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2014

NATIONAL TECHNICAL INSTITUTE FOR THE DEAF

Annual Report

2014 Annual Report

Note of Explanation

This Annual Report notes activities and accomplishments throughout Fiscal Year 2014 (October 1, 2013 – September 30, 2014), corresponding primarily to Academic Year 2013-2014. References to Fiscal Year 2015 correspond to characteristics and accomplishments as of fall semester Academic Year 2014-2015.

Throughout the report, RIT and NTID alumni are indicated by their graduation years appearing after their names. We apologize for any omissions.

NTID FY 2014 Annual Report Contents

Contents (continued)

Contents (continued)

December 19, 2014

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…"

Our mission, established almost 50 years ago, continues to be the driving force behind NTID's accomplishments, strategic plans and everything we do:

> *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.*

In FY 2014, we proudly can say that our students *are* receiving outstanding technical and professional education programs. NTID students have a higher persistence rate and graduation rate than the national persistence and graduation rates for all students, hearing and otherwise, at two-year and four-year colleges. NTID graduates *are* prepared to work in the mainstream of a rapidly changing world. Ninety-four percent of FY 2013 graduates seeking employment were employed in FY 2014, the highest rate in five years. NTID has been successful in preparing professionals to work in fields related to deafness, with 100 percent of FY 2013 graduates in the ASL-English Interpretation program and the Master of Science in Secondary Education of Students who are Deaf or Hard of Hearing employed in FY 2014. NTID's research programs are robust and thriving, with four centers and two research and training programs dedicated to enhancing the access, education, employment and social well-being of people who are deaf and hard of hearing, as well as more than $4 million in research awards for FY 2014. Finally, NTID's outreach efforts continue to change lives, with more than 350 pre-college students participating in our programs in FY 2014 and NTID's DeafTEC serving as the only Advanced Technological Education National Center of Excellence to support individuals who are deaf or hard of hearing. NTID's mission is alive and well and will remain so as long as we continue to manage our resources effectively and give our students the best access services, support services, education and job preparation possible.

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. '78
President, NTID
Vice President and Dean, RIT

Cover Photos

RIT Tiger Walk

On August, 20, 2014, RIT/NTID staff and faculty welcomed 380 new NTID students during the 10th annual Tiger Walk. 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. New students wear brown RIT shirts while faculty, staff, parents and other family members are encouraged to wear orange. In the front cover photo, new NTID students take a "selfie" on their way to Convocation.

Graduation

The back cover photo is a picture of NTID FY 2014 Associate of Applied Science (AAS) graduates from NTID's Arts & Imaging Studies program. With a heavy emphasis on computer technology, this program prepares students for careers in commercial digital printing, website design and development, packaging, signage and photography. In the back row, from left to right, are:

- Whitny Giberson, of Levittown, Pa.
- Adan Ortiz, of Elgin, Ill.; current Photographic and Imaging Arts major at RIT's College of Imaging and Arts and Sciences
- Heather Mattmann, of New Glarus, Wisc.; current Photographic and Imaging Arts major at RIT's College of Imaging and Arts and Sciences
- Tracy Nowak, of Tinton Falls, N.J.; current Photographic and Imaging Arts major at RIT's College of Imaging and Arts and Sciences

In the front row, from left to right, are:

- Maryam Hussein, of Chicago, Ill.; current Photographic and Imaging Arts major at RIT's College of Imaging and Arts and Sciences
- Leah Murray, of Levittown, Pa.; current Graphic Design major at RIT's College of Imaging and Arts and Sciences

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.

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 1,387 students enrolled as of fall 2014. Undergraduate: 1,153 deaf and hard-of-hearing students, 146 hearing students (enrolled in ASL-English Interpretation program). Graduate: 88 students (44 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 44 deaf and hard-of-hearing students in the other colleges of RIT). These students are part of a university that includes more than 16,000 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
53 percent male; 47 percent female.

Diversity
Of the 1,387 students enrolled, 34.3 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 300 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
Last year, 94 percent of deaf and hard-of-hearing graduates who sought jobs after graduation found one within a year.

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 18 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 2014-2015
for Undergraduate/U.S. Citizens

Tuition	$ 14,040
Room	$ 6,758
Board	$ 4,810
Fees	$ 512
Total	$ 26,120

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 2014 was $13,029, not including loans.

Annual Highlights

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

- NTID's most recent employment rate for graduates in 2013 is 94 percent. The average employment rate over the past five years is 92 percent.
- 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.
- NTID's combined sub-baccalaureate and baccalaureate first-year persistence rate of 77 percent is the highest in NTID history.
- NTID Performing Arts dedicated its 2013-2014 season to founding faculty member Robert F. Panara, who passed in July 2014.
- A record 21,601 hours of real-time captioning services were provided to students in FY 2014.
- RIT hosted the Deaf International Short Course Swimming Championship in January 2014. RIT/NTID student Scott Farrell, of North Tonawanda, N.Y., won silver medals in the 200- and 800-meter free relay, and a bronze for the 50-meter backstroke.
- A team of RIT/NTID students known as MotionSavvy received $25,000 and acceptance into Leap Motion's LEAP AXLR8R in San Francisco to help them further develop an application that will translate sign language into English. Buzz about the product has already begun, with articles in *The Washington Post*, *Time* and *Forbes*. *Time* named it one of the Best Inventions of 2014.
- In July 2014, a team of RIT/NTID students won the National Association of the Deaf College Bowl Championship, an academic trivia contest held every other year.
- Ryan Hait-Campbell, a New Media Design major from Seattle, Wash., was named Deaf Youth Ambassador by the National Association of the Deaf.
- This fall, NTID's enrollment is more diverse than ever, with 34 percent of enrolled students from a minority background.
- In October 2014, the National Organization on Disability kicked off National Disability Employment Awareness Month at RIT, recognizing RIT's leadership in preparing students with disabilities for work.
- This fall, NTID was awarded a three-year, $534,204 grant from the National Science Foundation (NSF) with a collaborative sub-award to the University of Rochester to determine if stereotypes affect the way deaf and hard-of-hearing students perform in mathematics.
- In October 2014, the NSF also awarded a $399,986 three-year grant to RIT's College of Science and NTID to develop up to 10 supplemental online learning tools that may help deaf and hard-of-hearing students better understand statistics concepts.

Executive Summary

New Registrations	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Fall Admissions (Deaf and Hard-of-Hearing Students Only)					
Applications	906	902	989	833	796
Acceptances	477	439	504	507	464
Registrations	351	345	381	381	324
Other New Registrations					
AAS/BS ASL-English Interpretation	57	41	45	43	40
MS in Secondary Education	27	18	19	16	16
Total New Registrations	**435**	**404**	**445**	**440**	**380**
Enrollment (Deaf and Hard-of-Hearing Students Only)					
Sub-Baccalaureate Programs					
Career-Focused Programs	488	449	400	368	354
Associate+Bachelor's/Pre-Baccalaureate	168	204	198	190	202
Subtotal Sub-Baccalaureate	**656**	**653**	**598**	**558**	**556**
Baccalaureate Programs at RIT	495	515	551	526	529
Graduate Programs at RIT	40	42	37	42	44
Subtotal Baccalaureate and Graduate at RIT	**535**	**557**	**588**	**568**	**573**
Career Exploration Studies	112	113	120	111	68
Subtotal Deaf and Hard-of-Hearing Students Only	**1,303**	**1,323**	**1,306**	**1,237**	**1,197**
Other Enrollments					
ASL-English Interpretation	147	160	167	147	146
MS in Secondary Education*	71	64	56	48	44
Subtotal Other	**218**	**224**	**223**	**195**	**190**
Total Enrollment	**1,521**	**1,547**	**1,529**	**1,432**	**1,387**

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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.

Executive Summary (continued)

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Withdrawn (All Students)	14%	13%	14%	16%	13%
Graduates					
Total Degrees Granted	306	288	355	424	344
Degree Level					
Certificate	12	15	6	13	0
Diploma	1	0	0	0	0
Associate (AOS)	42	41	52	48	46
Associate (AS/AAS)	74	82	107	104	82
Associate (Interpreting)	2	1	0	1	1
Bachelor's (Interpreting)	31	18	32	52	29
Bachelor's	112	97	118	168	144
Master's	14	11	10	21	8
Master's (MSSE)	18	23	30	17	34
Post-Graduation Employment					
Post-Graduation Employment	96	95	124	174	N/A*
Post-Graduation Employment Rate	90%	91%	93%	94%	N/A*
By Sector of the Economy					
Business and Industry	57%	54%	65%	60%	N/A*
Education	27%	31%	24%	31%	N/A*
Government	16%	15%	11%	9%	N/A*
Cooperative Work Experiences	281	298	299	295	238
Access/Support Services					
Notetaking Hours	63,620	77,436	66,797	67,671	58,246
Tutoring Hours	18,236	19,395	18,039	16,559	15,661
Interpreting Hours	116,782	131,065	129,900	145,003	132,055
Real-Time Captioning Hours	19,493	21,493	19,516	18,263	21,601

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* Post-graduation employment numbers reflect status as of one year following graduation; employment numbers for September 1, 2013 through August 31, 2014 graduates will be reported next year.

Executive Summary (continued)

Outreach (Number of External Participants)	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
C-Print® Training	7	6	0	6	4
Digital Arts, Film and Animation	62	47	32	63	46
Explore Your Future	217	228	192	192	100
FutureQuest	128	102	125	196	N/A
Interpreter Training*	74	63	132	104	59
Math Competition	61	105	115	83	79
NTID Center on Employment	521	677	613	413	417
National Science Fair	66	54	72	52	N/A
Notetaker Training	346	359	277	262	417
Project Fast Forward	76	55	25	87	78
SpiRIT Writing Contest	31	31	36	38	91
Steps to Success	23	23	21	23	12
TechGirlz/TechBoyz Camp	41	38	57	48	34

Financial Aid (Domestic Students)

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Grant-in-Aid	$1,174,944	$1,268,955	$1,303,635	$1,303,299	$1,251,745
Vocational Rehabilitation	8,377,642	8,805,867	9,314,927	9,319,129	10,531,963
Pell Grants	2,781,909	3,130,369	2,972,676	2,796,483	2,751,344
State Grants	548,863	464,249	502,031	517,134	522,612
Federal Loans	5,394,370	5,671,152	6,058,928	5,476,048	5,163,359
Scholarships and Other	2,147,416	2,571,691	2,381,377	2,553,633	3,026,247
Total Financial Aid	**$20,425,144**	**$21,912,283**	**$22,533,574**	**$21,965,726**	**$23,247,270**
Average Aid per Domestic Student (Excluding Loans)**	**$10,496**	**$10,966**	**$10,947**	**$11,157**	**$13,029**

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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 2011	FY 2012	FY 2013	FY 2014	FY 2015
Tuition	$10,719	$11,583	$12,393	$13,512	$14,040
Room	5,862	6,096	6,309	6,530	6,758
Board	4,182	4,317	4,491	4,648	4,810
Fees	753	453	474	492	512
Total	**$21,516**	**$22,449**	**$23,667**	**$25,182**	**$26,120**
Fundraising Activity					
Cash to Endowment and Restricted Funds	$2,975,368	$1,460,336	$935,832	$1,321,580	**
Equipment and Software	$1,028,004	$141,740	$29,380	$57,117	**
Federal Funds Matched***	$220,700	$141,418	$177,000	$85,000	**

ZVRS Senior Vice President Chris Wagner '94 congratulates RIT/NTID students Patrick Seypura, a Management major from South Windsor, Conn.; Sophie Phillips, a Medical Illustration major from Sleepy Hollow, N.Y.; and Alec Satterly, a Management Information Systems major from Oreland, Pa.; who won $5,000 in "The Next Big Idea" competition for Cenify, a vibrating device for smartphones that would alert people who are deaf or hard of hearing to alarm clocks, important calls and fire alarms.

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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.

Diana Pineda, an Arts & Imaging Studies major from Florida City, Fla.; and Fardosa Adam, a Business Technology major from Denver, Colo.; celebrate NTID's Commencement with President Gerry Buckley '78.

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:

"Method for Determining Hearing Thresholds in the Absence of Pure-Tone Testing" – Bochner, Garrison.

This invention disclosure (RIT ID 2013-011), dated December 2012, had a provisional patent application filed June 12, 2014.

Performance Indicators

Performance indicators, required by the Government Performance and Results Act, measure NTID's performance related to enrollment, persistence, graduation and employment.
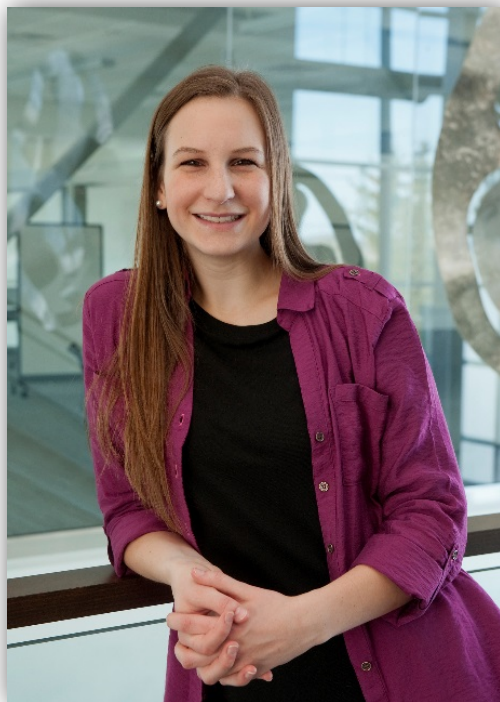
Stephanie Kiessling, an International Hospitality and Service Management major from Jackson, N.J., became the first deaf student to serve on the executive board for the Puttin' on the RITz Black Tie Dinner, an annual student-run event to raise money for the RIT Hospitality Education Fund.

National Technical Institute for the Deaf

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
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
2015	1,387

Measure 1.1 of 3: The number of NTID-supported deaf and hard-of-hearing undergraduates (desired direction: increase)

Fiscal Year	Target	Number	Status
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
2015	1,200	1,153	Target Not Met

Performance Indicators (continued)

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.

Explanation: Below 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.

Fiscal Year	Baccalaureate	Sub-Baccalaureate	Total
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
2015	529	624	1,153

As seen from the above table, NTID experienced a decrease in the undergraduate enrollment of students who are deaf and hard of hearing from 1,195 students during the 2013-2014 (FY 2014) academic year to 1,153 students in the 2014-2015 (FY 2015) academic year.

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
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
2015	160	146	Target Not Met

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.

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**
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
2015	95	88	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.

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 2015, NTID had a total of 44 students in the MSSE program and 44 deaf and hard-of-hearing students in other RIT graduate programs, for a total of 88 students.

Performance Indicators (continued)

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 2014 data will be reported in April 2015.

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**	**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	68.0	Made Progress From Prior Year

Source: Rochester Institute of Technology, Registrar Office records

Frequency of Data Collection: Annual

Data Quality: In April 2014, NTID reported to the Department the FY 2013 persistence rate of its sub-baccalaureate students, who returned from the 2012-2013 academic year to their second year in the 2013-2014 academic year. 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 68.0 percent. Currently, there are no sub-baccalaureate students enrolled in the ASL-English Interpretation programs.

NTID will report to the Department the FY 2014 persistence rate in April 2015, with a sub-set of disaggregated data on the persistence rates of sub-baccalaureate students who are deaf and interpreter education students, if applicable. Prior to FY 2008, this measure did not include interpreter education students.

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.

Performance Indicators (continued)

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	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	90.8	Target Surpassed

Source: Rochester Institute of Technology, Registrar Office records

Data Quality: In April 2014, NTID reported to the Department the FY 2013 persistence rate of its baccalaureate students, including interpreter students, who returned from the 2012-2013 academic year to their second year in the 2013-2014 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%
FY 2013	90.8%	89.3%	95.7%

NTID will report to the Department the FY 2014 persistence rate of its baccalaureate students in April 2015, with a sub-set of disaggregated data on the persistence rates of baccalaureate students who are deaf and interpreter education students.

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**	**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	41.6	Target Surpassed

Source: Rochester Institute of Technology, Registrar Office records

Frequency of Data Collection: Annual

Data Quality: In April 2014, NTID reported to the Department the FY 2013 percentage of its sub-baccalaureate students (those who were initially enrolled in the 2007-2008 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%
FY 2013	41.6%	41.3%	100.0%

(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 2014 graduation rate of its sub-baccalaureate students in April 2015, 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 35 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

Performance Indicators (continued)

length of time. Based on the comparison with IPEDS data, the Department and NTID determined that the target of 35 percent for FY 2013 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	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	70.3	Target Surpassed

Source: Rochester Institute of Technology, Registrar Office records

Data Quality: In April 2014, NTID reported to the Department the FY 2013 percentage of its baccalaureate students (those who were initially enrolled in the 2007-2008 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 2004, Fall 2005, or Fall 2006.)

NTID will report to the Department the FY 2014 graduation rate of its baccalaureate students in April 2015, 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 2013 is 62 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 62 percent for FY 2013 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

Performance Indicators (continued)

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 semester 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 2013, a total of 331 deaf and hard-of-hearing students graduated from NTID. Valid data existed on 302 graduates. Of the 302 graduates, 174 students were employed (58%), 98 students were in higher education or training (32%), and 30 students were not employed or in higher education or training (10%). Of the 30 students not employed or in higher education or training, 11 were actively looking for work.

Category of Graduate	Count
Employed	174
Unemployed (Seeking Employment)	11
Not Seeking Employment	19
Education (Within RIT)	76
Education (Outside RIT)	22
Unknown	29
Total	331

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
2013	50	58	Target Surpassed

Performance Indicators (continued)

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
2004	93
2005	93
2006	95
2007	95
2008	90
2009	90
2010	90
2011	91
2012	93
2013	94

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.

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
2013	45	32	Target Not Met

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

Performance Indicators (continued)

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
2013	5	10	Target Not Met

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

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 percent 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.

Performance Indicators (continued)

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.

Fiscal Year	Target	Cost (or date expected)	Status
Measure 4.1 of 2: Federal cost per NTID graduate (desired direction: decrease)			
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	183,300	Target Surpassed
2015	205,657	(December 2015)	Pending

Source: National Technical Institute for the Deaf, Budget Office

Frequency of Data Collection: Annual

Data Quality: The FY 2014 data on the federal cost per graduate, as reported by NTID, is an average of the cost per graduate from FY 2009 to FY 2014. The federal 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 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.

Performance Indicators (continued)

Measure 4.2 of 2: Total educational cost per NTID graduate (desired direction: decrease)

Fiscal Year	Target	Cost (or date expected)	Status
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	224,000	Target Surpassed
2015	247,203	(December 2015)	Pending

Source: National Technical Institute for the Deaf, Budget Office

Frequency of Data Collection: Annual

Data Quality: The FY 2014 data on the total educational cost per graduate, as reported by NTID, is an average of the cost per graduate from FY 2009 to FY 2014. 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.

Incoming NTID students with minimal or no ASL skills participate in the New Signers Program, a *Strategic Decisions 2020* initiative that gives new students the option of a one-week ASL-immersion experience before fall orientation begins.

Strategic Decisions 2020

FY 2014 marked the fourth year of NTID's
implementation of *Strategic Decisions 2020*, the
strategic plan for the next six 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 global society. 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 established key initiatives that respond to future challenges and shape 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 are available at www.ntid.rit.edu/president/sd2020.

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*.

In November 2014, the RIT Board of Trustees approved "Greatness Through Difference," the university's Strategic Plan for 2015-2025. In December 2014, NTID President Gerry Buckley charged Dr. Denise Kavin, special assistant to the NTID president for *SD 2020* Implementation, and Dr. Marianne Gustafson, associate dean for Curriculum and Special Projects, with convening and co-chairing the *SD 2020* Mid-Term Review Committee, which will assess the current state of *SD 2020* implementation and consider adjustments that will align it with the university's new strategic plan.

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 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 improving 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 plans to identify students who demonstrate promise for success in career-focused associate degree-level programs and beyond, and provide consultation regarding postsecondary educational alternatives for students who may not meet this threshold.

The study and implementation of this envisioned example, as with various other items included in *SD 2020*, slowed between 2012 and 2014, as NTID grappled with budgetary challenges resulting from sequestration. Upon the restoration of NTID's sequestered funding in January 2014, attention returned to ways in which NTID could invest in future growth.

The following are examples of *SD 2020* goals that NTID actively is addressing at this time:

Providing Space for Innovation, Scholarship and Research

Three emerging forces within the larger university continue to shape the landscape of scholarship, research and innovation at NTID: 1) the strategic objective of RIT to become a leader in innovation in higher education, which was reaffirmed in the university's new strategic plan; 2) the expectation that all tenured and tenure-track faculty at RIT will conduct 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 became imperative for NTID to create and provide space for activities that would further these objectives and expectations.

2014 marked the first full year of operation 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. 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. Research centers and labs active in the new 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 deaf and hard-of-hearing students in STEM disciplines.

- The Research Center for Teaching and Learning, which includes an experimental classroom 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 through the Rochester Bridges to the Doctorate Program, in partnership with the University of Rochester Medical Center via a grant funded by the National Institutes of Health.

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

During the past year, Dr. Gary Long has served as interim associate dean for Research, leading the effort to position NTID as the preeminent national and international center for research regarding evidence-based educational practice, employment and full inclusion of deaf and hard-of-hearing individuals in society. Part of Dr. Long's portfolio includes directing the research and scholarship efforts conducted by the strategic research centers within and outside of Rosica Hall, in addition to coordinating all of NTID's grant-related efforts across its academic departments. A national search for a permanent associate dean for Research is expected to commence early in 2015.

Supporting Discipline-Based Research

Discipline-based scholarship and research is expected to be conducted by tenured and tenure-track faculty within the academic departments. As new tenure-track faculty join the NTID community, they are generally provided with access to funds that will "kick-start" their programs of discipline-based research, provide them with a platform from which to apply for external funds to support ongoing research, and hopefully set them further down the road to eventual tenure.

Enhancing Faculty/Staff Professional Development

Nearly 40 percent of NTID's current employees are eligible for retirement, which means that even as we have reduced the size of our workforce by almost 10 percent since January 2011, an increasing percentage of current employees are new to NTID. Therefore, we must take immediate steps to ensure a smooth transition to the well-trained and productive NTID leaders of tomorrow. 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 our 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, where she reports to Dr. Kathryn Schmitz '95, associate dean for Academic Administration, and coordinates all internal and external professional development activities within the college. NTID intends to augment this effort as additional resources become available.

NTID recognizes that its population of lecturers – who already are proficient in teaching and fluent in American Sign Language – represents one of the most promising pipelines for filling vacant tenure-track slots. As a result, NTID in 2014 began piloting a new tuition assistance program designed to encourage talented and motivated lecturers to obtain terminal degrees and develop the academic credentials necessary to qualify for these positions.

