Library Liaison, Joan Naturale.

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* Data not available for all faculty and staff.
** To be eligible for retirement, an employee's age and years of service must be greater than or equal to 70, and they must be at least 55 years of age if hired after 1995, and at least 50 years of age if hired before 1995.

Faculty and Staff New Hires

The distribution of new hires by category and for
full-time and part-time positions is shown below.

	New Hires				
	FY 2009	**FY 2010**	**FY 2011**	**FY 2012**	**FY 2013**
Full-Time:					
Faculty	11	13	6	11	3
Exempt Staff	12	14	13	7	2
Non-Exempt Staff*	18	24	13	7	4
Total Full-Time	**41**	**51**	**32**	**25**	**9**
Part-Time:					
Faculty	0	1	0	0	0
Exempt Staff	1	1	0	1	2
Non-Exempt Staff*	1	6	4	5	10
Total Part-Time	**2**	**8**	**4**	**6**	**12**
Total	**43**	**59**	**36**	**31**	**21**

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* Includes technical, clerical, C-Print® captionists and interpreters.

Faculty and Staff Terminations

The faculty and staff turnover rate, 10.4 percent, is an increase from last year. Retirements of current faculty and staff are expected to rise as the employee base ages.

Full-Time/Part-Time	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013 Percent	Number
Faculty	2.5%	6.9%	6.6%	8.2%	15.1%	26
Exempt Staff*	6.9%	10.0%	9.0%	17.6%	10.6%	12
Non-Exempt Staff**	4.2%	9.8%	9.8%	7.2%	6.9%	17
Total	**4.2%**	**8.9%**	**8.5%**	**9.7%**	**10.4%**	**55**

* Includes all exempt staff and educational development faculty.
** Includes technical, clerical, C-Print® captionists and interpreters.

RIT/NTID Leadership

RIT/NTID leaders stand for the beginning of NTID's 2013 graduation ceremony. From left to right: Dr. Gerry Buckley, president, NTID and vice president and dean, RIT; Dr. Stephen Aldersley, associate vice president for Academic Affairs, NTID; Dr. Vincent Daniele, chair of the Department of Science and Mathematics, NTID (now retired); and Dr. Bill Destler, president, RIT.

NTID Administrative Council

Dr. Gerard J. Buckley
President, NTID
Vice President and
Dean, RIT

Bernard Hurwitz, J.D.
Executive Assistant to the
President, NTID

Dr. Stephen Aldersley
Associate Vice President for
Academic Affairs

Linda L. Hoke
Assistant to the President
and Office Manager

Erwin Smith
Assistant Vice President for
Information Technology and
College Operations

Mike Servé
Assistant Vice President for
Finance and Budget

Dr. Linda Bryant
Interim Associate Dean for
Student and Academic Services

Dr. Kathryn Schmitz
Associate Dean for
Academic Administration

Dr. Rico Peterson
Assistant Dean and Director,
NTID Access Services

Marianne Gustafson
Associate Dean for
Curriculum and Special
Projects

Dr. Pamela Carmichael
Executive Director of
Communications, Marketing
and Multimedia Services

Dr. Denise Kavin
Special Assistant for
Strategic Decisions 2020
Implementation

Alvin Boyd
Special Assistant for
Diversity and Inclusion

NTID National Advisory Group

The National Advisory Group advises the NTID president / RIT vice president and dean in developing and carrying out policies governing the operation and direction of the institute. The National Advisory Group comprises professionals concerned with the education of deaf and hard-of-hearing students, professionals concerned with postsecondary education and individuals familiar with the need for the services provided by NTID.