Communication Expectations for Faculty and Staff

NTID continues to examine and discuss ways to encourage all faculty and staff to improve their sign language skills, and reaffirms its commitment to 100 percent signing in public spaces by all faculty and staff. Pursuing these twin goals will help maintain open, respectful communication at NTID and maximize student learning on a number of levels. To better serve the communication development needs of our faculty and staff, NTID has created the Office of American Sign Language Training and Evaluation (ASLTE) to administer Sign Language Proficiency Interviews (SLPI) and to enhance sign language proficiency among both faculty and staff.

Promoting Technology in Support of Access and Learning

In 2014, President Buckley formed the ad hoc Captioning Study Committee, which evaluated the cost and utility of various real-time captioning alternatives for the Department of Access Services. The committee's report resulted in a decision to retain C-Print®, a technology first developed at NTID, as the sole method of delivering real-time in-class captioning services to NTID-supported students.

Admissions and Enrollment

NTID had 380 total new registrations for FY 2015 (fall 2014).

A fall tradition for new and returning students, Mud Tug is a tug-of-war fundraiser benefiting an organization that provides housing, education, counseling and support services to children and families in Rochester.

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 made 361 recruitment visits during the FY 2014 admissions cycle. Visits this year included 302 mainstream schools, 48 schools for the deaf and 11 college visits. This includes 50 in New York State, 65 in the Northeast, 83 in the Midwest, 77 in the Southeast, 84 on the West Coast and two international.

The number of new students entering NTID in fall 2014 was 380. The total included 309 deaf and hard-of-hearing freshmen and transfers, 23 first-year deaf and hard-of-hearing graduate students (eight in the Master of Science program in Secondary Education of Students who are Deaf or Hard of Hearing [MSSE] and 15 in other RIT master's programs) and 48 first-year hearing students (40 in the ASL-English Interpretation program, and eight in the MSSE program).

Overall, NTID's applicants decreased by 4 percent from last year's 1,095 to 1,047 applicants for fall 2014 enrollment. Total enrollment was 1,387 compared to 1,432 for last year. The breakdown of the 1,387 students is as follows:

	Deaf and Hard-of-Hearing	Hearing	Total
Undergraduate Programs			
Career Exploration Studies	68	0	68
Career-Focused Associate Programs	354	0	354
Associate+Bachelor's Programs and Pre-Baccalaureate	202	0	202
Baccalaureate (ASL-English Interpretation)	0	146	146
Baccalaureate/Master's Programs in Other RIT Colleges	529	0	529
Subtotal NTID Undergraduate Programs	**1,153**	**146**	**1,299**
Graduate Programs at RIT	44	0	44
MSSE Program	16	28	44
Total Enrolled Students	**1,213**	**174**	**1,387**

NTID's student population remains strong in both ethnic and geographic diversity. Minority students represent 34 percent of this year's fall 2014 entering class, compared to 34 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 29 to 34 percent of the entire student population over the past five years (for more information see the Diversity and Pluralism section). Domestic 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 12 new international students. The total number of international students is 44, or 3.2 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 380 new students and is serving a total of 1,387 students.

NTID's fall 2014 enrollment of 1,387 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
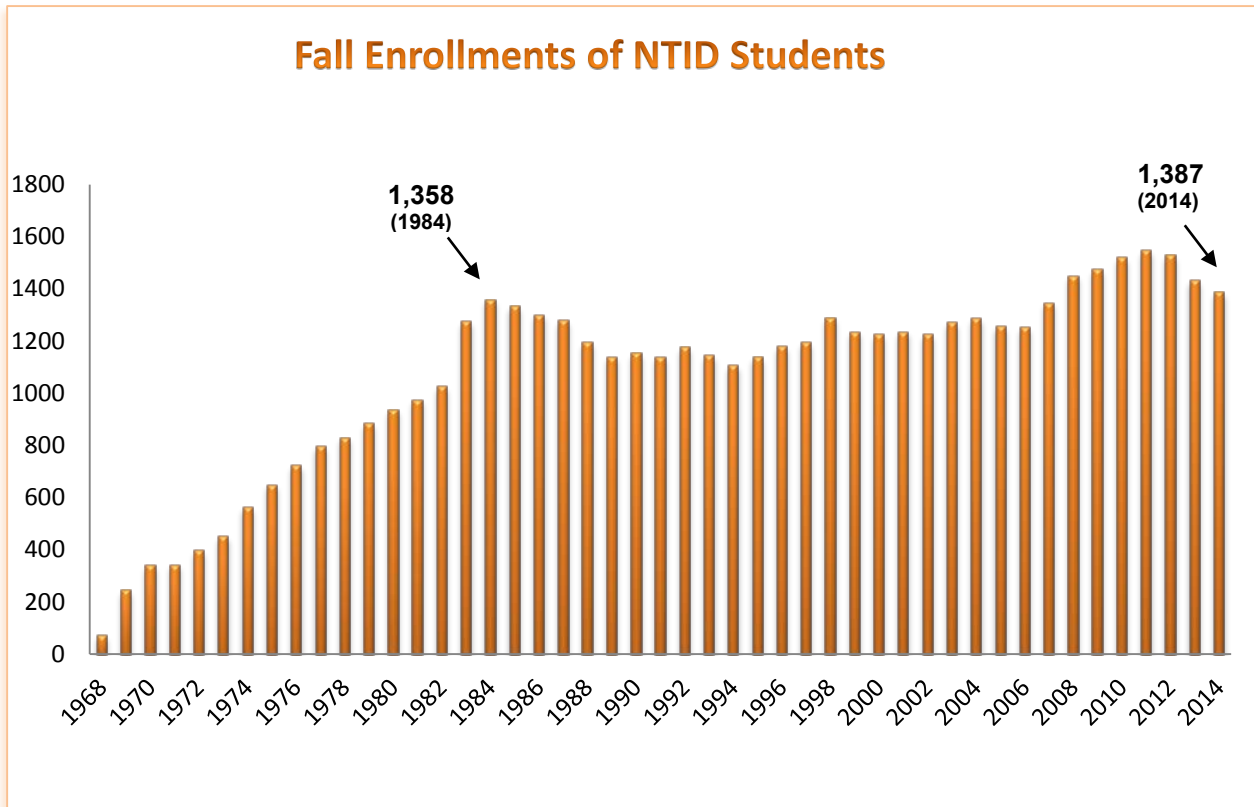
Comparative Admissions Data

Applications, excluding the ASL-English Interpretation or MSSE programs, decreased significantly from last year.* The acceptance rate was 58 percent of applications. Registrations were 324, achieving a yield rate of 70 percent.

	Number of New Students				
	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Applicants	906	902	989	833	796
% Increase or Decrease from Previous Year	+0.7%	-0.4%	+9.6%	-15.8%	-4.4%
Accepted Applicants	477	439	504	507	464
% Increase or Decrease from Previous Year	-1.0%	-8.0%	+13.0%	+0.1%	-8.5%
Acceptance Rate (Percent of Total Applicants)	52.6%	48.7%	50.9%	60.9%	58.3%
Registrations	351	345	381	381	324
Yield Rate (Registrations as a Percent of Accepted Applicants)	73.6%	78.6%	76.8%	75.1%	69.8%

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* Overall, NTID's total applications decreased by 4 percent from last year's 1,095 to 1,047 applicants for fall 2014 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.

Summer 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 212 SVP registrants for summer 2014, and all 212 continued on to register for fall semester 2014 (FY 2015).

	Number of Students*				
	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
SVP Students Accepted	352	323	349	346	295
SVP Students Registered at Start of Program	269	269	269	268	212
SVP Students Completing Program	268	268	268	266	212
SVP Students Registered in Academic Programs for Fall Term	263	265	267	266	212

Jonathan Cabrera, a Computer-Integrated Machining Technology major from Boston, Mass., was a member of SVP '12. He recently completed a co-op at GE Aviation in Cincinnati, Ohio, and plans to graduate in 2015.

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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 (146), or deaf, hard-of-hearing or hearing students enrolled in the Master of Science program in Secondary Education (44). 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 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%	*	*	*	1,118	3.33%	-9.62%	259	-19.8%	212	-20.9%
FY 15:	Oct. 14-Sep.15	1,197	-3.23%	*	*	*							

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

* 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, 95 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 and beyond).

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015		
						Number	
					Percent	Full-Time	Total
Career Exploration	100%	98%	98%	98%	100%	68	68
Career-Focused and Associate+Bachelor's Degrees	97%	98%	97%	95%	97%	511	526
Pre-Baccalaureate	100%	100%	100%	100%	100%	30	30
Baccalaureate and Graduate	93%	93%	93%	90%	94%	538	573
ASL-English Interpretation	97%	94%	97%	97%	95%	139	146
Master of Science in Secondary Education (MSSE)*	80%	84%	82%	98%	77%	34	44
Overall	**95%****	**95%*****	**95%**	**94%**	**95%**	**1,320**	**1,387**

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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 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 62 and, of those, 14 were accepted and 10 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 2011	FY 2012	FY 2013	FY 2014	FY 2015
Applicant Continent of Origin					
Africa	12	7	24	5	16
Asia	10	6	16	15	25
Europe	8	5	4	1	1
North America	31	40	45	29	16
South America	2	1	2	0	2
Unknown	0	0	0	5	2
Total Applicants	**63**	**59**	**91**	**55**	**62**
Accepted Applicants	**14**	**7**	**20**	**18**	**14**
Acceptance Rate (Percent of Total Applicants)	22%	12%	22%	33%	23%
New Registrations	**9**	**7**	**15**	**14**	**10**
Yield Rate (New Registrations as a Percent of Accepted Applicants)	64%	100%	75%	78%	71%
Returning International Students	**31**	**34**	**33**	**25**	**30**
Total Enrollment (Returning International Students plus New Registrations)	**40**	**41**	**48**	**39**	**40**

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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 2011	FY 2012	FY 2013	FY 2014	FY 2015
Characteristics of Entering Students					
Gender					
Male	54%	64%	55%	60%	58%
Female	46%	36%	45%	40%	42%
Mean Age at Entry	21	21	20	21	20
Parents' Hearing Status					
Both Hearing	86%	83%	90%	89%	88%
Both Deaf	8%	10%	5%	5%	7%
One Hearing/One Deaf	6%	7%	5%	6%	5%
Origin of Entering Students					
United States by Region: 100% of U.S. students distributed across four regions					
West	14%	13%	15%	11%	16%
Midwest	25%	28%	23%	20%	23%
South	22%	20%	21%	22%	24%
Northeast	39%	39%	41%	47%	37%
Distribution of United States and International Students					
United States	96%	98%	96%	96%	97%
International	3%	2%	4%	4%	3%
School Background of Entering Students					
First Time in College	72%	81%	80%	72%	79%
Transfer from Other Colleges	20%	12%	13%	17%	13%
Previously Enrolled at RIT	5%	5%	4%	5%	4%
Graduate Students	3%	2%	3%	6%	4%

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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.

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

	FY 2015*		
	International	**U.S.**	**Overall**
Demographics			
Gender			
Male	70%	58%	58%
Female	30%	42%	42%
Entry Age, All Students	26	22	22
Entry Scores			
Hearing Level (Pure Tone Average)	94.5 dB	95.9 dB	95.9 dB
ACT Composite Score	17.0	18.6	18.6
Program Area			
Career Exploration	2%	6%	6%
Career-Focused Associate Degrees	23%	30%	29%
Associate+Bachelor's Degrees	17%	17%	17%
Other Colleges of RIT Baccalaureate/Master's	58%	47%	48%
FY 2015 Status of Students Enrolled FY 2014			
Still Registered	74%	68%	68%
Withdrawn	13%	13%	13%
Graduated	13%	19%	19%

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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 was used to evaluate educational achievement for admission to NTID. In 1996, the decision was made to replace the Stanford Achievement Test with the American College Test (ACT). Mean scores for the ACT are presented below.

American College Test (ACT)*	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
ACT English	14.5	15.1	15.8	14.9	14.7
ACT Reading	17.0	18.1	18.5	17.7	17.5
ACT Mathematics	17.5	18.3	18.6	18.3	18.1
ACT Science Reasoning	18.7	19.7	19.7	19.3	18.5
ACT Composite**	17.2	18.0	18.6	19.5	18.1

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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 (CollegeBoard) 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 24.5, and represent 27.1 percent of NTID's entering class of 2014. The average ACT composite score for students entering associate+bachelor's programs is 18.4, and represents 22.1 percent of NTID's entering class. The average ACT composite score for students entering career-focused associate programs is 15.3, and represents 32.6 percent of NTID's entering class. Lastly, the average ACT composite score for students entering career-exploration programs is 13.7, and represents 18.2 percent of NTID's entering class. The average ACT composite score of 18.1 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	27.1%	24.5
NTID		
Associate+Bachelor's Programs	22.1%	18.4
Career-Focused Associate Programs	32.6%	15.3
Career Exploration	18.2%	13.7
Total*	**100%**	
Average Score of All Entering Students*		**18.1**

* 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 93.5 dB.

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.

The number of students with cochlear implants has increased to 394 in fall 2014.

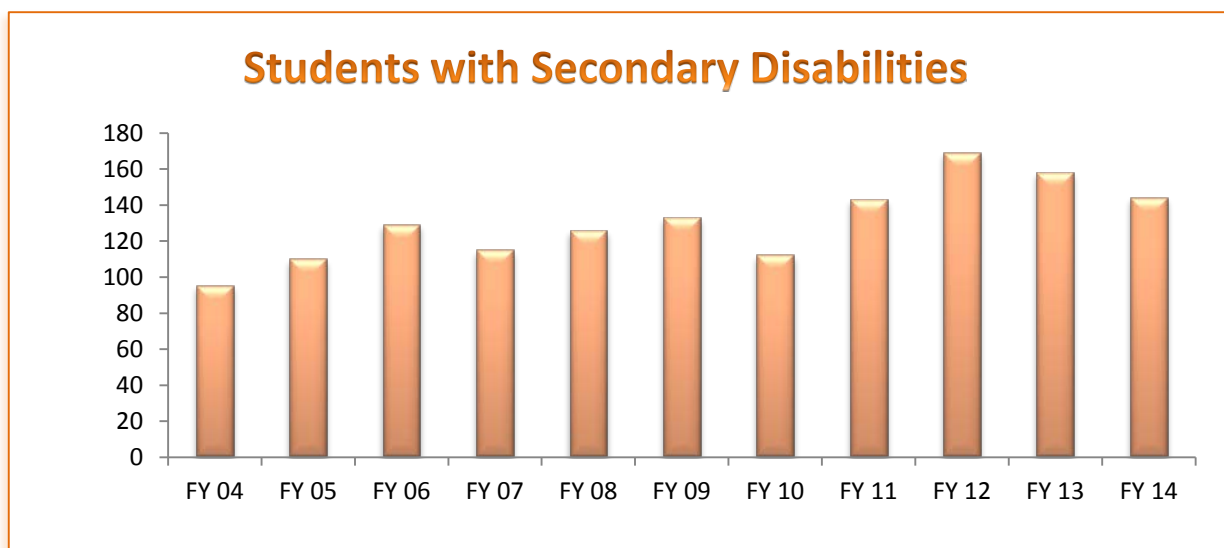|	FY 2012	FY 2013	FY 2014	FY 2015
Total Number of Deaf Students*	1,354	1,331	1,255	1,213
Students with Cochlear Implants	331	366	363	394
Percent with Cochlear Implants	24.4%	27.5%	28.9%	32.5%
Average Hearing Level	93.5 dB	94.9 dB	90.2 dB	95.9 dB

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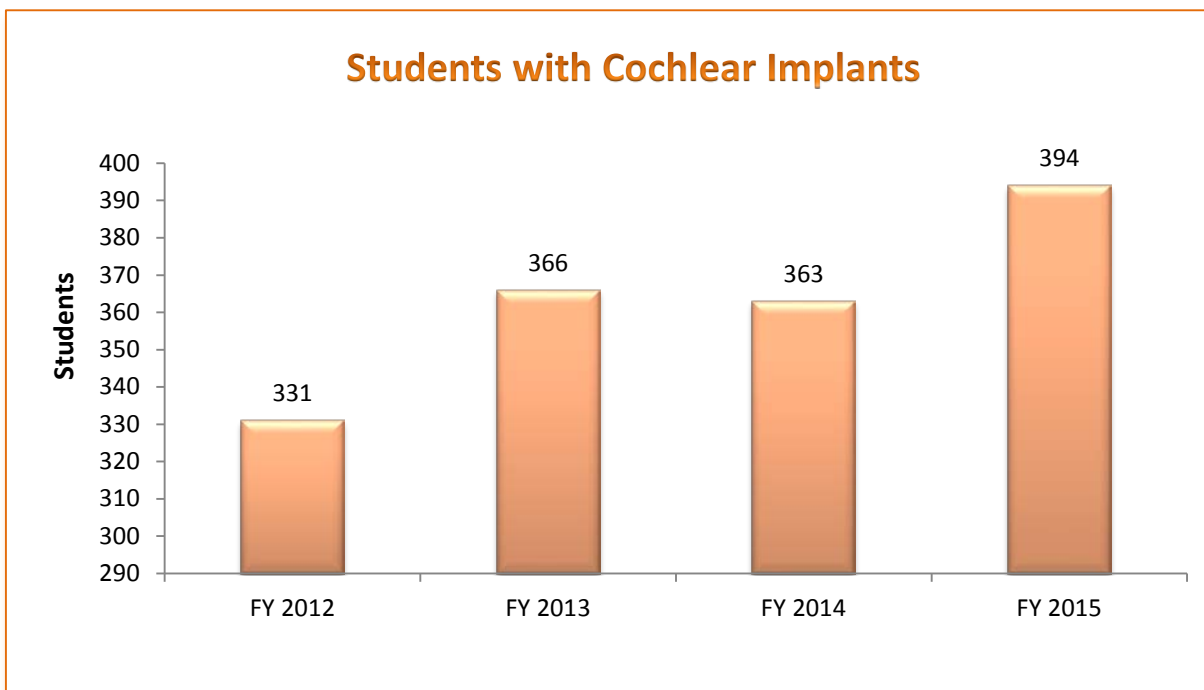
* This figure includes all deaf and hard-of-hearing students, undergraduate and graduate.

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." FY 2015 totals will be reported next year, as students with secondary disabilities could enroll in the spring semester. 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 has a committee of faculty and staff that focuses on the accommodation of deaf and hard-of-hearing students specifically with visual disabilities, a population that is increasing.

Number and Percent of Students Receiving Secondary Disability Services			
Fiscal Year	**Total Deaf Students***	**Students with Secondary Disabilities**	**Percent**
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%
2014	1,195	144	12%

Students with Secondary Disabilities

*   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 2014 come from 48 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 2015	Graduates to Date as of Fall 2014	Cumulative Students to Date*
Alabama	5	35	65
Alaska	3	11	25
Arizona	19	35	107
Arkansas	1	32	69
California	101	389	855
Colorado	6	64	123
Connecticut	28	202	390
Delaware	8	34	74
District of Columbia	4	16	43
Florida	25	192	452
Georgia	22	74	184
Guam	0	0	2
Hawaii	2	28	42
Idaho	0	3	16
Illinois	75	460	947
Indiana	24	109	261
Iowa	2	61	111
Kansas	11	47	107
Kentucky	7	45	127
Louisiana	11	53	114
Maine	13	50	120
Maryland	54	181	455
Massachusetts	62	352	706
Michigan	25	292	586
Minnesota	25	106	214
Mississippi	3	6	25
Missouri	37	165	336
Montana	2	7	18
Nebraska	6	38	76
Nevada	0	9	21
New Hampshire	12	54	104
New Jersey	78	382	728
New Mexico	3	25	73
New York	384	2,118	4,231
North Carolina	20	64	151
North Dakota	1	19	36

* Includes current and withdrawn students and graduates.

Admissions and Enrollment

Origin of Students and Graduates (continued)

Home State or U.S. Territory (Domestic Students)	Number in Student Body FY 2015	Graduates to Date as of Fall 2014	Cumulative Students to Date*
Ohio	40	398	735
Oklahoma	2	20	45
Oregon	7	57	107
Pennsylvania	62	579	1,144
Puerto Rico	0	9	19
Rhode Island	3	40	81
South Carolina	5	24	53
South Dakota	1	13	23
Tennessee	2	49	98
Texas	53	189	479
Utah	2	13	26
Vermont	5	41	89
Virgin Islands	0	1	4
Virginia	30	144	319
Washington	19	79	176
West Virginia	1	31	66
Wisconsin	22	117	244
Wyoming	1	4	7
Other**	6	14	222
Subtotal	**1,340**	**7,581**	**15,931**

Where Are Our Students From?

WASHINGTON 19 · OREGON 7 · IDAHO 0 · MONTANA 2 · NORTH DAKOTA 1 · MINNESOTA 25 · WISCONSIN 22 · NEW HAMPSHIRE, 12 · VERMONT, 5 · MAINE 13 · SOUTH DAKOTA 1 · WYOMING 1 · MICHIGAN 25 · R·I·T · NEW YORK 384 · MASS., 62 · NEVADA 0 · UTAH 2 · COLORADO 6 · NEBRASKA 6 · IOWA 2 · ILLINOIS 75 · INDIANA 24 · OHIO 40 · PENNSYLVANIA 62 · R.I., 3 · CONN., 28 · NEW JERSEY, 78 · CALIFORNIA 101 · KANSAS 11 · MISSOURI 37 · KENTUCKY 7 · W. VIRGINIA 1 · VIRGINIA 30 · DELAWARE, 8 · MARYLAND, 54 · DISTRICT OF COLUMBIA, 4 · ARIZONA 19 · NEW MEXICO 3 · OKLAHOMA 2 · ARKANSAS 1 · TENNESSEE, 2 · N. CAROLINA 20 · S. CAROLINA 5 · MISS. 3 · ALABAMA 5 · GEORGIA 22 · TEXAS 53 · LOUISIANA 11 · FLORIDA 25 · ALASKA 3 · HAWAII 2

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, Fiji, Ghana, Hungary, India, Jamaica, Japan, Malaysia, Nepal, Norway, Pakistan, Philippines, Saudi Arabia and Tanzania.

* 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 2015	Graduates to Date as of Fall 2014	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	16	169	308
Chad	0	0	1
China	0	3	8
Colombia	0	1	1
Czech Republic	0	1	1
Dominican Republic	0	0	1
Ecuador	0	0	1
Estonia	0	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	3	4
Philippines	1	2	5
Portugal	0	1	1
Saudi Arabia	1	2	3
Singapore	0	4	4
Somalia	0	0	1

* Includes current and withdrawn students and graduates.

Origin of Students and Graduates (continued)

Country (International Students)	Number in Student Body FY 2015	Graduates to Date as of Fall 2014	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	0	0	1
Zambia	0	0	2
Zimbabwe	0	1	2
Other	15	18	18
Subtotal	**47**	**268**	**482**
Total	**1,387**	**7,849**	**16,413**

As of fall 2014, NTID has 44 international students enrolled based on visa status.

	Number	Percent
U.S. Students	1,343	96.9%
International Students	44	3.1%
Total	**1,387**	**100.0%**

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* Includes current and withdrawn students and graduates.

Academic Programs

Students enrolled at NTID can earn associate degrees in 18 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.

Adam O'Connor, an ASL-English Interpretation major from Rochester, N.Y., explains his senior poster presentation to NTID Associate Interpreter Daron Ladson '06, '08 and RIT ASL and Deaf Studies Community Center Coordinator Jeanne Behm '81.

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 continues to promote education, understanding and participation in the RIT deaf community by all members of the RIT community. A variety of events ranging from weekly ASL classes to regular community meetings and special Rochester-area group gatherings are hosted in the new location in the Wallace Center.

This fiscal year marked the first year of the semester system at RIT. Students matriculated prior to FY 2013 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 2014-2015, there were 422 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 2013-14, the Arts & Imaging Studies (AIS) Department formally changed its name to Visual Communications Studies (VCS). The AIS program name change to Design & Imaging Technology awaits final NYSED approval. The new names better enable the department to communicate program content and outcome goals to potential students, their parents and vocational rehabilitation (VR) counselors. The VCS department continued to implement a student success and retention strategy that included a formal faculty tutoring assignment aimed at first-year students and a variety of faculty, staff and student social interaction events. Thirteen students completed their AAS degree and 11 students completed their AOS degree. Faculty continued development of the proposal for a new AAS program, 3D Graphics Technology (3DGT), which will articulate with the 3D Digital Graphics BFA program. This proposal will be submitted for approval by the Institute committees in AY 2014-15 and NYSED approval by summer, 2015.

The Business Studies Department continues to enjoy steady enrollments in the AOS and AAS programs. Twenty-one students completed cooperative work experiences, close to 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. During the second annual year of utilizing the semester format, both programs are modifying the curriculum to strengthen the contents and technical electives. In addition, the department continues to advocate that existing students complete their cooperative work experiences to satisfy their degree requirements for all programs. 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 are seeking a new

possible niche after we successfully implemented the Civil Technology's articulation agreement with RIT's College of Applied Science and Technology's Civil Engineering Technology program. During the FY 2014 Summer Vestibule Program, 12 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, or the program capacity maxed out due to resource allocation issues. 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 and the program currently is suspended due to resources allocation issues.

In AY 2013-14, the Information and Computing Studies (ICS) Department submitted a concept paper for an AAS program in Mobile Application Development (MApp) which was approved for full program development as of May 2014. The full program proposal is currently going through the NTID Curriculum Committee for review and approval. Additionally, a concept paper for an associate+bachelor's in Applied Networking was approved for full program development as of May 2014. Work is in progress.

During the 2013-2014 academic year, the Department of Liberal Studies (DLS) taught its first semester courses. In response to student feedback and performance, DLS faculty modified the DLS policy for progression through its semester course sequences. 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.

A number of science and math courses have been developed over the past year to give more options to students who need to satisfy requirements in these academic areas. Accelerated Algebra I (NMTH 245) and Accelerated Algebra II (NMTH 272) now provide students with a two-semester fast-track sequence for completing their math requirements in less time. Principles of Biochemistry (NLST 235) has been added to the second year of the Laboratory Science Technology (LST) curriculum to provide students with a better understanding of biologically important molecules and the processes they undergo in living systems. Two astronomy courses, Processes of Science: Astronomy (NSCI 157) and Principles of Modern Astronomy (NSCI 284), have been added to the department's general science curriculum and have proven to be a popular choice for students in non-science programs who need to fulfill the general education science requirement. These astronomy courses provide students with a laboratory experience through the use of RIT's Observatory to allow them to make observations of the nighttime sky.

Associate+Bachelor's Degrees

A key feature of NTID's educational portfolio is the 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 2014-2015 academic year, 202 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 VCS 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 VCS program students making the transition from the NTID VCS associate degree program into a CIAS BFA or BS program. In AY 2013-14, 14 VCS program students were accepted to start in a CIAS bachelor's degree program. The new 3DGT AAS-degree program proposal includes an articulation agreement with the 3D Digital Design BFA-degree program in CIAS.

Academic Program Highlights (continued)

NTID's AS in Applied Liberal Arts remains the largest associate+bachelor's degree program with more than 45 students. The program prepares students for entry into any of 12 baccalaureate majors in RIT's College of Liberal Arts (CLA). DLS has worked closely with RIT's College of Liberal Arts and RIT's Undergraduate Admissions Office to streamline the transfer of its AS students into CLA baccalaureate programs as well as other baccalaureate programs across RIT.

In the Business Studies Department, the associate+bachelor's degree programs continue to successfully graduate students who are accepted into RIT's Saunders College of Business, and the Administrative Support Technology program continues to experience success with students transferring to and graduating from the Multidisciplinary Studies program in RIT's Center for Multidisciplinary Studies. Current department numbers show 58 percent of students in AS and BS degrees and 42 percent in AOS/AAS degrees.

The Department of Engineering Studies has one student in the newly implemented Civil Technology program that was approved in July 2014. During the academic year 2014-2015, the Admissions Department recruiters are recruiting and marketing this program for the upcoming academic year.

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 22 percent. Current numbers show 42 percent of students enrolled in associate+bachelor's (AS) programs and 58 percent in associate degree (AAS & AOS) programs.

Students who complete the AAS degree in Laboratory Science Technology continue to matriculate into BS-level academic programs within RIT. The individualized study program offered through RIT's Center for Multidisciplinary Studies remains a popular choice and was revised during the university's conversion to semesters to provide students with a stronger foundation in statistics and in biology. LST graduates and departmental pre-baccalaureate students also have been choosing to enter BS-level programs in the College of Science (biochemistry, biology, environmental science), the College of Health Science Technology (biomedical sciences) and the College of Applied Science and Technology (packaging science). Currently, a number of students who have completed the LST AAS degree and have gone on to receive BS degrees at RIT are enrolled in graduate work in biochemistry, bioinformatics and environmental science.

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 2014-2015, 529 students (44 percent of the total deaf and hard-of-hearing student enrollment) were enrolled in baccalaureate programs 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 2014-2015 the enrollment percentages for deaf and hard-of-hearing undergraduates were 35 percent career-focused, 17 percent associate+bachelor's degree programs and 48 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)

Outcomes Assessment

During AY 2013-2014 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 completed the RIT Progress Reports based on AY 2012-2013 results.

The fourth annual RIT Progress Report, completed in January 2014, 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 their AY 2012-2013 Outcomes Assessment Plans. This was the last outcomes assessment Progress Report on quarter-based programs taught prior to RIT's conversion to a semester calendar. 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 15/15 programs completing the report. NTID contributed favorably toward the RIT rate of 86 percent of programs completing assessments. Additionally:
- 100 percent of NTID programs met or exceeded established benchmarks for at least one student learning achievement, compared to the RIT level of 83 percent; and
- 100 percent of NTID programs indicated use of assessment results to guide program planning improvements, compared to the RIT level of 79 percent.

Beginning in September 2014, NTID program chairs and directors moved from NTID's web-based reporting system used for quarter-based programs to RIT's online outcomes assessment management system, TaskStream. They began by using information from their approved AY 2013-2014 semester-based Outcomes Assessment Plans. NTID OA plans identify program goals, critical student learning and programmatic outcomes, data sources/measures, performance benchmarks, and timelines. Key findings and use of results were entered, along with recommendations.

Highlights from AY 2013-2014 OA Reports illustrate how outcomes assessment data collection and analysis are used to influence decision-making. Note that this year programs still were in transition as they dealt with a mix of students meeting quarter-based and semester-based program requirements.

ASL and Interpreting Education Department (ASLIE)
- ASL-English Interpretation: Benchmarks exceeded on all three outcomes assessed; 90 percent of students produced successful simultaneous ASL interpretations of English source texts and 87 percent produced English interpretations of ASL or contact signing source texts; 100 percent were rated by mentors as having either good or excellent professional work habits; some semester-based courses in which assessment will occur were not offered yet since they are for upper level students who are still following the quarter requirements.

Business Studies Department
- Accounting Technology: Criteria exceeded for five measures, met for one measure, and not met for another; student placement after graduation was high and students were rated highly by their co-op supervisors; 100 percent met interpersonal and team work outcomes; students continued to have a difficult time passing the revised Student Learning Assessment Test, which is partly due to the semester transition; department will work with students and their counselors so that students enroll in courses sequentially without significant time lapse between the prerequisite courses and the course in which this assessment is given.
- Administrative Support Technology (AST): Met or exceeded seven out of eight assessed outcomes; faculty will continue to monitor the high final grades on the e-Portfolio rubric to assure grades are not inflated; with the move to semesters and its reduced time allotted for skill development, the program revised the acceptable speed for keyboarding and 100 percent of students met the new benchmark.
- Business AS: Criteria exceeded for three of the five outcomes, met for one, and not met for another; 66.7 percent met the benchmark on the Student Learning Assessment Test given in

Academic Program Highlights (continued)

- Managerial Accounting and more than 90 percent demonstrated appropriate interpersonal business skills and teamwork.
- Business Technology AOS: For the first time (i.e., under semesters) this group has been assessed independently from the AAS students in Accounting or AST and results were mixed with students exceeding benchmarks on three outcomes, meeting benchmarks on three, and not meeting them on three outcomes; although 50 percent met the criterion of 50+ words per minute with five errors or less, 100 percent met the semester-based speed/accuracy keyboarding test of 40+ that is used for the AAS students; 85 percent and 100 percent met criterion on the e-Portfolio Marketing Project rubrics, respectively; faculty will investigate ways to achieve better results with students related to interpersonal skills and the Accounting Student Learning Assessment Test.
- Hospitality & Service Management (AS): Criteria exceeded for three of the four outcomes, not met on one outcome; due to the low number of students enrolled in some of the courses, faculty will continue to monitor the results in courses where measures are taken as the number of students increases, e.g., Hotel Management and Operations and Food and Beverage Management where use of effective and established principles is assessed.

Career Exploration Studies Department
- Career Exploration Studies (CES): Criteria exceeded for students passing the Level A reading/writing and mathematics courses within two semesters; the percentage of CES students being accepted into a major within two semesters at NTID was below the 70 percent benchmark, possibly due to the impact of RIT's change to semesters.

Communication Studies and Services Department
- Communication Outcomes: For the first time since co-op supervisors' ratings have been used for assessment reporting, criteria exceeded for students demonstrating competency in face-to-face communication during cooperative work experiences and in initiating and replying to e-mails; department will continue to collect and monitor student communication using this measure.
- Speech-Language, Aural Rehabilitation and Audiology Services: Criteria exceeded for student satisfaction and self-perceived benefit; criteria met for faculty ratings of students' progress toward stated communication goals and for improvement on most pre-post tests; department will review pre-and post-test evaluations in aural rehabilitation to ensure identical tests are being given for assessment; while goals were met for the primary goal areas of speech intelligibility, articulation and pronunciation, the department will monitor students' scores on voice and prosody goals for which criteria were not met.

Engineering Studies Department
- Applied Mechanical Technology: Small and robust program; students continue to perform well in RIT's College of Applied Science and Technology (CAST) courses; student population continues to grow; faculty updated the NETS 101 Fundamentals of Engineering by adding a component of application software tools to support the engineering design process.
- Computer-Aided Drafting Technology: Students met or exceeded criteria for most 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: Faculty has been incorporating the use of student developed process work sheets, which require students to visualize the end product prior to the actual production process and to develop a step-by-step process for completing a given part.

Information and Computing Studies Department
- Applied Computer Technology AS: Criteria exceeded for demonstrating fundamental programming and web skills, acceptance into baccalaureate program and student satisfaction outcomes; criteria was not met for the graduation benchmark, but there were two cohorts of students who began at the AS level and then graduated from the INFOTEC and ANSA BS programs who met or exceeded the graduation rates for those who directly entered the BS programs.

Academic Program Highlights (continued)

- Applied Computer Technology AOS/AAS: Based on last year's findings, the assessment calculations were modified slightly to average each task/assessment individually and then average combined percentages as appropriate; criterion levels were exceeded for assessments of core technical skills, for outcomes related to troubleshooting, repairing and maintenance of multiplatform computers and related peripherals, and for measures of networking and cyber security skills; criteria levels also exceeded for job placement, co-op supervisors' evaluations, presentation of technical information and teamwork.

Liberal Studies Department

- Applied Liberal Arts (AS): Criteria met or approached for each assessment used to measure success in the program's writing and general education course requirements as well as acceptance into RIT's College of Liberal Arts (CLA); current measure of students admitted to CLA will be expanded to include admission to other RIT colleges to reflect the depth and breadth of student abilities and interests; student success will continue to be monitored through tutoring and advising.

Masters of Science in Secondary Education Department

- Masters of Science in Secondary Education of Students who are Deaf or Hard of Hearing: 24 of the 25 measures included in the semester plan were assessed; criteria exceeded for seven measures and met for 14; significantly, the benchmark was met for students who took NYSTCE certification tests passing them, though more students will be encouraged to take the tests; students also met criteria levels for lesson planning, sign language proficiency and teaching performance; benchmark will be adjusted from 100 percent to 75 percent for students earning at least 30 semester credits in their content area because the benchmark was not met, possibly due to RIT starting to charge tuition for students taking more than 18 credits.

Science and Mathematics Department

- Laboratory Science Technology (LST): Benchmarks were again exceeded in all general skill and technical competence areas; students continued to perform very well in the areas of fundamental, analytical and organic chemistry and the content in each of these courses either has been maintained or expanded in the new semester-based system; due to concerns outlined in prior reports, LST restructured/added biology-related coursework and though still early to fully assess, this move appears to be effective in improving student learning outcomes in this area; the one area where benchmark was not achieved (microbiology-related skills to be assessed with general proteomic and genomic techniques) will be an area of particular focus in future outcome assessment initiatives; though the benchmarks were satisfied for new assessment topics regarding teamwork projects and technical presentations, topics such as proper citing protocol for technical presentations were identified for emphasis in future offerings of courses.

Visual Communications Studies Department

- Arts & Imaging Studies: Criteria exceeded for all eight outcomes assessed; students exceeded expectations for working collaboratively, communicating effectively, using appropriate software applications and hardware systems, and designing and producing graphic media in course-related projects and co-op; faculty in the employment course plan to continue their emphasis on students' résumé writing in which grammar closely correlates with a student's AOS or AAS degree level.

American Sign Language and Interpreting Education (ASLIE)

ASLIE enrolled a total of 146 students in the fall of 2014 for the bachelor's degree program in ASL-English Interpretation, meeting the targeted admissions number for the program. The program made a successful transition from quarters to semesters. One of the most significant changes includes students completing two practicum experiences that encompass their full senior year.

In AY 2013-2014, the ASL-English Interpretation program graduated 30 students. Eight of these students (28 percent) responded to a Senior Satisfaction Survey. When reporting their overall satisfaction with the

program 100 percent of the students responded favorably (ranging from neutral to strongly agree). When asked whether they would recommend the program, 75 percent responded favorably.

ASLIE and the interpreter preparation program at Hogeschool Utrecht University (Holland) successfully continued their student/faculty exchange. In fall 2013, four students from Utrecht University spent 10 weeks with ASLIE, attending ASL/Deaf Culture/interpreting-related coursework and activities. In summer 2014, seven ASLIE students attended a five-week program at Utrecht University, studying NGT (sign language of the Netherlands)/Dutch spoken language, Deaf culture and interpreting-related coursework. In addition, a faculty exchange will occur in which an ASLIE ASL instructor teaches ASL at the Hogeschool for four weeks in January and in the spring an NGT instructor from the Netherlands shares their language/culture with the ASLIE department.

In spring 2014, a major accomplishment for the interpreter preparation program was the approval of a concept paper proposing an MS degree program in Interpreting in Healthcare Settings. The aim of this program is to address the national shortage of sign language interpreters who are prepared to work in healthcare settings. The goals of the program are to prepare graduates to effectively interpret for deaf consumers (patients and family members) in healthcare environments, effectively interpret for deaf health professionals in academic and clinical settings and demonstrate administrative skills enabling them to analyze, conduct and consult on the effective and efficient provision of interpreting services in healthcare institutions.

The Certificate in Healthcare Interpreting (CHI) program is in its third year of delivery and for the first time (AY 2013-2014) became a blended on-line program with a one-week on-site start up. This nine-month program accepted and graduated 15 students, all of whom are nationally certified ASL/English interpreters. The feedback from these graduates is overwhelmingly favorable and has led to NTID being viewed as a national leader in the field of healthcare interpreting.

ASLIE's ASL program offers College of Liberal Arts (CLA) ASL courses *Beginning ASL I, II* and *Intermediate ASL I* and *II* for RIT students who want to take ASL as an elective or to fulfill their liberal arts immersion. The requirement for an ASL immersion is to take any three courses from ASL and Deaf Cultural Studies. In AY 2013-2014, the CLA program had an enrollment of 240 in the fall semester and an enrollment of 244 students in the spring semester. In that total number of students, five of them were from the MSSE program. During the summer, ASLIE offered *Beginning ASL I* following a blended course structure and *Beginning ASL II* online*. This was the first time ASLIE offered online and blended ASL courses. In total 16 students took summer ASL courses. The ASL program will offer a variety of course instructions: traditional, blended and online in the fall of 2014 for the CLA ASL courses.

The interpreting program under ASLIE offered *ASL II, III and IV* for interpreting students*. In AY 2013-2014, the interpreting program had an enrollment of 72 in the fall semester and 79 students in the spring semester.

The ASL program also offered evening courses: *Introduction to ASL and Deaf Culture I* and *II* in fall and spring semesters. The courses are designed for RIT students, faculty, staff and community members interested in a basic introduction to ASL and Deaf culture. In AY 2013-2014, the Introduction to ASL and Deaf Culture program had an enrollment of 16 students in the fall semester and 27 students in the spring semester.

The ASL program also provided ASL courses for NTID students as part of the ASL/Deaf Studies requirement. In AY 2013-2014, 20 students were enrolled to take *Beginning ASL I* in the fall semester*.

Two ASLIE faculty also provided instruction in the Master of Science program in Secondary Education of Students who are Deaf or Hard of Hearing. *Structure of ASL* was offered in the fall semester and *Language Acquisition and Learning* was offered the spring semester. In AY 2013-2014, ASLIE served 31 MSSE students.

The Faculty Staff Sign Language program (FSSL), a program offered through the Office of ASL Training and Evaluation (ASLTE), had an enrollment of 216 faculty and staff from NTID and other departments across RIT.

A total of five ASLIE faculty continued to provide sign communication assessment and feedback services for RIT/NTID faculty and staff and MSSE students through the Office of ASLTE. Faculty conducted 11 Sign Language Proficiency Interviews (SLPI), 24 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 Office of ASLTE. 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 two-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, 16 RIT faculty and staff attended this two-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 Provost's Development of ASL Communication Skill at RIT program was offered to RIT faculty/staff who have some basic ASL skills. Eight faculty and staff from various RIT colleges attended this one-week program in August. The program was very successful and received positive feedback from those who attended.

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, 17 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.

Communication Studies and Services (CSS)

The Communication Studies and Services Department (CSS) is comprised of 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 31 credit hours of instruction for 119 students in 2013-2014.

Audiology and speech-language clinical services were provided to members of the RIT community throughout the 2013-2014 academic year. Faculty and staff provided 3,082 hours of individual speech-language instruction serving 125 students, and 2,002 hours of audiology services to 610 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. During the 2013-2014 academic year, the speech-language discipline served an additional 272 students during 408 hours of on-call services, while the audiology discipline provided 419 hours of on-call services in the Hearing Aid Shop, serving more than 1,250 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 also is 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 20th year, graduated 34 students during the 2013-2014 academic year. All of these MSSE graduates are eligible to receive initial certification from New York State (NYS) in an academic content area (grades 7-12) and/or in education of students who are deaf or hard of hearing (grades K-12) if they meet all of the certification requirements, including the NYS teacher certification exams. Those who do not have certification either need to take additional NYS teacher certification exams and complete the edTPA (Teacher Performance Assessment) or choose to pursue certification from the states where they are teaching.

For the 2014-2015 academic year, the MSSE program has an enrollment of 44 students, of whom 16 (36 percent) are deaf or hard of hearing and four (11 percent) are members of minority groups. It is anticipated that at least 15 students will graduate from the program during the 2014-2015 academic year. There are an additional five students who have completed their coursework during the quarter system 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 is accredited by the Council for the Accreditation of Teacher Preparation (CAEP) 2013-2020, and also approved by the Council on Education of the Deaf (CED).

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, 212 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 2013-2014, CES served 119 students in fall and 90 students in spring; 74 percent of CES students were accepted into a major within two semesters.

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.

Academic Program Highlights (continued)

This year, individual students signed up to use NLC computers 29,682 times for a total of approximately 212,607 hours. This "tracking" of computer use behavior is made possible with in-house software installed on all NLC PCs that asks 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 2013-2014 represents an increase of approximately 8 percent when compared to AY 2012-2013 and is about even when compared to AY 2011-2012.

Since AY 2006-2007, the NLC has loaned laptops (Windows and Mac) to students for 24-hour lending. This year, laptops were borrowed 1,506 times, which is a 23 percent decrease when compared with AY 2012-2013 and a 27 percent increase over AY 2011-2012.

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, 79 tutors (faculty and students) provided 7,460 hours in a variety of curricular areas.

The General Area supported courses for a total of 863 hours of use. The NLC continues to support the administration of SVP writing tests and the quarterly administration of the Liberal Arts placement 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 for a total of 1,132 hours in AY 2013-2014. 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, housed within the NLC, in addition to the newly implemented Flipped Classroom Studio, supported by the NLC, hosted 226 course/workshop/other sessions for a total of 460 hours. The Sprint Relay Lab supported a variety of activities, including conducting experimental videoconferencing projects as well as video/lecture-capturing and Flipped Classroom classes for archiving and subsequent "anytime/anywhere" access by students.