Active Members

Brenda Battat
Retired Executive Director, Hearing Loss Association of America

Andrew N. Brenneman '86 AS, '88 BS
Senior National Account Executive, Sprint Nextel

Elizabeth Ayers Gibson '98 BS, '02 MS
Advanced Practice Sonographer, Virginia Mason Medical Center

Dr. Catherine Hunt
Retired R&D Director, Innovation Sourcing and Sustainable Technologies, DOW Chemical Company

Cinda Lautenschlegar '87 BS
Lead Senior Air Pollution Control Engineer, Connecticut Department of Environmental Protection

Jon Levy
Principal, Orange County Department of Education Regional Deaf and Hard-of-Hearing Program

Essie Calhoun McDavid
Retired Chief Diversity Officer and Director, Community Affairs Vice President, Eastman Kodak Company

James Meisser
President/CEO, Hiawatha National Bank

Dr. Harold Mowl
Superintendent/CEO, Rochester School for the Deaf; *Chair*

Leeanne Seaver
Owner, Seaver Creative Services, Inc.

Dr. Laurance Warford
Senior Workforce Consultant, League for Innovation in the Community College

Dr. Olga Welch
Dean, Duquesne University School of Education

U.S. Department of Education

Annette Reichman
Director/Liaison, Office of Special Institutions, Office of Special Education and Rehabilitative Services

U.S. Government Representatives

The Honorable Charles E. Schumer
Member, U.S. Senate, New York State

The Honorable Louise M. Slaughter
Member, U.S. House of Representatives, New York State

Members of NTID's National Advisory Group toured NTID's new research and innovation center, Sebastian and Lenore Rosica Hall, during their spring 2013 meeting.

NTID Foundation Board

The NTID Foundation is an organization of volunteers committed to the advancement of career development and personal growth opportunities for deaf and hard-of-hearing students at NTID.

Foundation board members foster involvement and private investment to enrich the quality and vitality of the learning environment at NTID.

Active Members:

Richard C. Adamany
Chief Executive Officer, Swiss+Tech Products

Vicky Adamany

Gary W. Behm '81
Associate Professor, Engineering Director of Center on Access Technology Innovation Laboratory, NTID

Shraddhaq Chaplot
Hardware Test Engineer, Cicso Systems, Inc.

Gracie Coleman (Emeritus Director)
President & CEO, Coleman Consulting Services

Meredith Crane (Emeritus Director)
Executive Director, Deaf Initiatives, Inc.

Michael Ellis
National Director, Sprint Nextel

Max Factor III (Honorary Director)
Attorney at Law, Factor Mediation and Arbitration Services, Inc.

Sean P. Flanagan
Sr. Customer Business Manager, Bayer Consumer Care

Sue Gagnon-Flanagan
Volunteer Event Coordinator

Eric Gjerdingen '92
Executive Director, DEAF Inc.

Dr. Mary Jane Hellyar (Emeritus Director)
Retired Executive Vice President, Film & Photofinishing Systems Group, Eastman Kodak Company

Gordon Hewitt '73, '75 MS
Chief for Strategic Enterprise Initiative Branch, U.S. Dept. of Homeland Security

Andrew Jacobson '90, '96 MS
Enrolled Agent, Better Tax Service

Edward Latimer, M.D.
Psychiatrist

Gretchen Logue

Ken Logue
National Sales Manager, ITW Company

NTID Foundation Board (continued)

RIT Officers

Dr. William W. Destler
President

Karen Barrows
Secretary to the Institute and Chief of Staff

Dr. Heath Boice-Pardee
Interim Senior Vice President, Student Affairs

Dr. Gerard J. Buckley
President, NTID; Vice President and Dean, RIT

Lisa Cauda
Vice President, Development and Alumni Relations

Dr. Jeremy Haefner
Provost and Senior Vice President for Academic Affairs

Kevin McDonald, J.D.
Vice President and Associate Provost for Diversity and Inclusion

Dr. Katherine J. Mayberry
Vice President for Strategic Planning and Special Initiatives

Dr. James G. Miller
Senior Vice President, Enrollment Management and Career Services

Dr. David Ornt
Vice President, Institute of Health Sciences and Technology; Dean, College of Health Sciences and Technology

Dr. Ryne Raffaelle
Vice President for Research and Associate Provost for Outreach Programs

Deborah M. Stendardi
Vice President, Government and Community Relations

Dr. James H. Watters
Senior Vice President, Finance and Administration

RIT Board of Trustees Active Trustees

Susan J. Riley
BS '81; Former Executive Vice President, The Children's Place

Richard E. Sands
Chairman, Constellation Brands, Inc.