Enrollment by Degree Programs

In fall 2014, 59 percent of NTID's 1,387 students were enrolled in a broad array of programs within NTID. Forty-one percent were enrolled in other colleges of RIT, including 44 students in graduate programs. Of the 1,387 students, 1,197 are deaf and hard-of-hearing students in traditional undergraduate and graduate programs (excluding MSSE and Interpreting students). Forty-seven percent of deaf and hard-of-hearing students (573) 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)	32
Career Prep Foundation (UND)	36
Subtotal	**68**
NTID Career-Focused	
Non-Degree Student (NONDEG)	9
Accounting Technology (AAS)	11
Applied Computer Technology (AAS)	34
Applied Computer Technology (AOS)	40
Arts & Imaging Studies (AAS)	32
Arts & Imaging Studies (AOS)	67
Business Technology (AOS)	48
Business Technology (UND)	2
Computer-Aided Drafting Technology (AAS)	9
Computer-Aided Drafting Technology (AOS)	22
Computer-Integrated Machining Technology (AOS)	41
Engineering Technologies (UND)	10
Laboratory Science Technology (AOS)	28
Subtotal	**353**
Associate+Bachelor's Degrees	
Administrative Support Technology (AAS)	21
Applied Computer Technology (AS)	23
Applied Liberal Arts (AS)	40
Applied Mechanical Technology (AAS)	18
Business (AS)	33
Hospitality and Service Management (AS)	3
Laboratory Science Technology (AAS)	34
Subtotal	**172**

Enrollment by Degree Programs (continued)

	Number of Students
NTID ASL-English Interpretation	
ASL-English Interpretation (NONDEG)	3
ASL-English Interpretation (BS)	143
Subtotal	**146**
NTID Master of Science in Secondary Education (MSSE)	
Graduate Teacher (NONDEG)	8
Secondary Education of Students who are Deaf/Hard of Hearing (MS)	36
Subtotal	**44**
NTID Pre-Baccalaureate Students	
Pre-Baccalaureate Engineering (UND)	9
Pre-Baccalaureate Liberal Arts (UND)	3
Pre-Baccalaureate Science (UND)	6
Pre-Baccalaureate Visual Communication (UND)	12
Subtotal	**30**
NTID Subtotal	**813**
Baccalaureate Students in Other RIT Colleges	
College of Applied Science and Technology	
Civil Engineering Technology (BS)	14
Computer Engineering Technology (BS)	1
Electrical Engineering Technology (BS)	1
Electrical/Mechanical Engineering Technology (BS)	5
Environmental Sustainability Health & Safety Management (BS)	4
International Hospitality and Service Management (BS)	11
Manufacturing Engineering Technology (BS)	3
Mechanical Engineering Technology (BS)	17
Packaging Science (BS)	12
Subtotal	**68**

	Number of Students
Saunders College of Business	
Business Administration-Accounting (BS)	5
Business Undeclared (UND)	3
Finance (BS)	8
International Business (BS)	2
Management (BS)	18
Management Information Systems (BS)	10
Marketing (BS)	3
New Media Marketing (BS)	2
Subtotal	**51**
College of Science	
Applied Mathematics (BS)	1
Applied Statistics (BS)	2
Biochemistry (BS)	4
Bioinformatics (BS)	1
Biology (BS)	9
Chemistry (BS)	2
Environmental Science (BS)	6
Imaging Science (BS)	1
Molecular Bioscience and Biotechnology (BS)	7
Physics (BS)	2
Science Exploration (UND)	2
Subtotal	**37**
College of Imaging Arts and Sciences	
3D Digital Graphics (BFA)	3
Film and Animation (BFA)	6
Fine Arts-Studio (BFA)	5
Glass (BFA)	1
Graphic Design (BFA)	19
Illustration (BFA)	3
Industrial Design (BFA)	10
Interior Design (BFA)	6
Media Arts and Technology (BS)	3
Medical Illustration (BFA)	2
Motion Picture Science (BS)	1
New Media Design and Imaging (BFA)	4
Photographic and Imaging Arts (BFA)	8
Photographic and Imaging Technology (BS)	1
Professional Photographic Illustration (BFA)	2
Visual Media (BFA)	2
Subtotal	**76**

	Number of Students
College of Liberal Arts	
Advertising and Public Relations (BS)	7
Communication (BS)	1
Criminal Justice (BS)	17
Economics (BS)	2
International and Global Studies (BS)	5
Journalism (BS)	3
Liberal Arts Exploration (UND)	8
Museum Studies (BS)	5
Political Science (BS)	2
Professional and Technical Communication (BS)	2
Psychology (BS)	38
Public Policy (BS)	1
Sociology and Anthropology (BS)	5
Subtotal	**96**
Kate Gleason College of Engineering	
Biomedical Engineering (BS)	8
Chemical Engineering (BS)	2
Computer Engineering (BS)	8
Electrical Engineering (BS)	5
Engineering Exploration (UND)	5
Industrial Engineering (BS)	1
Mechanical Engineering (BS)	12
Subtotal	**41**
Golisano College of Computing and Information Sciences	
Applied Networking and System Administration (BS)	5
Computer Science (BS)	21
Computing Security (BS)	6
Game Design and Development (BS)	4
Information Technology (BS)	30
Networking and System Administration (BS)	3
New Media Interactive Development (BS)	3
Software Engineering (BS)	5
Subtotal	**77**

	Number of Students
University Studies	
University Studies (UND)	14
Subtotal	**14**
Center for Multidisciplinary Studies	
Applied Arts and Sciences (BS)	44
Subtotal	**44**
Student Affairs	
College Restoration Program	3
Subtotal	**3**
College of Health Sciences and Technology	
Biomedical Sciences (BS)	18
Nutrition Management (BS)	1
Physician Assistant (BS)	3
Subtotal	**22**
Subtotal Baccalaureate Students in Other Colleges	**529**

Christina Rizzetta, a Multidisciplinary Studies: Biomedical Sciences and Business major from Galloway, N.J., plans to get her master's degree in Health Administration after graduation. She currently is an officer with the RIT chapter of The National Society of Collegiate Scholars.

Enrollment by Degree Programs (continued)

	Number of Students
Graduate Students in Other RIT Colleges	
College of Applied Science and Technology	
Hospitality-Tourism Management (MS)	1
Human Resources Development (MS)	7
Service Leadership and Innovation (MS)	1
Subtotal	**9**
Saunders College of Business	
Business Administration (MBA)	5
Business Administration Executive (MBA)	1
Subtotal	**6**
College of Imaging Arts and Sciences	
Computer Graphics Design (MFA)	1
Fine Arts Studio (MFA)	1
Visual Arts (MST)	1
Visual Communication Design (MFA)	1
Subtotal	**4**
College of Liberal Arts	
Criminal Justice (MS)	1
Experimental Psychology (MS)	1
School Psychology (MS)	3
Subtotal	**5**
College of Health Science and Technology	
Health Systems Administration (MS)	1
Subtotal	**1**
College of Science	
Bioinformatics (MS)	1
Chemistry (MS)	1
Environmental Science (MS)	2
Material Science and Engineering (MS)	1
Subtotal	**5**
Kate Gleason College of Engineering	
Applied Statistics (MS)	1
Electrical Engineering (MS)	1
Mechanical Engineering (MS)	1
Subtotal	**3**

	Number of Students
Golisano College of Computing and Information Sciences	
Computer Science (MS)	1
Human Computer Interaction (MS)	3
Information Science and Technology (MS)	1
Networking and System Administration (MS)	1
Subtotal	**6**
Golisano Institute for Sustainability	
Architecture (M Arch)	3
Sustainable Systems (MS)	1
Subtotal	**4**
Center for Multidisciplinary Studies	
Professional Studies (MS)	1
Subtotal	**1**
Subtotal Graduate Students in Other Colleges	**44**
Total	**1,387**

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

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 2013-2014	
	Fall	Spring
Accounting Technology	8.6	10.3
Administrative Support Technology	7.4	9.1
American Sign Language	10.0	0.0
Applied Computer Programming	8.4	8.7
Applied Computer Technology	8.4	6.6
ASL-Deaf Culture	16.0	13.5
ASL-English Interpretation	11.4	10.8
Career Development	12.2	9.5
Communication Studies	12.2	8.5
Computer-Aided Drafting Technology	7.4	7.2
Computer-Integrated Machining Technology	8.7	6.8
English	12.5	9.3
General Arts & Imaging	9.1	8.6
General Business	9.3	12.4
General Engineering Studies	9.7	6.3
Graphic Design	9.2	8.0
Graphic Production	6.4	7.2
Humanities and Social Science	14.5	17.3
Laboratory Science Technology	9.8	9.5
Liberal Studies	13.0	11.5
Master of Science in Secondary Education	14.5	17.1
Mathematics	10.2	9.9
Science	10.7	13.1
Overall Average	**10.4**	**9.6**

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 2014.

| | | Number of Students | |
	Number of Sections	Deaf and Hard-of-Hearing	Hearing
Saunders College of Business			
Computer-Based Analysis	1	24	0
Leadership	1	0	6
Power and Influence	1	0	6
Subtotal	**3**	**24**	**12**
College of Imaging Arts and Sciences			
Design Drawing II	1	3	15
The Fine Print Workflow	1	0	20
Interior Design Independent Study	1	0	2
Survey of Western Art & Architecture I	1	19	0
Survey of Western Art & Architecture II	2	31	0
Subtotal	**6**	**53**	**37**
College of Liberal Arts			
American Sign Language Literature	2	12	32
Auto/Biographical Literature	1	7	0
Beginning American Sign Language I	16	17	299
Beginning American Sign Language II	7	12	95
Deaf Art & Cinema	2	19	47
Deaf Culture in America	3	32	65
Diversity in the Deaf Community	2	25	39
Foundations of Sociology	3	52	0
Global Deaf Literature	1	16	4
Intermediate American Sign Language I	3	10	23
Intermediate American Sign Language II	1	2	4
Introduction to Criminal Justice	1	21	0
Introduction to Psychology	7	105	51
Introduction to Visual Arts	2	41	0
Linguistics of American Sign Language	2	6	44
Literary and Cultural Studies	1	9	0
Oppression in the Lives of Deaf People	2	28	35
Science, Technology and Values	3	63	0
Senior Project in Psychology	1	6	1
Social Psychology	1	3	29

	Number of Sections	Number of Students	
		Deaf and Hard-of-Hearing	Hearing
College of Liberal Arts (continued)			
Special Topic: Modern Language	1	0	14
U.S. Themes	2	33	0
Subtotal	**64**	**519**	**782**
College of Science			
Comp Organic Chemistry Lab I	1	1	23
Grad Biology Independent Study	1	1	0
Introduction to Statistics I	4	20	128
Solar System Astronomy Lab	3	2	44
Stellar Astronomy Lab	3	2	94
Subtotal	**12**	**26**	**289**
Interdisciplinary Studies			
Critical Reading and Writing	9	141	0
Writing Seminar	13	178	0
Subtotal	**22**	**319**	**0**
Center for Intercollegiate Athletics and Recreation			
Country Line Dance	1	1	9
Insanity	1	13	27
Kundalini Yoga	2	5	51
Turbo Kick	2	21	36
Ultimate Frisbee	2	1	55
Yoga	2	3	50
Subtotal	**10**	**44**	**228**
Total	**117**	**985**	**1,348**

American Sign Language-English Interpretation Program

The degree programs in ASL-English Interpretation graduated 30 students in 2013-2014, all with BS degrees. Forty new students matriculated into the program in September 2014. Currently, 12 percent of total enrollment are students from ethnic minority backgrounds. Since its inception, the Department of ASL and Interpreting Education has graduated 715 students. Of that number, 466 have graduated with an AAS degree, 241 with a BS degree, and eight with a certificate.

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Fall Applicants	202*	229	250	224	211
Accepted	66**	49	51	51	49
Registrations	57***	41	45	43	40
Enrollment					
AAS	0	0	1	0	0
BS	147***	156	162	143	143
Non-Matriculated	0	4	4	4	3
Total Enrollment	**147***	**160**	**167**	**147**	**146**
Employment Report					
Graduates	19	32	34	30	****
Employment Rate	100%	100%	100%	****	****

In addition to the interpreting program, ASL and Interpreting Education faculty also provide the following programs:	FY 2014 Enrollment
ASL courses in RIT's College of Liberal Arts (CLA)	484
Faculty Staff Sign Language program, open to all RIT and NTID employees	216
ASL courses for deaf students, NTID	20
Master of Science in Secondary Education Program, NTID	31
Introduction to ASL and Deaf Culture	43
Provost Summer Intensive ASL Experience Programs, RIT's Office of the Provost	24
New Signers Program	17
Global Understanding Program Fall Semester – Hogeschool, the Netherlands students to NTID	4
Global Understanding Program Summer – NTID interpreting students to Hogeschool, the Netherlands	7

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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 2014 and FY 2015 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 20th year. To date, 300 students have graduated from the program. One hundred percent of the FY 2013 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 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 RIT's College of Science, College of Engineering and 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.

Forty applications for admission for fall 2014 were received. Nineteen were offered admission. Of those, 16 matriculated into the program. For the 2014-2015 academic year, the MSSE program has a total enrollment of 44 students: 28 second-year or returning students and 16 first-year students. Of the 44 matriculated students, 36 percent are deaf or hard-of-hearing and 4 percent are minority.

MSSE Student Data

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Fall Applications	50	43	49	38	40
Acceptances	34	26	30	16	19
New Registrations	27	18	19	16	16
Deaf and Hard-of-Hearing Enrollment	29	12	25	18	16
Total Enrollment*	**71**	**64**	**56**	**48**	**44**
Employment Report					
Graduates	23	30	15	34	**
Employment Rate	94%	100%	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 2014 and FY 2015 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 2014:
- 238 students were enrolled in cooperative work experiences
- 61 academic programs had students on cooperative work experiences
- 12 faculty and staff visited 35 students at their job sites during the summer

	Number of Students Involved in Cooperative Work Experiences*				
	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Sub-Baccalaureate					
NTID Career-Focused and Associate+Bachelor's Degrees	123	107	96	105	90
Percent of Total Co-op Enrollment	44%	36%	32%	36%	38%
Baccalaureate/Master's					
College of Applied Science and Technology	46	50	57	64	40
Saunders College of Business	33	36	34	38	18
Golisano College of Computing and Information Sciences	21	34	41	29	33
Kate Gleason College of Engineering	10	14	11	16	18
College of Health Sciences and Technology	N/A	N/A	6	5	1
College of Imaging Arts and Sciences	7	13	11	7	10
College of Liberal Arts	28	35	37	25	22
College of Science	13	9	6	6	6
Subtotal	158	191	203	190	148
Percent of Total Co-op Enrollment	56%	64%	68%	64%	62%
Total Co-op Enrollment	**281**	**298**	**299**	**295**	**238**

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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's Student Life Team provides a campus environment which supports transformational community and individual student activities, learning and growth.

Members of NTID's Student Life Team put on a show as hosts of Apple Festival, an annual celebration to welcome students and introduce them to clubs and services on campus.

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. RIT students, faculty and staff, NTID-supported alumni and those enrolled in RIT's Osher Lifelong Learning Institute are served.

- 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 2013-2014, 168 deaf and hard-of-hearing students were seen for these services.

- Personal and career counseling and academic advising. Upon entry, every NTID-supported student is assigned to a counselor/academic advisor from the NTID Department of Counseling and Academic Advising Services. These professional counselors/advisors play an important role in helping students maximize their educational opportunities. NTID associate-level students receive personal and career counseling and academic advising from their assigned counselor/advisor. NTID-supported bachelor-level students also receive personal and career counseling from their assigned NTID counselor. The academic advising for bachelor-level students is provided by the advisor in their home college. In AY 2013-2014, the NTID Counseling and Academic Advising Services Department provided more than 10,000 hours of career counseling, personal counseling and academic advising for students. In addition, the faculty and staff in the department frequently serve as guest lecturers in Freshman Seminar classes and other courses related to various aspects of college success. This department also manages a full-service Career Resource and Testing Center, which provides a number of career assessment tools and resources. These include 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. NTID counselors/advisors also work in collaboration with other service providers on campus to help students access services and experiences that promote academic growth, as well as enhance personal and social development.

- Student Life Team (SLT) continued its tradition in FY 2014 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 and Academic Advising Services Department, the NTID Center on Employment, NTID Student and Academic Services, Department of Public Safety, 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, spiritual/religious and civility exploration workshops, self-advocacy and community accountability mentoring programs, social and cultural programs, fraternity and sorority event collaborations and club/organization advising are avenues of outreaching and networking with students. SLT values the ongoing partnership with NTID alumni to offer every student a greater sense of his/her purpose as a global citizen.

- 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. In AY 2013-2014, 548 deaf or hard-of-hearing students participated in wellness activities, 450 deaf or hard-of-hearing students participated in intramural sports, and 41 deaf or hard-of-hearing students participated in intercollegiate athletics.

- Financial aid for domestic students was provided in AY 2013-2014 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, 473 received NTID merit scholarships, 80 received RIT merit scholarships, 480 received NTID endowed scholarships and 126 students received scholarships from external funding sources. In addition, the NTID Financial Services Office 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 2014, 212 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-one sections were offered with an average class size of 9 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 2013-2014, CES served 119 students in fall and 90 students in spring. Seventy-four percent of CES students were accepted into a major within two semesters.

- 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 biochemistry. The NLC continues to support the administration of SVP writing tests and the quarterly administration of the Liberal Arts placement tests and provided a number of tours for incoming freshmen and visitors from other institutions such as foundation boards and universities. 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 2013-2014		
	Hours of Service Tutoring/Advising	Class Sections Served	Total Student Registrations
College of Applied Science and Technology (CAST)	*	313	682
College of Imaging Arts and Sciences (CIAS)	2,053	395	758
Saunders College of Business (SCB)	1,978*	183	572
Kate Gleason College of Engineering (KGCOE)	961*	154	204
College of Liberal Arts (CLA)	1,961	695	2,608
College of Health Sciences and Technology (CHST)	447	68	266
College of Science (COS)	6,211*	486	1,419
Golisano College of Computing and Information Sciences (GCCIS)	2,050*	220	510
Total	**15,661**	**2,518**	**7,019**

Isabel Lainez Gonzalez, an Arts & Imaging Studies major from Mississauga, Canada, receives one-on-one assistance from Ernie Roszkowski '07, a lecturer in the Visual Communications Studies Department.

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

Student Access Services

NTID's Access Services staff provide access services in the classroom as well as outside the classroom for events such as student government meetings, judicial proceedings, extra-curricular programs and guest lecturers and entertainers.

Katelyn Hohmann, an ASL-English Interpretation major from Constantia, N.Y., and Jilissa Vellake, a visiting interpreting student from Holland, interpret for Angela Paz Pereira, an Accounting Technology major from Norwalk, Conn. Hohmann and Vellake joined 18 other interpreting students as well as 31 staff interpreters and 10 faculty/staff volunteers to facilitate communication at NTID's Job Fair.

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 120 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 2014, is 16 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 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)	9,263	4,994	1,428	241
Saunders College of Business (SCB)	7,970	4,721	1,563	162
Golisano College of Computing and Information Sciences (GCCIS)	8,545	4,848	2,655	177
Kate Gleason College of Engineering (KGCOE)	3,127	2,724	2,243	126
College of Health Sciences and Technology (CHST)	1,760	1,348	687	47
College of Imaging Arts and Sciences (CIAS)	18,089	10,775	3,002	319
Interdisciplinary Studies (INTSD)	1,070	438	73	28
College of Liberal Arts (CLA)	24,231	14,651	5,335	485
College of Science (COS)	20,051	215	4,042	416
Student Affairs Division (STUAF)	2,566	582	77	135
Golisano Institute Sustainability (GIS)	1,159	113	35	9
NTID Students with Approved Accommodations*	1,342	582	0	37
FY 2014 Total Hours	**99,173**	**58,246**	**21,140**	**2,184**

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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.

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 student 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.

The reduced number of sections and hours required this year result from RIT's move to a semester-based academic calendar.

FY 2014	In-Class			Non-Class Activity		Administrative Activity		Overall Total	
	Hours	%*	Sections						
Fall	44,943	79%	774	9,741	17%	2,250	4%	56,934	100%
Winter	113	6%	4	1,430	70%	504	25%	2,047	100%
Spring	51,608	80%	836	10,299	16%	2,375	4%	64,282	100%
Summer	2,509	29%	46	4,753	54%	1,530	17%	8,792	100%
FY 2014 Total	**99,173**	**75%**	**1,660**	**26,223**	**20%**	**6,659**	**5%**	**132,055**	**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%
FY 2013 Total	111,757	77%	2,262	26,878	19%	6,368	4%	145,003	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 orientations and meetings.

The growth in the provision of real-time captioning from FY 2004 is reflective of strategic planning. The reduced count of sections served in 2014 results from RIT's move to semesters.

FY 2014	In-Class			Non-Class Activity		Administrative Activity		Overall Total	
	Hours	%*	Sections						
Fall	10,358	99%	237	52	0%	3	0%	10,413	100%
Winter	67	96%	1	3	4%	0	0%	70	100%
Spring	10,081	98%	236	122	1%	50	0%	10,253	100%
Summer	634	73%	15	174	20%	57	7%	865	100%
FY 2014 Total	**21,140**	**98%**	**489**	**351**	**2%**	**110**	**1%**	**21,601**	**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%
FY 2013 Total	17,782	98%	577	265	1%	216	1%	18,263	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.
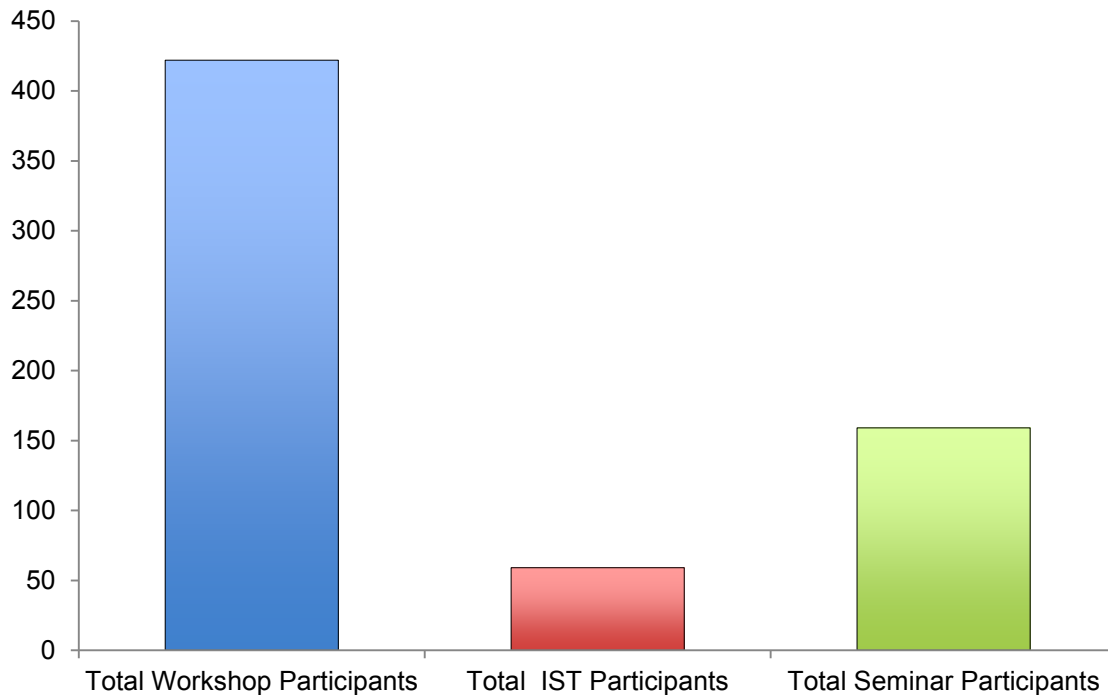
Programs	Number Enrolled				
	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
In-Service Training for Interpreters	74	63	132*	104	59
Notetaker Training	346	359	277	262	417
Real-Time Captionist Training	7	6	0	6	4
Total	**427**	**428**	**409**	**372**	**480**

Access Services Professional Development Programs
    Workshops: 422
    Seminars: 159
    In-Service Trainings: 59

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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 2013 graduates, 94 percent of those seeking employment were employed in 2014.

Nigel Evans, from Pensacola, Fla., celebrates the receipt of his associate degree in Applied Computer Technology with his family at RIT/NTID's 2014 Commencement. He plans to one day start his own company in network marketing and business investing.

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, 92 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 2013 graduates show that 94 percent, or 174 of the 185 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's Retention Committee is dedicated to identifying retention issues that impact students' persistence from first-year transition through graduation. The AY 2013-2014 Retention Committee focused on analyzing exit interview data to identify reasons why students leave; identifying strategies to increase the retention of NTID transfer students; and determining if the AALANA StepUp! program was positively affecting graduation rates after five years of implementation. As a result, more emphasis will be given to ensure students who leave prior to graduating complete an exit interview to better identify reasons; greater emphasis to expand retention efforts to include transfer students in all degree levels; and maintain the current StepUp! mentoring program while expanding mentoring support to include NTID AALANA second-year students and beyond.

Persistence is a continuing concern for NTID. However, NTID first-year retention and overall graduate rates continue to exceed national averages when compared to hearing students in associate and bachelor's degree programs in other colleges and universities. Notwithstanding these positive comparisons, NTID continues to work at improving its persistence to graduation rate.

For AY 2013-14, RIT/NTID awarded 344 associate, bachelor's and master's degrees. Of those graduates, 38 percent earned associate degrees, 50 percent earned bachelor's degrees and 12 percent earned master's degrees. Twenty-nine percent of degrees were granted to minority students.

Persistence, Graduation and Employment Highlights (continued)

The NTID Office of Alumni and Constituent Relations plans and implements strategies for engaging alumni and other constituents through social and professional development events, volunteer opportunities and other activities, both campus-based and in targeted regions around the country. With counsel from and collaboration with the NTID Alumni Association Board of Directors, Alumni and Constituent Relations works to build and maintain connections between NTID and its 7,581 alumni. Over the past year, more than 400 alumni and guests participated in more than 25 alumni activities and events across the country and internationally including receptions, workshops and networking opportunities.

Born in Kyoto, Japan, RIT/NTID alumnus Minoru Yoshida '04 traveled across the world to earn a bachelor's degree in Information Technology and later a master's in Science, Technology and Public Policy from RIT. After a stint working at the NTID-based Postsecondary Education Network-International, Yoshida now works as a grant officer with The Nippon Foundation in Japan, screening and evaluating international disability projects and deafness-related projects in Japan.

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 855 students who were first-time, full-time, degree-seeking in the years 2011, 2012 and 2013. Data in the table below indicate that for the most recent three-year period, 77 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%
2011, 2012, 2013	855	658	77%

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* Three-year averages for first-time, full-time, degree-seeking students registering for fall term. 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 (41 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	59%	31%
NTID Sub-Baccalaureate**	**69%**	**41%**
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 2010 to FY 2014

During the past five years, NTID has awarded an average of 344 degrees annually. The number for FY 2014 was 344. 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 2014, 70 of the 344 graduate and undergraduate degrees and certificates (29 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 45-52 semester 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 15 semester credit hours in the NTID general education curriculum, as well as other required semester credit hours determined by their program of study.

2. An *Associate in Applied Science* (AAS) degree permits students to enter their careers directly upon graduation, or in many cases, to transfer to a baccalaureate program in the other colleges of RIT. Completion of this degree requires 48-52 semester credit hours of technical instruction. In addition to the technical courses, students must complete 24 semester credit hours in general education courses, primarily offered through RIT's College of Liberal Arts as well as other required credit hours as determined by their 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 60-63 semester 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 RIT's other eight colleges. A bachelor's degree requires completion of 120-128 semester credit hours.

5. A *Master's* degree indicates that a student has completed a minimum of 30 semester credit hours beyond the baccalaureate level in any RIT master's degree program.

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* Minority status is unknown for 103 of these 344 graduates or the graduate has international visa status.
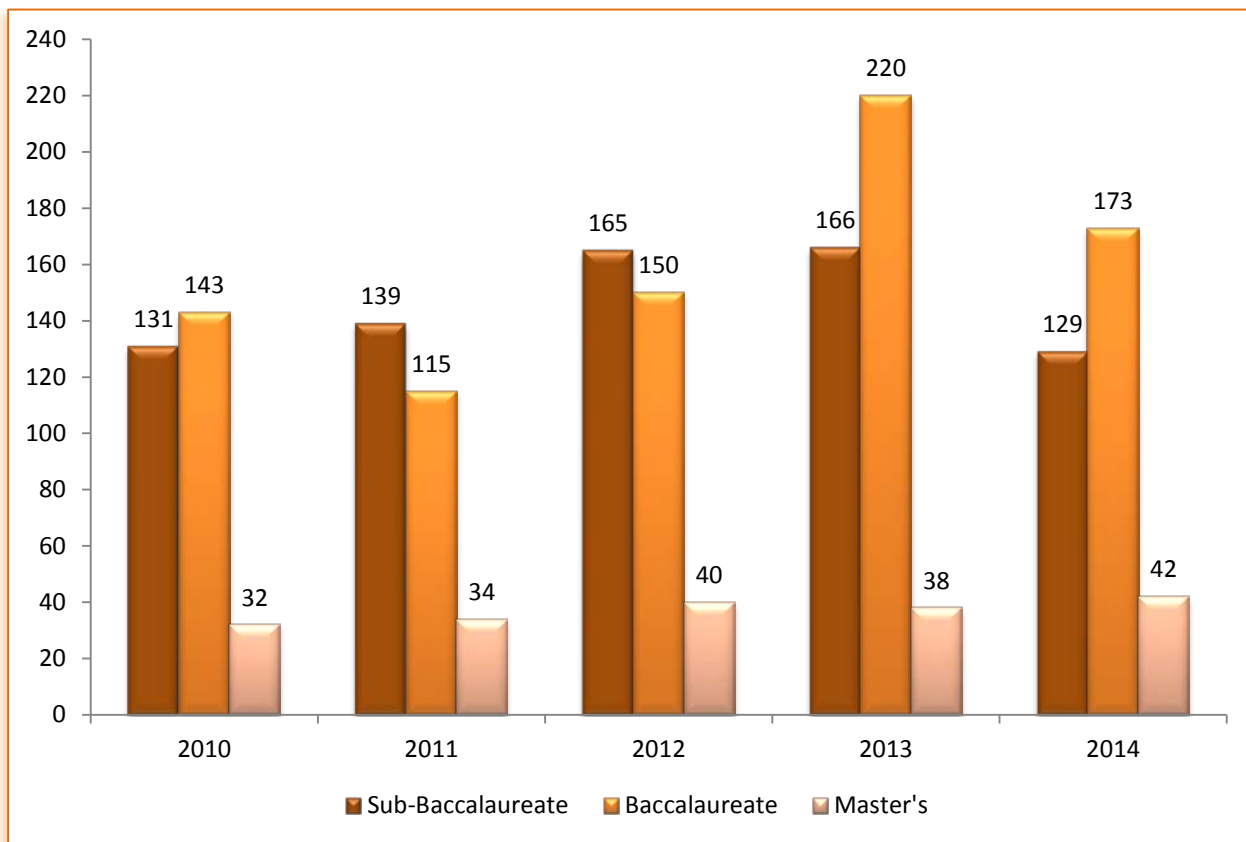
	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Sub-Baccalaureate*	40.9%	48.3%	46.5%	39.2%	37.5%
Baccalaureate*	43.3%	39.9%	42.3%	51.8%	50.3%
Master's**	15.8%	11.8%	11.2%	9.0%	12.2%

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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 2014, 56 percent were through programs offered by NTID and 44 percent through the other colleges of RIT. Historically, 66 percent of the degrees have been awarded from NTID and 34 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 2014 | | CUMULATIVE* | |
| | | | (FY 1970 – FY 2014) | |
	Number of Graduates	Percentage of Graduates	Number of Graduates	Percentage of Graduates
NTID				
Career-Focused and Associate+Bachelor's Degrees	127	37%	4,132	53%
ASL-English Interpretation Bachelor	29	9%	241	3%
ASL-English Interpretation Associate	1	0%	466	6%
ASL-English Interpretation Certificate	0	0%	8	0%
Master of Science in Secondary Education	34	10%	300	4%
Subtotal NTID	**191**	**56%**	**5,147**	**66%**
Other Colleges of RIT**				
College of Applied Science and Technology	17	5%	585	7%
Saunders College of Business	16	5%	384	5%
Golisano College of Computing and Information Sciences	13	4%	282	4%
Kate Gleason College of Engineering	1	0%	85	1%
College of Health Sciences and Technology	5	1%	15	0%
College of Imaging Arts and Sciences	24	7%	576	7%
College of Liberal Arts	31	9%	465	6%
College of Science	5	1%	158	2%
Multidisciplinary and University Studies	41	13%	122	2%
Subtotal Other Colleges	**153**	**44%**	**2,702**	**34%**
Total	**344**	**100%**	**7,849**	**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 academic term requirements for cooperative education experiences (paid employment in a field related to study), while some programs require more than three terms of cooperative education. This can extend program length by approximately one year. The table below shows the average number of active semesters and years elapsed between entry and date of degree.

Time Required to Complete a Degree: Graduates FY 2014		
First Degree Category	**Average Active Terms***	**Average Active Years***
Bachelor's degree	12.2	4.1
AS/AAS degree	9.4	3.1
AOS degree	8.9	3.0

Derek Landis, a Criminal Justice major from Frederick, Md., was the 2014 NTID College Delegate for undergraduates. He received his associate degree in Applied Liberal Arts and addressed other graduates at NTID's Commencement.

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

Persistence, Graduation & Employment

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 2013*, 331** deaf and hard-of-hearing students graduated, and 185 chose to enter the labor force. One hundred seventy-four were employed, while 11 were unable to find employment. Therefore, 94.05 percent (174/185) found employment. NTID's employment rate over the past five years as calculated above is 92 percent. Of the 146 remaining graduates from 2013, 98 are continuing their education toward advanced degrees either at RIT or elsewhere, 19 are not looking for employment, and 29 have an unknown status.

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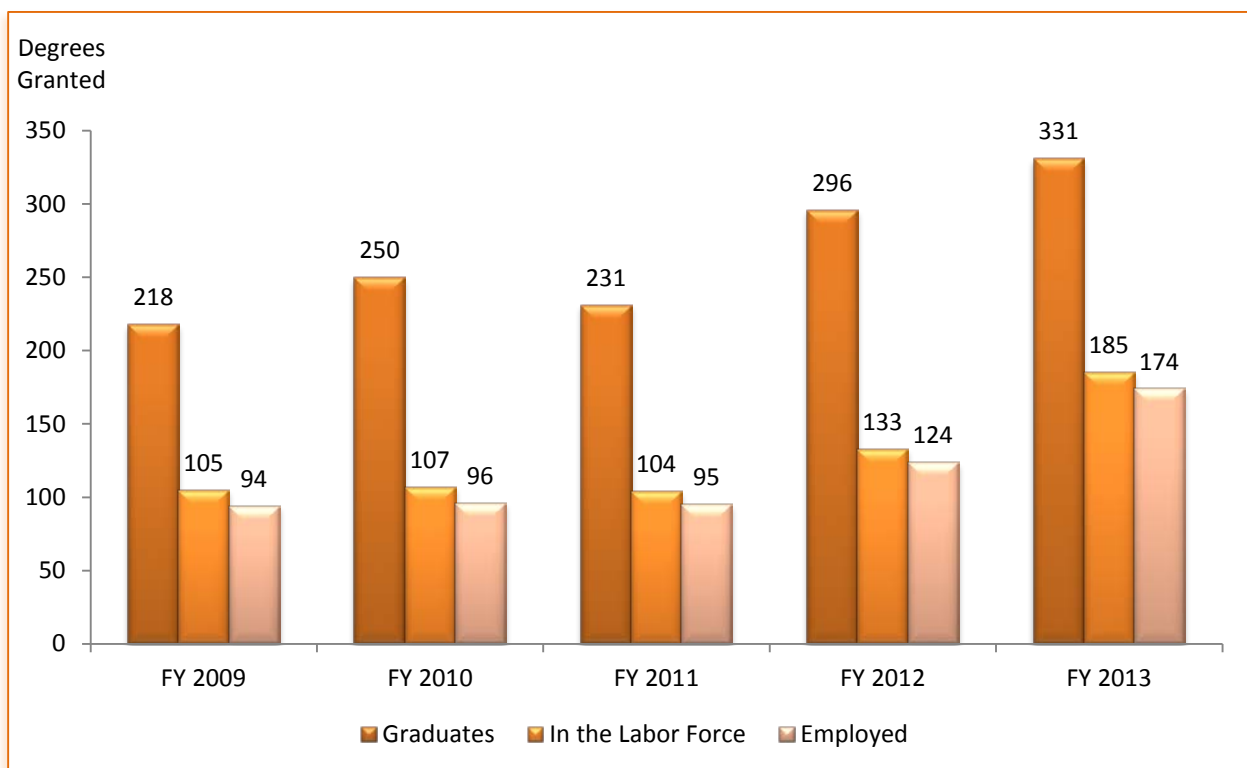
*   As of the writing of this report, the employment information for 2014 is incomplete; therefore, NTID reports employment rates of 2013 graduates.
** Students are only counted once in the case of multiple degrees, and the total number of graduates does not include degrees in the ASL-English Interpretation 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 2014:

- NCE personnel appeared as guest presenters to discuss the job search process in 10 sections of various technical programs.

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

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

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

- The 13th annual NTID Job Fair was held in October 2013 with 22 employers attending and more than 300 students and alumni participating.

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

- NCE brought nine students from various majors and degree levels to visit Highmark in Pittsburgh, Pa., in November 2013 to learn about employment opportunities and work environment.

- NCE brought 13 students from computing, business and packaging science programs to visit Heinz in Pittsburgh, Pa., in April 2014 to learn about co-op and full-time opportunities and work environment.

Lakeishia Brown, an Electrical Engineering major from Woodbridge, Va., talks with potential employers at NTID's Job Fair.

Where Recent Graduates Are Working

In FY 2013, 38 percent of U.S. NTID graduates accepted jobs in their home states as their first jobs after graduation, while 24 percent found employment in the Rochester area and 38 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 2009	FY 2010	FY 2011	FY 2012	FY 2013*
Area					
Rochester	18%	17%	17%	23%	24%
Home State	33%	24%	43%	38%	38%
Other	49%	59%	40%	39%	38%
Total	**100%**	**100%**	**100%**	**100%**	**100%**
Number of Graduates Placed	**94**	**96**	**95**	**124**	**174**

FY 2013 Graduate Placement by Region**

Pacific (includes Alaska & Hawaii) 8.5%

Mountain 2.6%

West North Central 2.0%

East North Central 19.0%

New England 5.2%

Middle Atlantic 41.8%

South Atlantic 12.4%

West South Central 2.0%

East South Central 2.6%
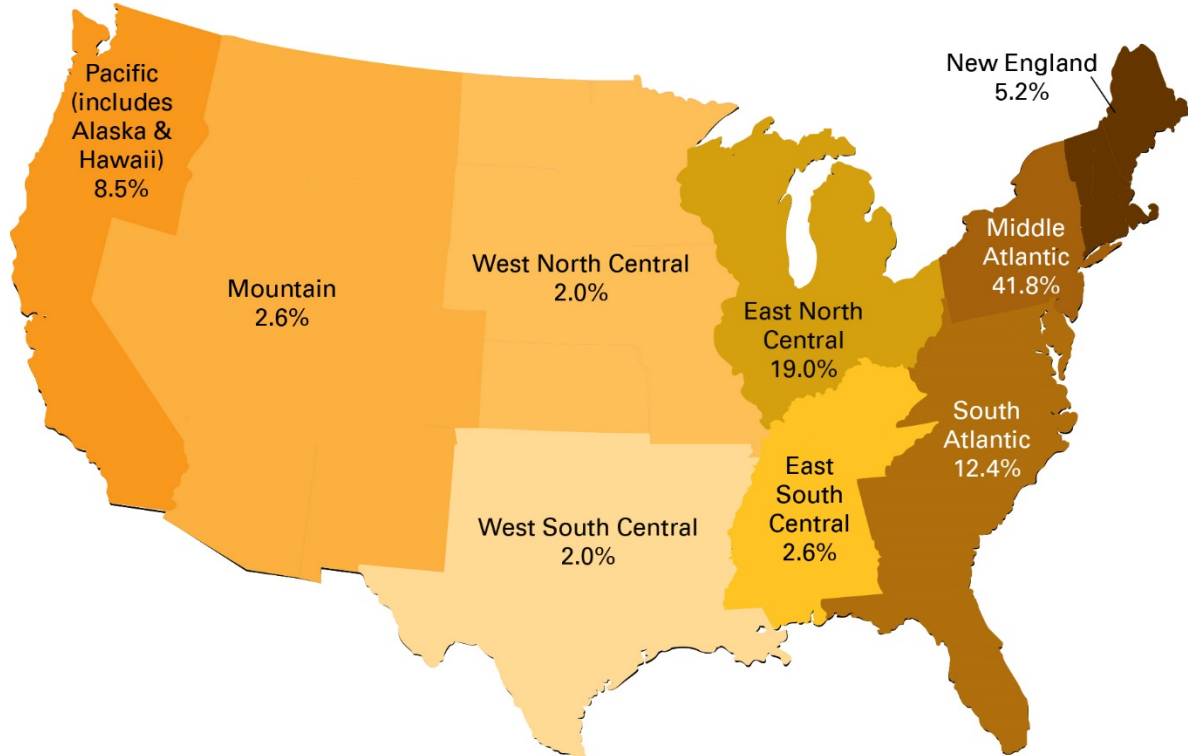
* Placement numbers for FY 2014 graduates are incomplete and will be reported next year.
** In addition, 1.3 percent are working internationally and 2.6 percent are working in unknown locations.

Employment by Sector of the Economy

Of the last cohort of graduates tracked for employment, 60 percent have acquired jobs in business and industry, 31 percent in education/non-profit and 9 percent in government.

Sector	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013*
Business/Industry	59%	57%	54%	65%	60%
Education/Non-Profit	21%	27%	31%	24%	31%
Government	20%	16%	15%	11%	9%
Total	**100%**	**100%**	**100%**	**100%**	**100%**

RIT/NTID alumnus Graham Forsey '14, a Business Systems Analyst at Whirlpool Corporation in Saint Joseph, Mich., interviews Matthew Stephens, an Arts & Imaging Studies major from Detroit, Mich.

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* Placement numbers for FY 2014 graduates are incomplete and will be reported next year.

Persistence, Graduation & Employment

Occupations of Recent Graduates: Entry Status by Labor Category

FY 2013 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 14 categories.

Percentages among the various categories are somewhat different than seen in the *FY 2013*

Annual Report. This year shows a large increase relative to previous years for employment in the computer and mathematics category of occupations. There was also a substantial increase this year in the percentage employed in education, training and library areas. There was a decrease in percentages employed in office and administrative support, and life, physical and social science positions.

Occupations of Working 2013 Graduates*	%	Sample Job Titles Held by 2013 Graduates within Category
Computer & Mathematics	17.3%	Website Developer, Programmer/Analyst, Technical Support, Web Programmer, Information System Analyst
Office & Administrative Support	15.1%	Paraprofessional, Office Associate, Administrative Assistant, Page, Direct Support Professional
Arts, Design, Entertainment, Sports & Media	14.4%	CAD Designer, Graphic Designer, UX Designer, Industrial Designer, Visual Communication Specialist
Education, Training & Library	11.5%	Teacher, Residential Counselor, Field Service Advisor, Teaching Assistant
Business & Financial Operations	8.6%	Distribution Specialist, Accountant, EEO Investigator, Risk Analyst
Sales & Related	5.8%	Telesales Specialist, Marketing Assistant, Guest Service Agent, Sales Associate
Architecture & Engineering	5.0%	Packaging Specialist, Engineering Intern, Engineering Mentor
Food Preparation and Serving Related	5.0%	Bakery Clerk, Bartender
Life, Physical & Social Science	4.3%	Microbiologist, Clinician

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* Fourteen of the FY 2013 employed graduates had either unknown job titles or titles too ambiguous for categorization.

Occupations of Recent Graduates: Entry Status (continued)

Occupations of Working 2013 Graduates*	%	Sample Job Titles Held by 2013 Graduates within Category
Installation, Maintenance & Repair	4.3%	Copy Technician, Maintenance Technician, Utility Worker
Management Occupations	2.9%	Food Service Supervisor, Engineering Manager
Building Cleaning	2.9%	Housekeeper
Health Services	1.4%	Health Project Coordinator
Production Occupations	1.4%	Package Handler
Total	**100%**	

Noe Turcios, of Frederick, Md., graduated in 2009 with an associate degree in Laboratory Science Technology and in 2012 with a bachelor's degree in Biotechnology. He works as a Biological Laboratory Technician in the Cancer Biology and Genetics Lab at the National Institutes of Health in Bethesda, Md.

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* Fourteen of the FY 2013 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 1999–2014 were surveyed in 2014.

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 13 major categories.

In 2014, the percentage of alumni working in Community and Social Services more than doubled compared with the 2010 alumni survey. Also, there were more alumni in Business & Financial Operations, and fewer alumni in Education, Training & Library.

The next alumni survey will be completed in 2019.

Occupations of Working Alumni*	%	Sample Job Titles Held by Alumni within Category
Community and Social Services	27.8%	Outreach Coordinator, Public Health Analyst, Residential Counselor
Business & Financial Operations	14.4%	Accountant, Billing Analyst, Management Analyst, Contracting Officer
Computer & Mathematics	13.4%	Information Assurance Analyst, IT Systems Analyst, Software Engineer, User-Interface Designer
Education, Training & Library	12.4%	Admissions Counselor, Instructional Faculty, Paraprofessional Teacher
Office & Administrative Support	9.3%	Administrative Assistant, Purchasing Specialist, Conference Administrator
Architecture & Engineering	6.2%	Capital Project Engineer, Facilities Engineer, R&D Assistant
Arts, Design, Entertainment, Sports & Media	4.1%	Creative Designer, Media Artist, Product Designer
Life, Physical & Social Science	3.1%	Chemical Lab Technician, Lab Manager, Lab Technician
Production Occupations	3.1%	CNC Operator, Setup Operator, Screen Printer
Management	2.1%	Supervisor, Business Owner
Sales & Related	2.1%	Customer Relations Representative, Sales Floor Team Member
Transportation & Material Moving	1.0%	Forklift Operator
Protective Services	1.0%	Security Officer

* There were several job categories not represented by any of the graduates.