Janet F. Sansone
Retired Chief Management Officer, The United States Government Printing Office

Stephen L. Schultz
AS '88, BS '89; Co-Founder and Chief Technology Officer, Pictometry International, Inc.

Frank S. Sklarsky
Chief Financial Officer and Executive Vice President, Tyco International

Kevin J. Surace
'85; Chief Executive Officer, Serious Materials

Sharon Ting
Partner, Axialent, Inc.

Harry P. Trueheart III
Chairman, Nixon Peabody LLP

Donald J. Truesdale
BS '87; Partner, Goldman, Sachs & Co.

Kim E. VanGelder
BS '86; Chief Information Officer and Vice President, Eastman Kodak Company

Ricardo A. Venegas
BS '92; Chief Financial Officer, CloudBurstTV, LLC; also serves as RIT Alumni Association Representative

Chester N. Watson
BS '74; General Auditor, General Motors Corporation

Christine B. Whitman
Vice Chair, Board of Trustees, Rochester Institute of Technology; Chairman and Chief Executive Officer, Complemar Partners, Inc.

Ronald L. Zarrella
Chairman Emeritus, Bausch & Lomb, Inc.

Results of Financial Operations

A student and furry companion enjoy a Rochester winter day outside NTID's Student Development Center.

Financial Operations Highlights

Fiscal year 2013 has come to be known as the year of sequestration. In March 2013 NTID's federal appropriation was reduced by 5.2 percent or $3.4 million from what was granted in fiscal year 2012. After taking into account an increase of 2.1 percent in non-federal funds, total revenue for 2013 was $2.9 million below 2012.

The budget reductions undertaken in fiscal year 2012 had a profound impact on NTID's expenditures in fiscal year 2013. Overall expenditures decreased by 3.2 percent. Total compensation declined by 6.0 percent. Salary and wages fell by 4.0 percent while significant savings were realized in employee benefit costs. Additional savings were recorded in residence hall operations and capital (equipment) expenditures.

These savings were somewhat offset by a 12.7 percent rise in expenditures for credit hours purchased for NTID students who take courses in the other colleges of RIT. The number of credit hours charged increased by 5.0 percent while the average per credit hour cost rose by 7.8 percent.

The fiscal year 2013 budget performance is an accurate measure of NTID's commitment to and recognition of the pressure upon the federal budget. NTID will continue to implement strategies to accommodate the funding challenges that seem likely to continue.

This being said, further budget sequestration as experienced in 2013 will require drastic reductions that will impair NTID's ability to continue to serve the current enrollment levels. Further reductions will require that current program offerings be curtailed as well as placing limits on the level of access services that can be provided.

Financial Operating Results

In FY 2013, NTID operating revenue fell by 3.2 percent. This was a result of the March 2013 sequestration which reduced NTID's federal appropriation by 5.2 percent or $3,421,969. Increased non-federal funds (tuition, room, board and fees) of $523,993 served to somewhat offset the revenue reduction. Reductions to NTID's faculty and staff headcount as well as benefit savings were required to lessen the impact of sequestration.

	FY 2012	FY 2013	Variance $	Variance %
EXPENSES				
Personnel Compensation Expenditures				
Salaries and Wages	$35,672,376	$34,237,664	(1,434,712)	-4.0%
Benefits	12,949,970	11,460,042	(1,489,928)	-11.5%
Total Personnel Compensation	**$48,622,346**	**$45,697,706**	**(2,924,640)**	**-6.0%**
RIT Services Expenditures				
Direct:				
Residence Halls/Food Service, Student Services	$7,562,794	$6,735,938	(826,856)	-10.9%
Cross-Registered Tuition	8,040,804	9,064,220	1,023,416	12.7%
Physical Plant Services	2,226,971	2,406,407	179,436	8.1%
Indirect:				
Overhead	13,404,341	14,258,211	853,870	6.4%
Total RIT Services	**$31,234,910**	**$32,464,776**	**$1,229,866**	**3.9%**
Other Expenditures				
Support Expenditures	$5,395,787	$5,248,012	(147,775)	-2.7%
Grant Cost Shares	337,699	323,344	(14,355)	-4.3%
Financial Aid	2,731,320	2,741,242	9,922	0.4%
Capital	581,689	210,488	(371,201)	-63.8%
Matching Endowment	141,418	177,000	35,582	25.2%
Plant Fund	1,075,525	360,150	(715,375)	-66.5%
Total Other	**$10,263,438**	**$9,060,236**	**(1,203,202)**	**-11.7%**
Total Expenses	**$90,120,694**	**$87,222,718**	**(2,897,976)**	**-3.2%**
REVENUE				
Federal Appropriation	$65,422,118	$62,000,149	(3,421,969)	-5.2%
Non-federal Funds	24,698,576	25,222,569	523,993	2.1%
Total Revenue	**$90,120,694**	**$87,222,718**	**(2,897,976)**	**-3.2%**