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

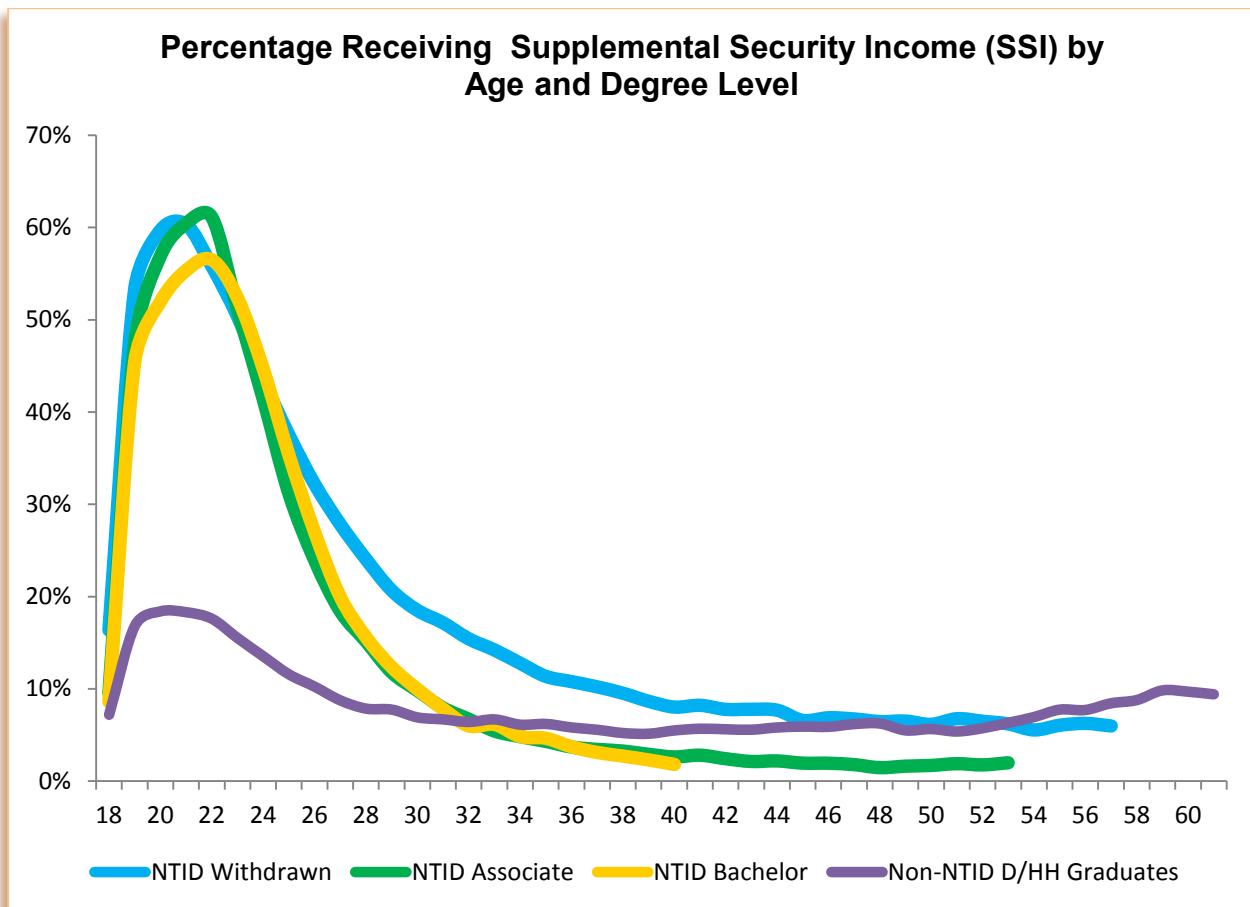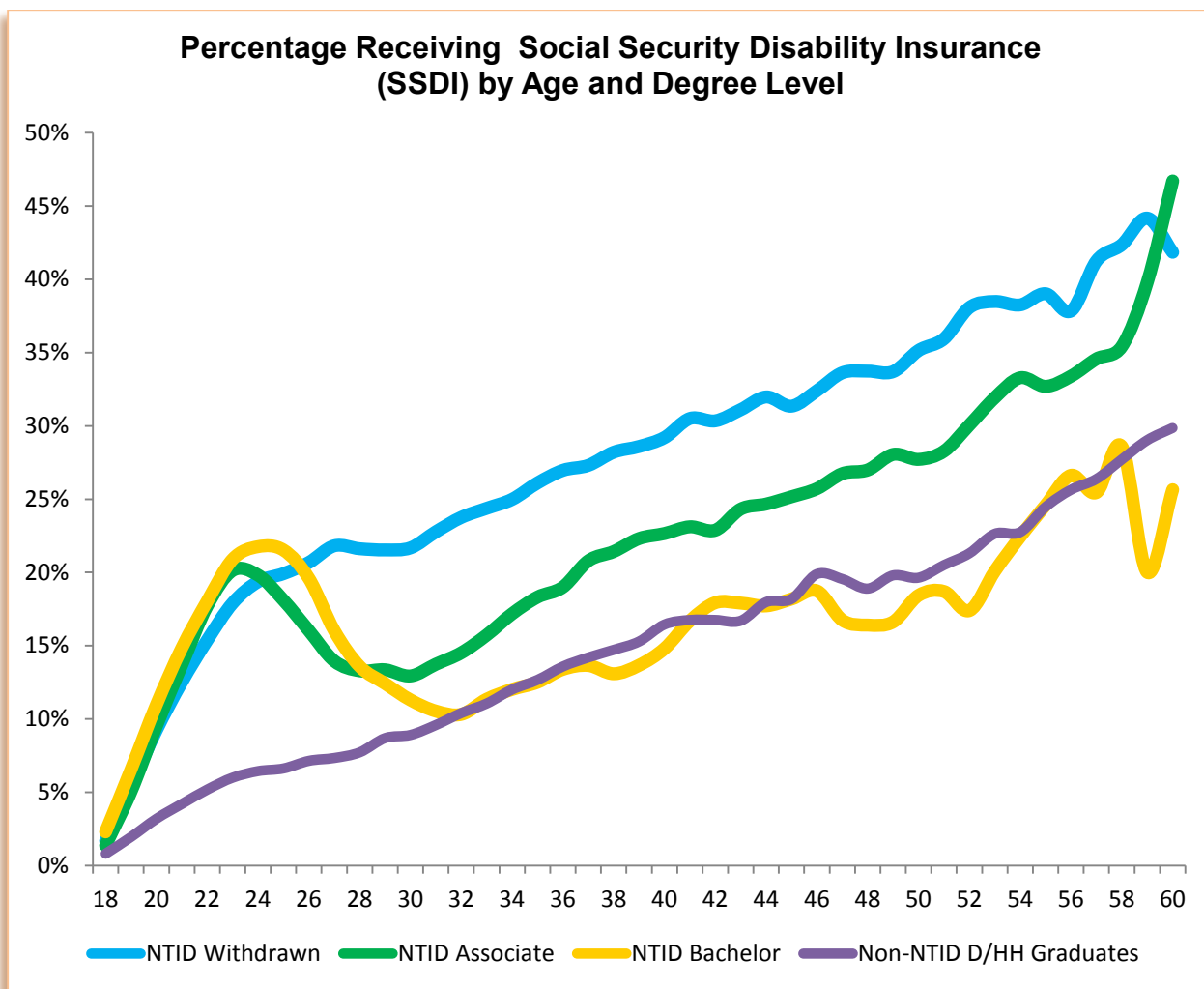Legend: NTID Withdrawn, NTID Associate, NTID Bachelor, Non-NTID D/HH Graduates

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).

Persistence, Graduation & Employment

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

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 perform the musical *Damn Yankees*. In addition to a diverse cast, the performance featured diverse communication methods: sign language, spoken English, captioning and singing.

National Technical Institute for the Deaf

Diversity and Pluralism Highlights

Students

As of fall 2014, the number of U.S. deaf and hard-of-hearing minority students at NTID is 378*, one of the larger numbers in the past five years. FY 2015 highlights follow:

- Thirty-four percent of the fall entering class is from minority groups. The percentage in the total student body is 34 percent, which is more than triple what it was 19 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 46 employees from ethnic minority populations, 23 are Black or African American, 11 are Hispanic of any race and 12 are other minorities.

Of 521 total number of employees, 95 are deaf or hard of hearing.

Of the 128 employees who are deaf or hard of hearing or are members of a minority group, 100 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. In the past year, 13 percent of all hires 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.

Keith Banks, Jr., an International Hospitality and Service Management major from Orlando, Fla., was the NTID senator for RIT Student Government 2013-2014, president of NTID's Masquers Drama Club and received the 2014 Dawan L. Albritton Humanitarian Award from RIT/NTID. He also participated in a five-month internship at Walt Disney World and hopes to manage a department there one day.

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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's Office of Diversity and Inclusion advocates for and advances 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.

- 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.

- In November 2014, 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.

- 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 as well as within the college in advance of each faculty search, supported by RIT's Office of Faculty Recruitment and Retention.

- The NTID Diversity Group promotes 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.

Admissions Activity by Ethnicity

Forty-two percent (246) of this year's 796 deaf and hard-of-hearing applicants were students from minority backgrounds. The FY 2015 entering class of deaf and hard-of-hearing students included 116 minority students, who represent 38 percent of the newly admitted deaf and hard-of-hearing students.

	FY 2013*	Percent	FY 2014*	Percent	FY 2015*	Percent
Total Applicants	989		833		796	
Non-Minority	296	51%	350	58%	339	58%
Minority	284	49%	253	42%	246	42%
Acceptances	504		507		464	
Non-Minority	202	55%	265	60%	272	63%
Minority	167	45%	177	40%	159	37%
Registrations	381		381		324	
Non-Minority	156	57%	205	62%	192	62%
Minority	117	43%	127	38%	111	38%

Students participating in NTID's Explore Your Future (EYF) program share some downtime at RIT's Frank Ritter Ice Arena. EYF is 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. Many EYF students go on to enroll at NTID. Thirty-two percent of FY 2014 EYF participants were from minority backgrounds.

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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.

Ethnicity of Entering Students

The FY 2015 total entering class included 116 minority students, who represent 34 percent of the entire incoming class. The FY 2015 entering class of deaf and hard-of-hearing students included 111 minority students, who represent 38 percent of the newly admitted deaf and hard-of-hearing students.

	FY 2013	Percent	FY 2014	Percent	FY 2015	Percent
Deaf and Hard-of-Hearing Undergraduate and Graduate Students						
American Indian or Alaska Native	*		0	0.0%	*	
Asian	30	11.0%	34	10.2%	29	9.8%
Black or African American	27	10.0%	38	11.4%	32	10.8%
Hispanic of Any Race	52	19.0%	42	12.7%	42	14.2%
Native Hawaiian or Other Pacific Islander	*		0		*	
White	156	57.1%	205	61.7%	185	62.5%
Two or More Races	6	2.2%	13	3.9%	8	2.7%
Non-Resident Alien (International)	15		14		10	
Unknown Race/Ethnicity	93		35		18	
Subtotal Minority Deaf and Hard-of-Hearing Undergraduate and Graduate Students	117	42.9%	127	38.3%	111	37.5%
Subtotal Deaf and Hard-of-Hearing Undergraduate and Graduate Students	**381**		**381**		**324**	

	FY 2013	Percent Minority	FY 2014	Percent Minority	FY 2015	Percent Minority
Other Enrollments						
ASL-English Interpretation	45	25.0%	43	13.2%	40	13.9%
Master of Science in Secondary Education	19	8.3%	16	20.0%	16	0.0%
Total Minority Enrollments	**125**		**135**		**116**	
Total Enrollments	**445**		**440**		**380**	
Overall Percent Minority		**39.9%**		**34.7%**		**33.9%**

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* Frequency counts small and not reported for confidentiality.

Diversity and Pluralism

Ethnicity of Enrolled Students

Minority enrollment at NTID has steadily increased from 8 percent in FY 1988 to 34 percent in FY 2015, more than four times what it was 26 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 2013	Percent	FY 2014	Percent	FY 2015	Percent
Deaf and Hard-of-Hearing Undergraduate and Graduate Students						
American Indian or Alaska Native	7	0.7%	*		*	
Asian	85	8.2%	88	8.7%	99	9.7%
Black or African American	135	13.1%	120	11.8%	113	11.1%
Hispanic of Any Race	127	12.3%	133	13.1%	137	13.5%
Native Hawaiian or Other Pacific Islander	0	0.0%	*		*	
White	652	63.1%	646	63.7%	639	62.8%
Two or More Races	28	2.7%	23	2.3%	28	2.8%
Non-Resident Alien (International)	48		39		40	
Unknown Race/Ethnicity	224		184		140	
Subtotal Minority Deaf and Hard-of-Hearing Undergraduate and Graduate Students	382	36.9%	369	36.4%	378	37.2%
Subtotal Deaf and Hard-of-Hearing Undergraduate and Graduate Students	**1,306**		**1,237**		**1,197**	

	FY 2013	Percent Minority	FY 2014	Percent Minority	FY 2015	Percent Minority
Other Enrollments						
ASL-English Interpretation	167	16.0%	147	14.9%	146	15.8%
Master of Science in Secondary Education**	56	13.5%	48	12.1%	44	3.7%
Total Minority Enrollments	**406**		**388**		**397**	
Total Enrollments	**1,529**		**1,432**		**1,387**	
Overall Percent Minority		**34.0%**		**32.6%**		**34.3%**

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

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 2011-2013 Cohort	Black or African American	Asian	Hispanic of Any Race	Non-Resident Alien (International)	White
Cohort Count	86	62	103	17	403
Persisted to Second Year	61	54	61	14	294
First to Second Year Persistence Rate	**71%**	**87%**	**59%**	**82%**	**73%**

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

Fall 2006-2008 Cohort	Black or African American	Asian	Hispanic of Any Race	Non-Resident Alien (International)	White
Cohort Count	73	66	73	14	513
Graduated Within Six Years	27	37	21	11	232
Six-Year Graduation Rate	**37%**	**56%**	**29%**	**79%**	**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.

Diversity and Pluralism

Graduates by College and Program Areas: Minority Status

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

	FY 2014 Number of Graduates		
	Minority	Non-Minority	Total***
NTID			
Career-Focused and Associate+Bachelor's Degrees	41	46	127
ASL-English Interpretation	*	19	30
Master of Science in Secondary Education	*	13	34
Other Colleges of RIT**			
College of Applied Science and Technology	*	10	17
Saunders College of Business	*	13	16
Golisano College of Computing and Information Sciences	*	7	13
Kate Gleason College of Engineering	*	*	1
College of Health Sciences and Technology	*	3	5
College of Imaging Arts and Sciences	*	17	24
College of Liberal Arts	5	22	31
College of Science	*	3	5
University Studies	12	17	41
Total* **	**70**	**171**	**344**

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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.

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-eight faculty and staff members.

FY 2014

	Total Employees	Female	Black or African American	Hispanic of Any Race	Other Minority	Deaf and Hard of Hearing
Faculty*	171	82	8	**	7	65
Percent		48%	5%	**	4%	38%
Exempt Staff*	109	63	6	**	**	25
Percent		58%	6%	**	**	23%
Executive/ Administrative Manager*	53	22	**	**	**	15
Percent		42%	**	**	**	28%
Non-Exempt Staff						
C-Print®	49	47	**	**	**	**
Percent		96%	**	**	**	**
Interpreter	115	101	**	**	**	**
Percent		88%	**	**	**	**
Technical/ Clerical	77	67	5	**	**	14
Percent		88%	7%	**	**	18%
Total	**521**	**360**	**23**	**11**	**12**	**95**
Percent		**69%**	**5%**	**2%**	**2%**	**18%**

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* Of the 53 executive/administrative managers, 23 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.

Diversity and Pluralism

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, 2013 – September 30, 2014

	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	15	108	59	3	4	24	31	0
Exempt Staff	10	289	182	10	16	17	89	2
Non-Exempt Staff*	9	235	164	26	9	12	44	2
Total	**34**	**622**	**405**	**39**	**29**	**53**	**164**	**4**

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

Affirmative Action Report: Faculty and Staff Hiring Results

During FY 2014, individuals from an ethnic minority or who were deaf or hard of hearing totaled 13 percent of all new hires and women, 83 percent. Individuals may appear in more than one Affirmative Action category. Two new hires were individuals of unknown ethnicity.

FY 2014

	Total New Employees	Female	Black or African American	Hispanic of Any Race	Other Minority	Deaf and Hard of Hearing
Faculty	11	8	*	0	*	*
		80%	*	0%	*	*
Exempt Staff	3	1	*	0	*	*
		33%	*	0%	*	*
Executive/ Administrative Manager**	0	0	*	0	*	*
		0%	*	0%	*	*
Non-Exempt Staff						
C-Print®	3	3	*	0	*	*
		100%	*	0%	*	*
Interpreter	11	11	*	0	*	*
		100%	*	0%	*	*
Technical/Clerical	3	2	*	0	*	*
		67%	*	0%	*	*
Total	**31**	**25**	*	0	*	*
		83%	*	0%	*	*

* 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.

Diversity and Pluralism

Affirmative Action Report: Faculty and Staff Termination Results

During FY 2014, 14 percent of terminations were individuals from ethnic minorities and 75 percent were women. In the chart below, individuals may appear in more than one Affirmative Action category.

FY 2014

	Total Terminated Employees	Female	Black or African American	Hispanic of Any Race	Other Minority	Deaf and Hard of Hearing
Faculty	15	9	*	*	*	*
		60%	*	*	*	*
Exempt Staff	10	5	*	*	*	*
		50%	*	*	*	*
Non-Exempt Staff**	23	22	*	*	*	*
		96%	*	*	*	*
Total	**48**	**36**	*	*	*	**8**
		75%	*	*	*	17%

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

Research, Innovation & Creativity

RIT and the University of Rochester established the Rochester Bridges to the Doctorate Program to increase the readiness of deaf and hard-of-hearing students who plan to apply to a doctoral level program in a behavioral or biomedical science discipline.

Rochester Bridges to the Doctorate students Jessica Contreras of Anchorage, Alaska; and Gina De Naples, of Greensboro, N.C.; educate the public about deaf scientists at Imagine RIT.

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. Two new research centers were established in January of 2012 utilizing funds provided by the RIT Vice President for Research: Research Center for Teaching and Learning (RC*f*TL); and Research on Employment and Adapting to Change: Center for Studies on Career Success (REACH).

RC*f*TL 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, RC*f*TL and REACH provide resources (e.g., expertise, mentoring, methodologies, equipment, supplies, space) during the early stages of project development and ongoing collaboration. Each center was able to obtain external NSF funding during their first year of operation.

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

The NTID Center on Access Technology (CAT) 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 (CERP) 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 (DSL) 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 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 (RC*f*TL)

Rather than follow the traditional model of one director and several co-directors, three faculty (Susan Foster, Sara Schley, Chris Kurz '95) 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 RC*f*TL 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.

During AY 2012-13 and 2013-14, the RC*f*TL put out a call for small, early-stage proposals to study educational access and success for deaf and hard-of-hearing students. Projects ranged from $3,000 to $10,000 based on scope and resources required. Through a competitive review process, nine research teams received RCfTL mini-grants (four during 2012-2013, five during 2013-2014). All projects included NTID faculty, often working in partnership with faculty from other colleges of RIT (CLA, KGCOE, COS). Four of these projects resulted in the submission of proposals for external funding thus far, and proposals by two other funded teams should be completed by August 2015. Three of the four proposals submitted were not funded; they will be revised and resubmitted based on reviewer feedback. The fourth proposal was funded for $396,986 and will run from September 2014 through August 2017:

- RCfTL co-director Susan Foster collaborated with RCfTL mini-grant recipient Carol Marchetti (COS) to submit a proposal to NSF's IUSE program (grant #1432566, $399,986, Sept. 2014-August 2017). Submitted February 2014. PI C. Marchetti, Co-PIs S. Foster, J. Jackson, & K. Mousley. Title: *Communication, Access, and Persistence among Deaf and Hard of Hearing Students in Foundational Statistics Courses.*

In AY 2014-2015, RC*f*TL staff/faculty focused efforts on supporting the NTID President and Office of the Associate Dean for Research, Scholarship Portfolio Development Initiative (SPDI) submissions. Co-directors were involved in writing and submitting five proposals, three of which were selected for funding:

- Stinson, Mike (PI), Beiter, K. (Co-PI), Foster, S. (RCfTL mentor), Kushalnagar, P., Kushalnagar, R., Pelz, J. *Accessible Technology to Support Visual Attention, Retention, and Procedural Learning.*

- Atkins, S. (PI), Foster, S., (RCfTL mentor) *Examination of Social Networks of Deaf Entrepreneurs: A Pilot Study.*

- Schlehofer, D. (PI), Foster, S. (RCfTL mentor), Blizzard, D. (Co-PI); Cuculick, J. (Co-I); Kushalnagar, P.; Barnett, S. MD (Consultant). *Health Literacy of Deaf and Hearing Female Students at RIT: A Mixed Method Approach.*

Research (continued)

Each of the projects met the center goals (as well as SPDI goals) as follows:

- Two of the three projects formed collaborative teams between NTID and other RIT colleges, including the College of Imaging Science, and the College of Liberal Arts, with substantial and substantive input from NTID faculty. The remaining three teams are made up of junior and senior NTID faculty working cooperatively.

- All teams include one or more deaf and hard-of-hearing NTID faculty in active roles such as PIs.

- 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.

Center co-directors collaborated on writing and submitting two RIT internal Provost's Learning Innovation Grant proposals. Neither was funded; however, the projects are being revised and submitted to external grant agencies.

During the last year, project teams (including students) have presented on their projects both within and outside of RIT/NTID. Examples of venues include poster sessions at the RIT/NTID Research Fest, National Council of Teachers of Mathematics Annual Conference and Exposition, Eastern Sociological Society 2014, Assessment Network of New York 2014 Conference and the Effective Access Technology Conference.

Additional current RC*f*TL projects include seed-funded projects that were carried over from last year and are still continuing:
- *Increasing Access to Complex Concepts for Deaf and Hard-of-Hearing Students* – Carol Marchetti (COS), Jane Jackson (NTID) and Penny Arndt (NTID)

- *Investigation of Strategies to Improve the Success of Deaf and Hard-of-Hearing Students Transitioning into Baccalaureate Studies in STEM Disciplines* - Matt Lynn (NTID), Sandra Connelly (COS), Annemarie Ross '05 (NTID), Denise Lengyel (NTID), Karen Tobin '00 (NTID).

A new activity for the RCfTL this year was providing consulting services for schools for the deaf and for a grant project. Sara Schley gave an in-service workshop at the Western Pennsylvania School for the Deaf on action research and data-driven assessment. Schley and Susan Foster completed an observational study of classroom teachers' needs at this school, feeding in to the school's planning for teacher support. Schley also completed a detailed analysis and report on students' assessment scores – state school assessment scores in English, Math and Science; and high school graduation requirement end-of-course assessments in Algebra, Literature and Biology. Chris Kurz '95 gave an in-service workshop for elementary teachers from two campuses at the Maryland School for the Deaf. The school principal and Kurz now are discussing possible classroom research related to use of an app to teach STEM concepts to deaf and hard-of-hearing students. Foster and Schley are working with Lea Michel (RIT, Department of Chemistry) on conducting evaluations about student experiences in a science research lab, a project funded by the Dreyfus Foundation.

- Schley, S. (2014, Jan. 20) *Assessment Sharing, Coordination of RIT: RCfTL, RIT/NTID, PLC Formative Assessment Progress and Literacy Toolkit Information*. In-service workshop to teachers at the Western Pennsylvania School for the Deaf.

- Kurz, C. & Lane-Outlaw, S. (2014, Sept. 26). *iPAD and Montessori: A New STEM Fusion to Introduce and Reinforce STEM Language and Concepts in PreK-5 Education*. All-day workshop to in-service teachers at Maryland School for the Deaf.

Research (continued)

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

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.

Since September 1, 2013, the REACH Center has been awarded two research grants from the National Science Foundation (NSF) for a combined total of $834,706. Since its inception in January 2012, the REACH Center has submitted five grant proposals (these included one revision, three new grant proposals and one preliminary proposal). Two of the five proposals were awarded funding for a success rate of 40 percent.

- o NSF Grant BCS-1251342 ($300,502), September 2013 to February 2017. *Deaf Learners' Acquisition of English Verbs and their Component Properties.* PI Gerald P. Berent, Co-PIs R. Kelly, J. Albertini, K. Schmitz, S. Van Horn.

- o NSF Grant DRL-1420063 ($534,204), September 2014 to August 2017. *Stereotype Threat Effects on Deaf and Hard-of-Hearing Students.* PI Ronald R. Kelly, Co-PIs G. Berent, P. Hauser, and J. Jamison (University of Rochester)

- Grant writing activities:
  - o January 10, 2014 grant proposal submitted to NSF REAL (DRL-1420063). *Stereotype Threat Effects and Deaf and Hard-of-Hearing College Students' Academic Performance.* R. Kelly PI and Director, Co-PIs J. Jamison (U of R), P. Hauser, & G. Berent. Requested for 36-month research project. Amount requested: $344,057. Negotiated amount approved/awarded = $534,204 Status: Awarded Funding effective September 1, 2014 to August 31, 2017

  - o April 14, 2014 i3 pre-application development grant proposal submitted to U.S. Department of Education. (Proposal #Berent_I3_preproposal_2014. OMB Control 1894-0008). *English Improvement for Successful Academic Achievement in Mathematical Word Problem Solving by Deaf and Hearing English Learners in Grades 6-12.* Gerald P. Berent. Principal Investigator and Director, Ronald R. Kelly, Co-Principal Investigator. Project team TBA if approved to submit full proposal. Requested for 60-month research project. Preliminary amount requested: $2,246,884. Cost sharing $388,994 (total = $2,635,878) Status: Not invited to submit full proposal.

- Conducting current research project supported/funded with NSF grant:
  - o September 2013 to February 2017 National Science Foundation Grant BCS-1251342 ($300,502), *Deaf Learners' Acquisition of English Verbs and Their Component Properties.* PI/Project Director G. Berent. Co-PIs R. Kelly, J. Albertini, K. Schmitz, and S. Van Horn (RIT Student Affairs)

- Provided two co-op experiences for deaf graduate student M. Caroline Denton (Fall Semester 2013 and Spring Semester 2014).

- Provided professional development on conducting research:
  - o Intersession January 9, 2014. Title: *Improve Your Promotion Prospects by Developing a Personal Scholarship Agenda.*
  - o Fifteen faculty participated

- Provided consultation/advice on research design, statistical analysis and publication to:
  - o Eight NTID faculty
  - o Two external faculty from other universities

Research (continued)

- Dissemination:
  - Kelly, R. R., Quagliata, A. B., DeMartino, R., & Perotti, V. (2014). *The Influence of Self-Efficacy on the Career Outcomes of Deaf College Graduates and Their Hearing Peers.* Manuscript under revision in response to reviewer comments.

  - Kelly, R. R., Quagliata, A. B., DeMartino, R., & Perotti, V. (2015, July). *Deaf Workers: Educated and Employed, But Limited in Career Growth.* Paper to be presented at the 22nd International Congress on the Education of the Deaf in Athens, Greece.

  - Kelly, R. R., & Quagliata, A. B. (2013, April). *Deaf College Graduates' Career Outcomes: Is There a Glass Ceiling for Advancement into Management?* Paper to be presented to the Special Interest Group for Research on the Education of Deaf Persons at the AERA Annual Meeting 2013, San Francisco, CA.

  - Berent, G. P. (2013, November). *Deaf Learners' Acquisition of English Verbs and Their Component Properties.* Overview presentation of National Science Foundation Grant BCS-1251342, RIT Brick City Weekend and NTID 45th Anniversary Reunion Rosica Hall Open House, National Technical Institute for the Deaf, Rochester Institute of Technology, Rochester, NY.

  - Berent, G. P. (2014, March). *The Centrality of Verb Knowledge in Language Acquisition: Implications for Deaf Students' English Education.* Guest presentation in Language Acquisition and Learning course, Master of Science in Secondary Education of Deaf and Hard-of-Hearing Students program, National Technical Institute for the Deaf, Rochester Institute of Technology, Rochester, NY.

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. Research was completed and reports sent to various audiences.

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 2014 to conduct research and assessment on innovative uses of technology. Projects include:

Research (continued)

- 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 lightweight, 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.

- Various notification devices. Currently have several under development.

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 fourth year of funding during FY 2014. 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 2014 including an AAA-rated accessible website according to the WEC Web Content Accessibility Guidelines (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. Presently halfway through the project.

Analyzing the Use of C-Print® Mobile Technology in STEM Lab Settings across Multiple Postsecondary Sites: Year Four. 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.

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). 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.

Research (continued)

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 20 invited presentations during the academic year and collaborating with colleagues at more than 36 schools and universities in the U.S. and abroad on deaf education through research collaborations, joint publications and grant proposals, and the editing of three relevant books (all published by Oxford University Press). 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 600 requests for information and/or assistance, and the www.educatingdeafchildren.org website had over 114,000 hits (compared to 71,000 last year). Over this past academic year, CERP members have published (or have in press) four peer-reviewed journal articles (two more are under review) and five peer-reviewed book chapters. Two books were published, three are in press, two book translations were published, and three more books are being prepared under contract.

This year, CERP continued work on 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 also 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 $8,000 grant from the Daisy Marquis Jones Foundation to support the collaboration with Oxford University Press created last year: "Raising and Educating Deaf Children: Foundations for Policy, Practice, and Outcomes." On a quarterly basis, the project disseminates free e-bulletins focusing on deaf education to legislative, business, medical, educational and research communities. In addition to dissemination through Oxford University Press international outlets, the project website provides broad-based information for decision-making with regard to deaf education. The site went live at www.raisingandeducatingdeafchildren.org in mid-January 2014, and has received almost 15,000 hits.

Two additional grant proposals were written to fund a Montessori preschool for deaf children focusing on mathematics in collaboration with the Department of Communication Science and Disorders at Texas Christian University; neither was funded. A research proposal with colleagues at the University of Edinburgh to support research into working memory among deaf students is under review at the Economic and Social Research Council in the United Kingdom. A $4.45 million grant proposal to the National Science Foundation for an interdisciplinary, international research project is in preparation.

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 disseminates free e-bulletins (and related publications normally requiring a fee) 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 language and cognitive foundations of learning by deaf and hard-of-hearing students with and without cochlear implants. The grant from NIDCD is providing insights 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."

Research (continued)

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

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)

- Prepared and submitted a research proposal to the Association for Institutional Research: *On Parity? An Analysis of the Impact of Deafness on Career Success*. ($20,839)

- Prepared an eBulletin for *Raising and Educating Deaf Children: Foundations for Policy, Practice, and Outcomes*, on the topic of educational attainment and field of study with respect to the deaf and hard of hearing as compared to the non-disabled.

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.

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 on special filters and run through a detailed extraction procedure before being analyzed by gas chromatography-mass spectrometry (GC-MS). We are most interested in studying the nicotine delivery to the body from electronic cigarettes and the consequential behavioral/ addiction patterns associated with their use. This initiative was launched from our prior American Cancer Society grant on tobacco cigarettes and we already have submitted an NIH R01 proposal to continue this work. Our first manuscript on this data has also been submitted for publication and a student will present this project at the upcoming national meeting of the ACS in Denver, Colo. (March, 2015).

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. Through instrument donations, we have vastly extended the number of analytes that we are able to analyze in this study. As well, we have investigated a new method of protein quantitation in fruits. Students presented this project at the conference of the Rochester Academy of Science (November, 2014).

LST Undergraduate Research: Antioxidant Capacity of Teas and Wines

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 and wine 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 and wine studies, and can even work toward predicting the geographic origin of the tea leaves and grapes. Several students presented this work at the National Meeting of the American Chemical Society in San Francisco, Calif. (August, 2014).

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 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.

Cochlear Implant Support

The number of students at RIT/NTID with cochlear implants has grown exponentially, from 29 students in 1999 to 394 in the fall of 2014. 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 computer stations equipped with innovative aural educational software programs and telecommunications equipment that students use to improve their spoken English Language recognition. In addition our latest hires in Audiology have been trained to map cochlear implants, increasing our capacity for providing this support service.

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;
- Three wall-mounted HD video cameras (instructor and audience) streaming live videos and a fourth supplementary SD video camera to capture front-of-classroom activities such as student presentations or sign language interpreters;
- Multi-type wireless microphones to capture audio from instructors, students, interpreters and visitors;
- Videoconferencing systems (Polycom HDX9004, and software based);

- Two short-throw interactive wall-mounted projectors with computer-based display, featuring network capabilities, supporting real-time interactions among remote and onsite learners; and
- One ceiling-mounted projector.

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.

Innovative Teacher Education

The microteaching component of all methods courses 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. 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 actors model behavior that the teacher-candidates likely will face in a middle or 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 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 100-hour practicum requirement. This provides the opportunity to allow the free flow of ideas and strategies between the seasoned teachers and our teacher-candidates.

The MSSE program is involved in a project with Nazareth College in providing MSSE teacher-candidates and speech-language pathology majors opportunities for interaction and collaboration in working with students who are deaf or hard of hearing in a variety of educational programs. The course instructors from both colleges developed a curriculum with the goal to increase awareness of the roles and responsibilities of the teachers of deaf/hard-of-hearing students and the speech-language pathologists and to discuss strategies for collaboration across the disciplines in services for the deaf and hard-of-hearing students.

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. (Access Services provided more than 21,000 hours of real-time captioning in classes this academic year.) The service provides captionists who 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. NTID operates the largest sign language interpreting, notetaking and speech-to-text service organization in the world, including 120 sign language interpreters, more than 400 student notetakers each semester 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 fourth year during FY 2014. 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. 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 39th season in AY 2013-2014, NTID Performing Arts presented four main stage productions and special events that involved more than 406 deaf, hard-of-hearing and hearing students, faculty/staff and members of the Rochester community as actors, dancers, theater technicians and front-of-house staff (box office and ushers). These performances were attended by more than 4,300 people from throughout New York State as well as schools and community groups from neighboring states. On-campus performances this year were a tribute to one of NTID's founding faculty and theater's namesake, Robert F. Panara, an inspiration and role model for many years.

This season included Mr. Panara's loves of Shakespeare, baseball, and poetry: *The Taming of The Shrew*, *Damn Yankees*, and a dance performance *…and melodies unheard* to the words of Panara's own poetry. NTID Performing Arts also worked with the College of Liberal Arts for their performance of *The Marriage of Bette and Boo*.

Special events in the Panara Theatre this year consisted of an evening with Peter Cook and Kenny Lerner in celebration of Peter's 30 years of poetry performances. Peter is an alumnus of NTID. Additional performances included a special project by student Nic Shaw, titled *Step On A Crack*, and a performance of *An Evening of One Acts*, by members of the RIT Players in the NTID Black Box Theatre Lab. Other special events included the NTID 45th reunion fundraiser to erect a plaque on the RIT baseball field in honor of "Dummy" Hoy, the first Deaf baseball player. Tony Mendez, the CIA officer, gave an inspirational talk on his rescue of the American diplomats during the Iran hostage crisis, which was the inspiration for the film *Argo*. The department put on a holiday show for the faculty and staff in December. We also supported the Spectrum group for their ColorFest weekend; worked with Student Life on the presentation by author Kambri Crews; and supported both the RIT Brick City Singers and 8 Beat Measure for their a cappella performances.

During AY 2013-2014, 506 students registered for and attended Performing Arts classes. Nine students were awarded performing arts scholarships and while one student was awarded a performing arts certificate this past year, there are many students well on their way to earning a certificate. In total, approximately 5,945 people were served by NTID Performing Arts activities during the 2013-2014 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 website, 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: https://www.ntid.rit.edu/educational-materials/?controller=product&product_id=34.

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. The NTID Librarian also teaches Deaf Studies classes.

Imagine RIT: Innovation and Creativity Festival

Innovation and creativity were center stage on the RIT campus on May 3, 2014, when the university held its seventh-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 3, 2014, 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 26 exhibits across campus.

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

- **Innovative Interactive Shared Screens** – children benefit from rich ASL storytelling, vocabulary words and captivating watercolor illustrations.
- **Programmable Notification Device –** allows deaf and hard-of-hearing people to be notified when a smartphone, instrument or appliance produces sound.
- **Increased Accessibility in the Field of Television** – adjusts captions according to who is watching television.
- **Hanging Out in Google Hangouts** – demonstrates how the Deaf STEM Alliance uses Google Hangouts to interact with and support students in science, technology, engineering and mathematics (STEM) majors.
- **EyeGaze Controlled Captioned Videos** – automatically pause and resume video with eye movement.
- **Tactile Captions: Augmenting Visual Captions** – supplemental online captioned video with tactile captions that enhance auditory information, such as a phone ringing.
- **Captioning to Go** – free, downloadable mobile application for C-Print® Mobile.
- **STEM Signs Dictionary Project** – development of standardized version of technical and scientific concepts used in STEM programs and workplaces. Will become a national online resource.
- **Deaf Scientists Today** – educated the public about deaf scientists who are conducting cutting-edge research.
- **Vibe Aid** – a vest that vibrates from a 360-degree surrounding soundwave.

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.

Members of the public use NTID's See-Through Interactive Board 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 and Android application)*
  Order online through the Apple Store at https://itunes.apple.com/us/app/id510152499 or through Google Play at
  https://play.google.com/store/apps/details?id=digmob.rit.edu.asldictionaryfromntid&hl=en

- 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

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

- *The HeART of Deaf Culture* (online subscription)
  Distributed through NTID Communications, Marketing and Multimedia Services

Megan Burgess, an MSSE student from Pembroke, Bermuda, portrays RIT alumnus and artist Chuck Baird, at a banquet honoring the birthday of Abbé de l'Épée and the 25th anniversary of Deaf View/Image Art (De'VIA), art focused on the Deaf experience. The banquet was an homage to a tradition started by Deaf leaders in 19th-century France, and was conducted in ASL and French Sign Language. It was held concurrently with NTID's exhibition VIVA De'VIA! as part of a weekend filled with presentations and panel discussions with De'VIA artists.

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.

At Explore Your Future, 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, students assemble a remote-controlled car as part of engineering career-exploration classes.

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.

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 2014, NTID faculty and staff conducted seven outreach programs: the SpiRIT Writing Contest for students in grades 10–12; Explore Your Future, a summer program for students in grade 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®; and the Digital Arts, Film and Animation Competition for students in grades 9–12.

- Explore Your Future (EYF), a week-long career exploration and evaluation program for deaf and hard-of-hearing students about to enter their 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 5,684 students have participated in EYF over the past 29 years. Thirty-one percent of the summer 2013 participants subsequently enrolled at NTID. One session was offered in summer 2014. This year's participants came from 27 states, with one student coming from Ontario, Canada.

Other Outreach Activities

- 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 2014, SLPI training and services included:

  - A week of consulting and training at Hogeschool Utrecht, Utrecht, Netherlands
  - A four-day SLPI training workshop at the Minnesota School for the Deaf
  - Two two-day SLPI refresher training workshops at the Florida School for the Deaf and the Blind
  - Two days of SLPI evaluating and consulting at William Carey College, Hattiesburg, Mississippi

  The SLPI website (www.rit.edu/ntid/slpi/) 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.

Outreach Highlights (continued)

- 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 2013 through September 2014, there were approximately 2,465 email dialogues and 328 phone call discussions with C-Print Product Development. The C-Print website (www.rit.edu/ntid/cprint/) received 8,601 visits from October 2013 to September 2014. 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 119, for software totaled 52, and for software updates totaled 588 from October 2013 through September 2014. In addition, the C-Print Mobile client became available for download from iTunes and Google Play.

- 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/.

- For its 39th season in AY 2013-2014, NTID Performing Arts presented four main stage productions and special events that involved more than 406 deaf, hard-of-hearing and hearing students, faculty/staff and members of the Rochester community as actors, dancers, theater technicians and front-of-house staff (box office and ushers). These performances were attended by more than 4,300 people from throughout New York State as well as schools and community groups from neighboring states. On-campus performances this year were a tribute to one of NTID's founding faculty and theater's namesake, Robert F. Panara, an inspiration and role model for many years.

  This season included Mr. Panara's loves of Shakespeare, baseball, and poetry: *The Taming of The Shrew*, *Damn Yankees*, and a dance performance *…and melodies unheard* to the words of Panara's own poetry. NTID Performing Arts also worked with the College of Liberal Arts for their performance of *The Marriage of Bette and Boo*.

  Special events in the Panara Theatre this year consisted of an evening with Peter Cook and Kenny Lerner in celebration of Peter's 30 years of poetry performances. Peter is an alumnus of NTID. Additional performances included a special project by student Nic Shaw, titled *Step On A Crack*, and a performance of *An Evening of One Acts*, by members of the RIT Players in the NTID Black Box Theatre Lab. Other special events included the NTID 45th reunion fundraiser to erect a plaque on the RIT baseball field in honor of "Dummy" Hoy, the first Deaf baseball player. Tony Mendez, the CIA officer, gave an inspirational talk on his rescue of the American diplomats during the Iran hostage crisis, which was the inspiration for the film *Argo*. The department put on a holiday show for the faculty and staff in December. We also supported the Spectrum group for their ColorFest weekend; worked with Student Life on the presentation by author Kambri Crews; and supported both the RIT Brick City Singers and 8 Beat Measure for their a cappella performances.

  During AY 2013-2014, 506 students registered for and attended Performing Arts classes. Nine students were awarded performing arts scholarships and while one student was awarded a performing arts certificate this past year, there are many students well on their way to earning a certificate. In total, approximately 5,945 people were served by NTID Performing Arts activities during the 2013-2014 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 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 2014, RIT/NTID welcomed more than 350 middle school and high school students and their parents from all over the country to seven pre-college outreach efforts—three 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 2014 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 46 entries to the 2014 Digital Arts, Film and Animation Competition in four different categories: Web page design, graphic media, photo illustration and film. Three winners were selected and 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 2014, 79 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.

SpiRIT Writing Contest

RIT's ninth annual SpiRIT Writing Contest for deaf and hard-of-hearing students attracted 91 10th–12th-grade students from around the United States in July 2014. 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

Twelve 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 July 2014. 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.

Pre-College Outreach (continued)

TechGirlz and TechBoyz Camps

Seventeen deaf and hard-of-hearing girls and 17 deaf and hard-of-hearing boys in grades 7–9 attended TechGirlz/TechBoyz in 2014 to explore their interests in science, technology, engineering and mathematics. This is the ninth year for TechGirlz and the fourth year for TechBoyz. The week-long summer camps held in July 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.

Pre-College Outreach AY 2013-2014	Total Participants	Minorities	
		Number	Percent
Explore Your Future	100	32	32%
SpiRIT Writing Contest	91	26	29%
Digital Arts, Film and Animation	46	19	41%
Math Competition	79	19	24%
Steps to Success	12	12	100%
TechGirlz/TechBoyz Camp	34	15	44%

Middle school students from across the country hunch over their worksheets as they participate in RIT/NTID's national Math Competition in April 2014. Cash prizes were given to the top three teams and individual winners.

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 5,684 students have participated in EYF over the past 30 years. Thirty-one percent of the summer 2013 participants subsequently enrolled at NTID. One session was offered in summer 2014. This year's participants came from 27 states and Canada.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Number of Participants	217	228	191	192	100
Percentage of Minorities	33%	29%	30%*	34%	32%
Percentage Enrolling at NTID	59%	47%	53%	31%	N/A**

Laboratory Technician Lori Poole leads EYF participants in an oscillating reaction where four different clear solutions are mixed in exact equilibrium and produce and repeat three different color changes for 20 seconds.

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* Twenty percent of students enrolled in EYF 2012 did not indicate their ethnicity on the registration form.
** Students from EYF 2014 currently are in the process of applying to NTID.

Explore Your Future – Enrollment by Location

Summer 2014 EYF students represented 27 states.

Home State or Country	Number in EYF Summer 2014
Arizona	2
California	17
Colorado	4
Florida	2
Illinois	6
Indiana	2
Iowa	1
Kansas	3
Kentucky	1
Maine	1
Maryland	8
Massachusetts	5
Michigan	2
Minnesota	3
Missouri	4
New Jersey	6
New York	9
North Carolina	2
Ohio	3
Pennsylvania	7
Rhode Island	4
South Carolina	1
Tennessee	1
Texas	1
Vermont	1
Virginia	2
Wisconsin	1
Ontario, Canada	1
Total	**100**

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, a comprehensive clearinghouse of online resources, and a national dual credit program, DeafTEC provides deaf and hard-of-hearing students, 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.

Regional Partnership Model: The goal of the DeafTEC partnership model is to build a mutually supportive professional community in selected regions of the country that will improve access to technological education and employment for deaf and hard-of-hearing students. DeafTEC established this train-the-trainer partnership model by selecting one high school, one community college and one or more employers within California, Florida and Texas, the three states that have the largest deaf and hard-of-hearing populations. 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
> Lockheed Martin, Orlando

Texas
> Texas School for the Deaf, Austin
> Austin Community College, Austin
> The Dow Chemical Company, Seadrift
> Lockheed Martin, Dallas

The DeafTEC partnership model involves personnel from each regional partner attending train-the-trainer professional development activities that prepares them to teach the four DeafTEC workshops described below. The trainers then offer these workshops to high school teachers, college faculty and employers within their regions:

1. *Working Together: Deaf and Hearing People* workshop is designed to help employers develop the sensitivity and skills to successfully integrate deaf employees into the workplace.
2. *Project Access* workshop sensitizes teachers in mainstreamed settings to the challenges faced by deaf and hard-of-hearing students and shares Universal Design for instruction strategies and best practices for instruction that will benefit all students in the classroom.
3. *Promoting Student Success in Math through Best Practices* workshop provides high school and college math instructors with a toolbox of effective strategies for teaching math to deaf and hard-of-hearing students.
4. *Writing in the Disciplines* workshop assists STEM instructors in bringing a *Writing in the Disciplines* (WID) approach to their STEM classes to provide students with writing practice to both improve their writing and enhance their learning in the discipline.