Tuition, Room, Board and Other Fees

Tuition and fees increased by 6.9 percent while charges for room, board and fees increased by 3.7 percent for a total combined increase of 5.4 percent. These non-federal resources constitute 29 percent of NTID's total operating revenue.

Rates Charged Students

	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Tuition	$9,801	$10,233	$10,719	$11,583	$12,393
Room	5,421	5,583	5,862	6,096	6,309
Board	3,960	4,059	4,182	4,317	4,491
Fees	702	717	753	453	474
Total	**$19,884**	**$20,592**	**$21,516**	**$22,449**	**$23,667**
Collections	$21,881,600	$22,849,300	$24,247,625	$24,698,576	$25,222,569
Enrollment (Fall)	1,450	1,474	1,521	1,547	1,529
Collections Per Student	**$15,091**	**$15,502**	**$15,942**	**$15,965**	**$16,496**

Students hang out to dry tie-dye designs created during the Imagine RIT *festival in May 2013.*

Financial Aid

The average student receives significant financial aid to apply against tuition, room, board, fees, books, transportation and other expenses.

Nicolette Ferron, a Master of Science in Secondary Education of Students who are Deaf or Hard of Hearing student from Rochester, N.Y., shares a commencement moment with her family.

Financial Aid (Domestic Students)

Financial aid awards to students totaled $22.0 million in 2013, a 2.6 percent decline from 2012. Institutionally sponsored aid increased by 4.0 percent while state and federal support remained essentially unchanged. There was a significant decline, 9.6 percent, in loans taken out by students. However, the number of awards, including loans, remained level from the previous year. Overall, the average financial aid per student (excluding loans) increased by 1.7 percent.

SOURCE OF AID	2012 Awards*	2012 Amount	2013 Awards*	2013 Amount	DIFF %
INSTITUTIONALLY SPONSORED SUPPORT					
Grant-in-Aid:					
NTID Grant-in-Aid	348	$1,206,833	382	$1,202,041	-0.4%
RIT Grant-in-Aid	33	$96,802	33	$101,258	4.6%
Subtotal Grant-in-Aid	381	$1,303,635	415	$1,303,299	0.0%
Scholarships:					
NTID Merit	461	$1,445,985	479	$1,515,898	4.8%
RIT Merit	64	$93,199	77	$133,539	43.3%
NTID Endowments	376	$611,265	405	$592,924	-3.0%
External Groups	100	$192,394	106	$248,184	29.0%
Subtotal Scholarships	1,001	$2,342,843	1,067	$2,490,545	6.3%
Subtotal Institutionally Sponsored Support	**1,382**	**$3,646,478**	**1,482**	**$3,793,844**	**4.0%**
STATE AND FEDERAL SUPPORT					
Grants:					
Pell Grants	702	$2,972,676	674	$2,796,483	-5.9%
State Grants	236	$502,031	237	$517,134	3.0%
Subtotal Grants	938	$3,474,707	911	$3,313,617	-4.6%
Other Federal Support:					
Vocational Rehabilitation	943	$9,314,927	912	$9,319,129	0.0%
Federal Work Study	22	$38,534	32	$55,588	44.3%
Subtotal Other Support	965	$9,353,461	944	$9,374,717	0.2%
Subtotal State and Federal Support	**1,903**	**$12,828,168**	**1,855**	**$12,688,334**	**-1.1%**
LOANS					
Subsidized Federal Student Loan	655	$2,643,177	576	$1,978,784	-25.1%
Unsubsidized Federal Student Loan	641	$2,791,802	670	$2,993,238	7.2%
Parent PLUS Loans	74	$623,949	70	$504,026	-19.2%
Subtotal Loans	**1,370**	**$6,058,928**	**1,316**	**$5,476,048**	**-9.6%**
TOTAL ALL FINANCIAL AID	**4,655**	**$22,533,574**	**4,653**	**$21,958,226**	**-2.6%**
Domestic Student Enrollment		**1,505**		**1,481**	**-1.6%**
Average Financial Aid per Student		**$14,972**		**$14,827**	**-1.0%**
Average Financial Aid per Student Excluding Loans		**$10,947**		**$11,129**	**1.7%**

* Students receive more than one form of aid; therefore the numbers of awards (grants, loans, scholarship, etc.) outnumber the student body.

External Funding Sources

The National Institute for General Medical Sciences, part of the National Institutes of Health, awarded a $2.1 million grant to RIT/NTID's Center on Access Technology and the University of Rochester Medical Center's Clinical & Translational Science Institute to build a model program that integrates activities at each university to improve the experience of deaf and hard-of-hearing students seeking advanced degrees. Here, Dr. Peter Hauser, principal investigator for RIT/NTID, talks with the two RIT/NTID graduate students in Environmental Science, Gloria Wink, of Rochester, N.Y., and Gina DeNaples, of Greensboro, N.C., who have enrolled in the program this first year.

The NTID Foundation

NTID received $1,649,495 in new commitments of support including outright gifts of cash and equivalents, gifts-in-kind, deferred gifts and pledges. These dollars were designated to support NTID endowed funds, construction of Sebastian and Lenore Rosica Hall, equipment upgrades to classrooms and laboratories, P-CEN and a variety of research and pre- and post-college outreach programs.

Contributions of $1,000 and above received during FY 2013 include:

$250,000 - $999,999 Level:	The Nippon Foundation
$100,000 - $249,999 Level:	William Randolph Hearst Foundation Mr. Martin L. Suter
$50,000 - $99,999 Level:	American Honda Foundation Way Trust
$25,000-$49,999 Level:	Interpretek Mr. Andrew R. Jacobson Mrs. Carol D. Menchel
$10,000 - $24,999 Level:	Bank of New York Mellon Dr. James J. DeCaro and Mrs. Patricia DeCaro Dow Chemical Co. Foundation Jephson Educational Trust Carl W. Johnson Foundation Estate of Ms. Conzilia D. Lopez Drs. Robert J. and Susan M. Mather Mr. Barry Myers Sorenson Communications, Inc. Ms. Francine L. Suan Solon E. Summerfield Foundation ZVRS
$5,000 - $9,999 Level:	JPMorgan Chase & Co. Mr. Mark C. Feder William G. McGowan Charitable Fund MSM Productions, Ltd. Mary S. Mulligan Charitable Trust Mr. Thomas M. Otto-Bruc Mr. Philip Rubin and Mr. Cliff White Mr. Christopher D. Wagner Mr. Jason N. Webb Wells Fargo Foundation
$1,000 - $4,999 Level:	Bank of New York Mellon Mr. Andrew N. Brenneman Enfocus Software, Inc. Dr. Robert F. Panara Rochester Area Community Foundation Mr. Daniel J. Schreiner Sprint Foundation Louis S. & Molly B. Wolk Foundation

$1,000 - $4,999 Level:	
	Dr. Henry J. Adler
	Dr. Laurie C. Brewer
	Dr. and Mrs. Gerard J. Buckley
	Mrs. Ginger Burkhauser
	Communication Service for the Deaf
	Constellation Energy Group Foundation, Inc.
	Dr. Vincent A. Daniele
	Dr. James J. DeCaro
	Easter Seals
	Mrs. Gail Feigenbaum
	Mr. Frederick G. Feldman
	Mr. Daniel Gahagan
	Hamilton Relay
	Dr. Robert I. Harris
	Bernard R. Hurwitz and Stacy M. Lawrence
	Dr. T. Alan Hurwitz
	Mr. and Mrs. Richard Hymes
	Drs. Christopher and Kim Kurz
	Stefano La Sala Foundation, Inc.
	Edward Latimer, M.D.
	Dr. Marvin Lessig
	James McCormick & Co.
	Dr. Harold M. Mowl, Jr.
	Musano Communications LLC
	Al Van Nevel Memorial Foundation
	Ms. Juanita Osterhout
	Mr. Michael Harris Pilson
	Dr. Karey T. Pine
	Purple Communications, Inc.
	Mr. John T. Reid
	Mrs. Sidonie Merkel Roepke
	Mrs. Eleanor P. Scouten
	Mr. Michael S. Servé
	Mr. Erwin J. Smith
	Frank B. Sullivan Memorial Foundation, Inc.
	Mr. Mark Leary Wambach
	Mr. Stephan Weitz
	Mr. Allon Yomtov

NTID Annual Fundraising Results

Through the ongoing support of the NTID Foundation, the college's development program continues to be successful even in this tough economic climate. The substantial sums that NTID raises demonstrate NTID's commitment to seeking alternative sources of public and private support.

In FY 2013, NTID development activity generated $935,832 for endowment and restricted purposes. Of that amount, $177,000 was matched with federal dollars and directed toward NTID's endowed scholarship funds.

	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Endowment and Restricted Funds	$2,085,697	$2,602,401	$2,975,368	$1,460,336	$935,832
Equipment and Software	87,660	94,100	1,028,004	$141,740	$29,380
Total	**$2,173,357**	**$2,696,501**	**$4,003,372**	**$1,602,076**	**$965,212**

NTID students perform in The Royal Hunt of the Sun. *There are several endowed funds for the NTID Performing Arts program.*

NTID Endowment Programs

A total of $354,000, including matching federal funds* of $177,000, was added to the Federal Matching Endowment Fund corpus in 2013. The market value of NTID's Federal Matching Endowment portfolio stands at $47,897,240.

The market value of NTID's total endowments, which include privately raised funds prior to the establishment of the Federal Matching Endowment program, is $52,985,811.

Value as of September 30, 2013

	Contributed Value	Market Value
Funds Subject to Federal Investment and Spending Guidelines		
Private	$7,255,491	$11,512,049
Federal	$7,164,205	$10,770,603
Subtotal	$14,419,696	$22,282,652
Funds No Longer Subject to Federal Investment and Spending Guidelines	$13,003,215	$25,614,587
Total Federal Endowment	**$27,422,911**	**$47,897,239**

Other Endowments	Contributed Value	Market Value
Private	$1,891,940	$5,088,572
Total Endowments	**$29,314,851**	**$52,985,811**

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* There no longer is a separate appropriation for the Matching Endowment Program. Any monies matched must be funded through operating funds efficiencies.

Scholarships and Endowed Funds

The generosity of a large number of friends of
NTID has resulted in the following scholarships
for NTID students.

Barlow Endowed Scholarship Fund

Alice Beardsley Memorial Endowed Scholarship Fund for Interpreting Students at NTID

Ned Behnke Memorial Endowed Scholarship Fund

Doris W. Blanchard Endowed Scholarship Fund

Farid Bozorgi Memorial Endowed Scholarship Fund

Bernard Bragg Deaf Theatre, Signed Arts and Deaf Cinema Endowment Fund

Caption First Scholarship at NTID

Citicorp/Citibank Endowed Scholarship Fund at NTID

Continental Corporation Endowed Scholarship Fund at NTID

Lillian M. Cowin Memorial Endowed Scholarship Fund

Robert R. and Donna E. Davila Endowed Scholarship Fund

James J. DeCaro Endowed Scholarship Fund

Delta Sigma Phi Fraternity Endowed Scholarship Fund

Ronald Dodge Memorial Endowed Scholarship Fund

Ronald Dodge Faculty/Staff Grants Endowed Fund

Dorothy E. Ann Fund (D.E.A.F.) Endowed Scholarship Fund

Mr. and Mrs. Joseph F. Dyer Endowed Scholarship Fund

Max Factor Family Foundation Endowed Scholarship Fund

Barbara M. Fallon KPMG Memorial Endowed Scholarship Fund

Rose and George Feigenbaum Endowed Scholarship Fund

Ruth H. Fenyvessy Memorial Endowed Scholarship Fund

Maurice and Maxine Forman Endowed Scholarship Fund

Ann Wadsworth Frisina Memorial Endowed Scholarship Fund

Dr. Robert Frisina Award

Max and Helene Frumkes Memorial Endowed Scholarship Fund

Garlinghouse Endowed Scholarship Fund

Warren Goldmann Endowed Scholarship Fund

Allen and Gloria Gopen Endowed Scholarship Fund

Mildred F. Hall Endowed Scholarship Fund

William Randolph Hearst Endowed Scholarship Fund for Financially Disadvantaged Students

Dr. Mary Jane Hellyar Endowed Scholarship Fund

Frank Horton Endowed Scholarship Fund

T. Alan and Vicki T. Hurwitz Family Endowed Scholarship Fund

Ralph Hymes Endowed Scholarship Fund

Linda A. Iacelli Endowed Student Support Fund

Scholarships and Endowed Funds (continued)

Interpretek Endowed Scholarship Fund

Lucille Ritter Jennings Endowed Scholarship Fund

Jephson Educational Trust Endowed Scholarship Fund for the Performing Arts

JHB Anonymous Scholarship Fund

Johnson Scholarship Foundation Endowed Scholarship for Innovation and Entrepreneurship

David T. Kearns Endowed Scholarship Fund for Technical Excellence

Ron and Lyn Kelly Endowed Scholarship for Deaf and Hard-of-Hearing Students

Drew and Frances King Endowment Fund

Sara L. Kuhnert Endowed Scholarship Fund

La Sala Foundation Doctoral Fellowship Fund

Johanna Larson Endowed Scholarship in the Allied Health Disciplines

Edward H. Lichtenstein Memorial Endowed Scholarship Fund

Dr. Frank W. Lovejoy Jr. Endowment for Deafness Research

Edmund Lyon Memorial Lectureship Fund

Dr. James C. Marsters Endowed Scholarship Fund

Dr. Robert S. and Carol D. Menchel Endowed Scholarship Fund

Kevin Mowl Memorial Endowed Scholarship Fund

Mageeda Murad Endowed Scholarship Fund

Dr. Genji Murai Endowed Scholarship Fund

Ruth G. Norton Endowed Scholarship Fund

NTID Alumni Association Endowed Scholarship Fund

NTID Anonymous #12 Endowed Scholarship Fund

NTID Architectural Technology Award Endowed Scholarship Fund

NTID Business Careers Endowed Scholarship Fund

NTID Emergency EYF Student Scholarship Fund

NTID Foundation Endowed Scholarship Fund

NTID Merit Scholarship Fund

NTID Performing Arts Endowed Scholarship Fund

NTID President and Dean's Scholarship for Academic Excellence

NTID Science and Engineering Careers Endowed Scholarship Fund

NTID Student Leadership Endowed Fund

NTID Visual Communications Endowed Scholarship Fund

NYS Federation of Home Bureaus, Inc. Endowed Scholarship Fund in Honor of Martha Perry

Florence L. Ohringer Art Scholarship Fund

Milton H. and Ray B. Ohringer Endowed Scholarship Fund

Ohringer Judean Deaf Students Endowed Scholarship Fund at NTID

Robert F. Panara Endowed Scholarship Fund

Scholarships and Endowed Funds (continued)

Shirley M. Panara Memorial Endowed Fund

Pulver Family Endowed Scholarship Fund

Robert W. Rice Endowed Scholarship Fund

RIT Celebration of Community Endowed Fund

Mary Hope Robinson Endowment for the Performing Arts

Dr. Ellie Rosenfield Endowed Scholarship Fund

Rothman Family Endowment Fund

Elizabeth Dunlap Sargent Memorial Endowed Scholarship Fund

Royichi Sasakawa / James J. DeCaro Endowed Scholarship Fund

Wilfrid and Isabel Searjeant Endowed Scholarship Fund

S. Richard Silverman Endowed Scholarship Fund for International Deaf Students

Carolie R. Simone Endowed Scholarship Fund

Edythe and Edward Sklar Endowed Scholarship Fund

David Smith Memorial Endowed Scholarship Fund

Benjamin J. Soukup Endowed Scholarship Fund

Sprint Endowed Scholarship Fund

Solon E. Summerfield Foundation Endowed Scholarship Fund

Michael A. Swartzman Memorial Endowed Scholarship Fund

Paul L. and Sally A. Taylor Endowed Scholarship Fund

Michael Thomas Endowed Scholarship Fund in the Performing Arts

Eloise Thornberry Endowed Scholarship Fund

W. Paul Urich Memorial Endowed Scholarship Fund

James Ventimiglia Memorial Printing Award Endowed Fund

Elizabeth W. Williams Endowed Fund for the Performing Arts

Joseph C. and Loretta F. Wolf Endowed Scholarship Fund

Louis S. and Molly B. Wolk Foundation Endowed Scholarship Fund for Deaf Students at RIT

The Womans' Club of Rochester Endowed Scholarship Fund for Deaf Students at RIT

Women's Council Endowed Scholarship Fund for Hearing-Impaired Students at RIT

Grants and Contracts

During FY 2013 NTID had 48 new grant proposals totaling $7,270,285 that were submitted for funding. Twenty, totaling $3,815,470, were funded; 15 are still pending; 13 were not funded.

As of September 30, 2013, the annual value of all grants and contracts at NTID totaled $2,845,260, with a total value over the lives of the projects of $15,828,865.

Project Title	Grant Provider	Year	Amount FY 2013	Total Value
The Science of Learning Center on Visual Language Visual Learning	National Science Foundation	7 of 7	$118,147	$1,190,879
National Center for the Deaf	National Institutes of Health	5 of 5	$92,625	$1,619,618
Spoken Language & Literacy	Department of Education	1 of 1	$55,854	$55,854
Collaborative Research: Real-Time Captioning by Groups of Non-Experts	National Science Foundation	1 of 3	$23,349	$97,544
Factors Associated with Positive High School and Post-High School Outcomes for Deaf and Hard-of-Hearing Students	Department of Education – SRI International	1 of 2	$27,639	$77,702
Addiction Treatment Services for Deaf and Hard-of-Hearing Individuals	NYS Office of Mental Health - Rochester Psychiatric Center	1 of 5	$6,106	$276,972
Language, Learning and Cognition Among Deaf Students With and Without Cochlear Implants	National Institutes of Health	1 of 4	$266,276	$2,259,300
FutureQuest	BNY Mellon	1 of 1	$20,000	$20,000
Demographic Analysis of the Deaf and Hard-of-Hearing Population in NC, SC, TN and VA	North Carolina School for the Deaf Foundation (NCSD)	1 of 1	$4,000	$4,000
Pre-College Education Network (P-CEN)	The Nippon Foundation	1 of 1	$767,500	$767,500
Broadening Participation of Deaf Students in Language Research	National Science Foundation	1 of 1	$34,240	$34,240
Deaf STEM Community Alliance: Supporting Postsecondary Deaf and Hard-of-Hearing Students	National Science Foundation	2 of 5	$229,873	$1,695,421
DeafTEC: Technological Education Center for Deaf and Hard-of-Hearing Students	National Science Foundation	2 of 4	$932,287	$5,838,677
Analyzing the Use of C-Print Mobile Technology in STEM Lab Settings Across Multiple Postsecondary Sites	National Science Foundation	3 of 4	$96,056	$394,738
Accountability Initiative with Special Emphasis on Recruitment of STEM and Minority Teachers of Deaf and Hard-of-Hearing Students	Department of Education	2 of 5	$171,308	$1,496,420
Total			**$2,845,260**	**$15,828,865**