Train-the-Trainer Professional Development. Six train-the-trainer professional development activities were offered this year to 70 participants from our high school, community college, and industry partners:

two at RIT/NTID, one at the California School for the Deaf, Riverside, and three at Lockheed Martin locations. Of these 70 participants, 20 were trained to offer more than one workshop.

- Four *Train-the-Trainer Working Together* workshops were offered to 41 participants
- Two *Train-the-Trainer Project Access* workshops were offered to 29 participants

To date, DeafTEC has offered a total of 10 train-the-trainer sessions to 129 participants. Of the 129 participants, 61 were trained to offer more than one workshop.

Partner-Led Professional Development. DeafTEC partners offered a total of 28 workshops to 398 participants.

- Eight *Project Access* workshops were offered by our educational partners to 104 participants from high schools and community colleges
- Nine *Writing in the Disciplines* workshops were offered. Seven offered by our educational partners and one workshop offered by RIT/NTID to 133 participants from high schools and community colleges
- Four *Promoting Student Success in Math Through Best Practices* workshops were offered by our educational partners to 65 participants from high schools and community colleges
- Seven *Working Together* workshops were offered by our industry partners to 96 employees

To date, our partners have offered 46 workshops to 767 participants.

Other partner activities:

- **STEM Careers Summer Camps.** This past year, STEM summer camps for deaf and hard-of-hearing students were held at Florida School for the Deaf and the Blind (FSDB) and at Texas School for the Deaf (TSD). A total of 26 students ages 13-17 participated in the camps. The TSD camp focused on neuroscience, forensic science and marine science. The FSDB camp explored various STEM occupations, including computer technology, engineering and surveying and mathematical, physical and life sciences.
- **Shadow Day and Internships at Solar Turbines**. As a result of their involvement in *DeafTEC*, one of our industry partners, Solar Turbines, began two new initiatives for deaf and hard-of-hearing students:
  - The company hired a deaf and hard-of-hearing machinist intern for the first time this past summer from RIT/NTID's Computer Integrated Machining Technology associate degree program.
  - Three deaf and hard-of-hearing bachelor's degree engineering students from RIT attended a "Shadow Day" at Solar Turbines in San Diego supported by *DeafTEC*. This was the first time Solar Turbines invited students outside of San Diego to this event.
- **Two new initiatives at Cisco Systems:** Through *DeafTEC*'s partnership with Cisco Systems, Ohlone College was able to certify a deaf instructor to teach Cisco Academy courses for deaf and hard-of-hearing students at the college, as well as a pilot program to develop training and internship opportunities for deaf and hard-of-hearing students at Cisco so they can become industry certified.

Website Development. The DeafTEC website (www.deaftec.org/) serves as a national resource on technical educational and technician careers for deaf and hard-of-hearing students, their parents, teachers and future employers. The website contains sections related to the following resources:

- STEM Career Awareness: Materials related to Information Technology, Engineering/Manufacturing and Lab Science careers have been added to the website along with five videos of deaf professionals talking about how they prepared for these careers and how they succeeded on the job. The video highlighting Ryan Shields, an RIT alumnus now working at Tiffany & Co as a CNC Operator, won a national Telly Award. This is the second Telly Award this STEM Career Awareness video series has won.

- 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 Resources: This section contains more than 60 math instructional videos on algebra concepts that provide instruction and practice problems for deaf and hard-of-hearing students as well other materials that provide teachers and tutors of deaf or hard-of-hearing students with instructional avenues and ideas that stress problem solving and student engagement.

- English Resources: This section provides materials to support a Writing in the Disciplines approach to enable teachers in STEM disciplines to successfully add a variety of writing practices to their curricula, and give students constructive feedback on their writing within the context of a STEM classroom.

- Employers Resources: 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.

- A STEM sign language video dictionary being produced with a yearly $20,000 gift from the Dow Chemical Company.

- **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 now is 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 2013-2014, dual credit courses were offered at two new schools and 10 established schools. Three additional schools were recruited to teach dual credit courses beginning in academic year 2014-2015. Current partner schools are:
    - Florida School for the Deaf and the Blind, St. Augustine, Fla.
    - Lexington School for the Deaf, Jackson Heights, Queens, N.Y.
    - Vines High School, Plano, Texas
    - Plano Senior High School, Plano, Texas
    - Rochester School for the Deaf, Rochester, N.Y.
    - University High School, Irvine, Calif.
    - Eastern North Carolina School for the Deaf, Wilson, N.C.
    - Learning Center for the Deaf, Framingham, Mass.
    - Maryland School for the Deaf, Frederick, Md.
    - Texas School for the Deaf, Austin, Texas
    - WT Woodson High School, Fairfax, Va.
    - Mill Neck Manor School for the Deaf, Mill Neck, N.Y.
    - Murry Bergtraum High School, New York, N.Y.
    - California School for the Deaf, Fremont, Calif.
    - California School for the Deaf, Riverside, Calif.
    - Cypress Ridge High School, Houston, Texas
    - William Boone High School, Orlando, Fla.
    - Indiana School for the Deaf, Indianapolis, Ind.
    - Western Pennsylvania School for the Deaf, Pittsburgh, Pa.
    - Alabama School for the Deaf and Blind, Talladega, Ala.
    - Hindsdale South High School, Hindsdale, Ill.
    - Martlon School for the Deaf, Los Angeles, Calif.

DeafTEC (continued)

- **Dual-credit courses** For the 2013-2014 academic year, we added two new dual credit courses offered by the Science and Mathematics Department, *Processes of Science: Environmental Studies* and *Processes of Science: Forensics.* The following courses have been developed for high schools to teach, and earn their students RIT/NTID college credit:

  - *Applications Software:* An introduction to word processing, spreadsheet, presentation and database applications
  - *Web Development I:* An introduction to Web page development, including XHTML and Web graphics
  - *Page Layout I:* An introduction to page layout applications to produce pages and documents to given specifications
  - *Raster/Vector Graphics:* Introduces the skills needed for the successful production and manipulation of raster and vector images using image creation and production software
  - *PC Hardware I:* An introduction to the fundamental hardware concepts of personal computer (PC) systems, including their structure and components
  - *Blueprint Reading:* An introduction to the skills necessary to read and interpret fundamental engineering drawings of details, subassemblies and assemblies
  - *Engineering Graphics:* Introduces basic skills needed to create professional 2D drawings using AutoCAD software for mechanical, architectural and civil drawings
  - *Processes of Science: Environmental Studies:* An introduction to science processes using the content of environmental studies as a vehicle to establish an appreciation of the scientific method, critical thinking and problem solving
  - *Processes of Science: Forensics:* An introduction to science processes using the content of forensic studies as a vehicle to establish an appreciation of the scientific method, critical thinking and problem solving

- **Courses taught and credit earned** During 2013-2014,18 courses were taught at our partner high schools, and 15 additional courses began being taught for the 2014-2015 academic year. The following is the record of the total number of Project Fast Forward dual credit courses taught and students served through Project Fast Forward.

  - 90 dual credit course sections were taught by 29 teachers in their high schools
  - 498 registrations were recorded in Project Fast Forward courses
  - 402 unique deaf and hard-of-hearing students participated in the program
  - 75 of the 402 deaf and hard-of-hearing students took more than one course
  - 70% (345/498) of high school students taking the dual credit courses passed
  - 1,044 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 2014, training was offered to eight new Project Fast Forward high school teachers, three established teachers teaching new courses and two new guidance counselors. Over six summers, 2007-2014, the following teachers and counselors have participated in summer professional development:

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

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 417 employer representatives received training through the NTID Center on Employment (NCE) in AY 2013-2014.

Employer Training and Educational Programs

NTID's Center on Employment conducted, delivered and presented 25 programs for 417 human resources professionals and company representatives.

NTID Job Fair

The 13th annual NTID Job Fair was held in October 2013 with 22 employers attending and more than 300 students and alumni participating. During this fair, five 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

Twelve NTID faculty and staff visited 35 students on cooperative education assignments and their supervisors in 10 states.

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

- Accommodated 20 employers in recruitment visits and 14 on-campus orientations; there were 22 résumé packages requested
- Consulted with 126 alumni and other deaf and hard-of-hearing adults seeking job search assistance
- Completed the final year of the BNY Mellon grant-supported Pittsburgh trip which included bringing nine students from various majors and degree levels to visit Highmark in November 2013 and 13 students from computing, business and packaging science programs to visit Heinz in April 2014.

NCE Marketing Highlights

- Exhibited at the United States Business Leadership Network Conference in October 2013 in Los Angeles, Calif.
- Presented *Disability Hiring: A Recruiting Resource* at the National Industrial Liaison Group in August 2014 in Washington, D.C.
- Presented *Making It Happen: Fostering Success in the Workplace for Deaf Employees* through the Job Accommodation Network Webcast in June 2014.
- Appeared on live radio on WXXI Radio's *1370 Connection Education Friday* with Frank Cegelski.
- Posted student/recent graduate success stories on the NCE website at least once a month.
- Reviewed and revised the program marketing pieces, NCE brochure and NCE website (www.ntid.rit.edu/nce/) to ensure content was up to date.

Faculty and Staff

As of fall 2014, 36 percent of NTID's workforce was eligible for retirement.

ASL and Interpreting Education Assistant Professor Dr. Jason Listman '07, '09 gets interpreting students on their feet to sign in unison.

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 2014, NTID employed 521 faculty and staff, down from 530 in fall 2013.

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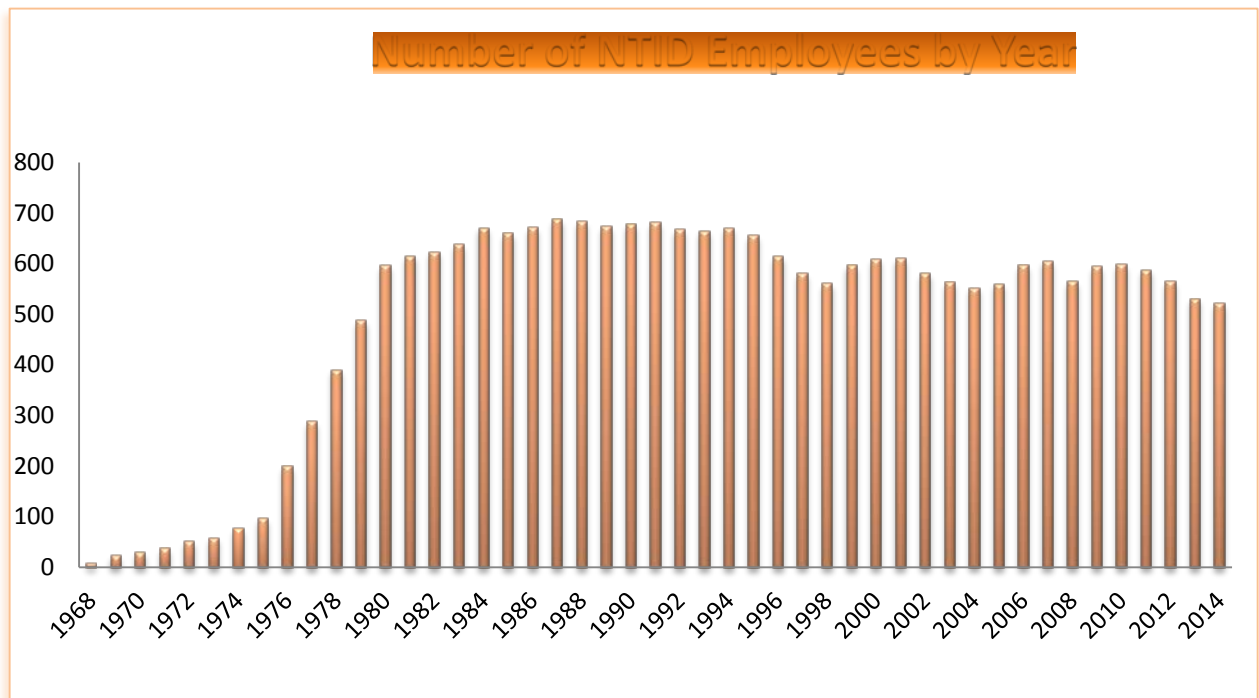
Average Salary: Faculty and Staff

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 2013 – September 2014
Faculty*		
Professor	29	$110,205
Associate Professor	47	$89,644
Assistant Professor	34	$70,600
Principal/Senior Lecturer	13	$64,735
Lecturer	48	$56,677
Subtotal Faculty	**171**	**$78,197**
Staff		
Exempt Staff**	109	$65,043
Non-Exempt Staff***	241	$44,626
Subtotal Staff	**350**	**$50,984**
Total	**521**	**$59,916**

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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.

Faculty and Staff

Tenure-Track Positions and Faculty Rank

In FY 2014, senior-level faculty members
(professor and associate professor) comprised
74 percent of all ranked tenure-track faculty as
compared to 47 percent in FY 1985. Of the
108 tenure-track positions, 91 percent are tenured.
The number of tenure-track positions has
decreased from 244 to 108 over the past 30 years.

| | Number of Tenure-Track Positions* | | | | | FY 2014 Faculty with Tenure | |
Rank	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	Number	Percent
Professor	35	35	34	31	28	28	100%
Associate Professor	55	56	52	49	45	45	100%
Assistant Professor**	53	51	48	37	35	25	71%
Instructor/Lecturer	1	1	4	0	0	0	0%
Total Positions	**144**	**142**	**138**	**117**	**108**	**98**	**91%**

Marguerite Carrillo '12, a lecturer in the ASL and Interpreting Education Department, coordinates the Provost Summer ASL Programs for RIT faculty and staff. She is fluent in both American and Mexican Sign Language.

* 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 2014, 95 percent of full-time, tenure-track faculty members held graduate degrees.

FY 2014 Highest Degree Level Achieved Tenure and Tenure-Track Faculty*		
	Number	Percent
Doctorate	49	45%
Master's	54	50%
Bachelor's	5	5%
Total	**108**	**100%**

Michael Stein, a lecturer in NTID's Liberal Studies Department and an attorney, uses his extensive experience in disability law to tutor and teach courses in Criminal Justice, Politics, Public Policy, Law, Philosophy and Economics. He recently led a group of NTID students to Chile to learn about the deaf community there.

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* 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 16 years of service at NTID. As of October 2014, 36 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%	63.9	33.0	1	6	11	10	1	2
Associate Professor	100%	59.1	28.6	15	10	10	7	5	2
Assistant Professor	100%	51.2	16.9	20	10	2	3	0	3
Principal/Senior Lecturer	100%	51.5	16.0	7	5	0	1	0	0
Lecturer	98%	41.9	6.5	42	5	1	0	0	0
Exempt Staff	97%	47.7	14.7	74	25	4	6	0	2
Technical/Clerical	93%	50.9	14.7	48	18	3	8	0	1
Interpreter	86%	44.8	15.4	88	22	2	1	2	2
Real-Time Captionist	44%	47.2	7.8	34	10	2	2	0	0

Jeanne Behm '81, coordinator of the RIT ASL and Deaf Studies Community Center, leads staff and students in ASL @ Lunch, a weekly opportunity for all RIT students and staff to practice conversing ASL.

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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 2010	FY 2011	FY 2012	FY 2013	FY 2014
Full-Time:					
Faculty	13	6	11	3	11
Exempt Staff	14	13	7	2	3
Non-Exempt Staff*	24	13	7	4	14
Total Full-Time	**51**	**32**	**25**	**9**	**28**
Part-Time:					
Faculty	1	0	0	0	0
Exempt Staff	1	0	1	2	0
Non-Exempt Staff*	6	4	5	10	3
Total Part-Time	**8**	**4**	**6**	**12**	**3**
Total	**59**	**36**	**31**	**21**	**31**

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

Faculty and Staff Terminations

The faculty and staff turnover rate, 9.2 percent, is a decrease from last year. Retirements of current faculty and staff are expected to rise as the employee base ages.

Full-Time/Part-Time	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014 Percent	Number
Faculty	6.9%	6.6%	8.2%	15.1%	8.8%	15
Exempt Staff*	10.0%	9.0%	17.6%	10.6%	9.2%	10
Non-Exempt Staff**	9.8%	9.8%	7.2%	6.9%	9.5%	23
Total	**8.9%**	**8.5%**	**9.7%**	**10.4%**	**9.2%**	**48**

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

RIT/NTID Leadership

Presiding over NTID's Commencement ceremonies were NTID Foundation Board Emeritus Director and RIT Board of Trustee member Rob Rice '94, '97; Acting Assistant Secretary for Special Education and Rehabilitative Services and NTID Commencement keynote speaker Michael Yudin; and NTID President Gerry Buckley '78. Here, they congratulate Luis Pages, an Automation Technology major from Rochester, N.Y.

NTID Administrative Council*

Dr. Gerard J. Buckley '78
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

Steven Morse, CPA '86
Assistant Vice President for
Finance and Budget

Dr. Linda Bryant
Interim Associate Dean for
Student and Academic Services

Dr. Kathryn Schmitz '95
Associate Dean for
Academic Administration

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* The following individual also served on the NTID Administrative Council in FY 2014: Mike Servé '76 – Assistant Vice President for Finance and Budget.

Dr. Rico Peterson
Assistant Dean and Director, NTID Access Services

Marianne Gustafson
Associate Dean for Curriculum and Special Projects

Dr. Pamela Carmichael '04
Executive Director of Communications, Marketing and Multimedia Services

Dr. Denise Kavin
Special Assistant for *Strategic Decisions 2020* Implementation

Alvin Boyd '07
Special Assistant for Diversity and Inclusion

Dr. Gary Long
Interim Associate Dean of Research

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

Joyce Bender
CEO, Bender Consulting Services

Andrew N. Brenneman '86, '88
Senior National Account Executive, Sprint Nextel

Lisa Dallos
Founder, High10Media

Dr. Catherine Hunt
Retired R&D Director, Innovation Sourcing and Sustainable Technologies, DOW Chemical Company

Dr. Christopher Lehfeldt
Associate Dentist

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

Dr. Harold M. Mowl, Jr.
Superintendent/CEO, Rochester School for the Deaf; *Chair*

Leeanne Seaver
Owner, Seaver Creative Services, Inc.

Michael Tecklenburg
Counsel to House Democratic Leader Nancy Pelosi

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

A team of RIT/NTID students known as MotionSavvy received $25,000 and acceptance into Leap Motion's LEAP AXLR8R in San Francisco to help them further develop an application that will translate sign language into English. Buzz about the product has already begun, with articles in The Washington Post*,* Time*, and* Forbes*. Here, students explain the idea to U.S. Senator Chuck Schumer.*

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 Adamany
Chief Executive Officer, Swiss+Tech Products

Vicky Adamany

Gary Behm '81
Associate Professor, Engineering Director of Center on Access Technology Innovation Laboratory, NTID

Dr. Gerard J. Buckley '78
President, NTID; Vice President and Dean, RIT

Arthur Carroll (Emeritus Director)
CEO, Mayflower Management Consulting, LLC

Shraddha Chaplot
Greengineer/Hardware Test Engineer, Cisco 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 & Arbitration Services, Inc.

Sean P. Flanagan
Sr. Customer Business Manager, Bayer Consumer Care

Sue Flanagan
Volunteer Event Coordinator

Eric Gjerdingen '92

Mary Jane Hellyar (Emeritus Director)
Retired Executive Vice President, Film & Photofinishing Systems Group, Eastman Kodak Company

Gordon Hewitt '73, '75
Retired Chief for Strategic Enterprise Initiative Branch, U.S. Dept. of Homeland Security

Andrew Jacobson '90, '96 (Emeritus Director)
Enrolled Agent, Better Tax Service

Edward Latimer, M.D.
Psychiatrist

Gretchen Logue

Ken Logue
National Sales Manager, Valeron Strength Films, ITW Company

Steven Morse, CPA '86 (Emeritus Director)
Assistant Vice President, NTID Finance and Budget

Anthony Napoli '01
Case Manager, Environmental Protection Agency

Jane Ratcliffe Pulver (Emeritus Director)
Emeritus RIT Trustee

Robert Rice '94, '97 (Emeritus Director)
President/Managing Partner, BayFirst Solutions, LLC
Co-Chair

James Stefano
President, Synergy Global Solutions, Inc.

Ricky Thomas
President, Maguire & Moore Capital Advisors, Inc.

Christopher D. Wagner '94
Senior Vice President of Operations, ZVRS, LLC
Chair

Cynthia F. Walker (Emeritus Director)

George D. Webb
Retired Senior VP of Operations, Great West Life Insurance Company

Diane Weihs

Gary Weihs
CEO/General Manager, Weihs Group

Sandra Weintraub

Steven J. Weintraub, M.D.
Medical Director, Department of Anesthesia, North Shore LIJ

RIT Officers

Dr. William W. Destler
President

Karen Barrows
Secretary to the Institute and Chief of Staff

Dr. Gerard J. Buckley '78
President, NTID; Vice President and Dean, RIT

Dr. Lisa Cauda
Vice President, Development and Alumni Relations

Dr. Jeremy Haefner
Provost and Senior Vice President for Academic Affairs

Dr. Sandra Johnson
Senior Vice President, Student 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. Daniel 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 (continued)

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MBA '85; President and Publisher, *Rochester Business Journal*

Jay T. Holmes
Retired Executive Vice President and Chief Administrative Officer, Bausch & Lomb, Inc.

Thomas F. Judson, Jr.
Chairman and Chief Executive Officer, The Pike Company

Richard A. Kaplan
Chief Executive Officer, Torvec Inc.

Joyce B. Klemmer
BS '78; Partner, Smith, Gambrell and Russell LLP

Austin W. McChord
BS '09; Founder and CEO, Datto, Inc.

Essie L. Calhoun McDavid
Retired Chief Diversity Officer and Director, Community Affairs Vice President, Eastman Kodak Company; also serves as NTID National Advisory Group Representative

Roosevelt Mercer, Jr.
Vice President, Government, Commercial & International Intitiatives, Exelis Inc.

Robert D. Moore, Jr.
BS '91; Chief Executive Officer, EagleDream Technologies

Harold M. Mowl, Jr.
Superintendent and Chief Executive Officer, Rochester School for the Deaf; also serves as NTID National Advisory Group Representative

Henry D. Navas
MBA '74; MS '77; Retired, Cisco Systems

Brian P. O'Shaughnessy, Esq.
BS '81, MS '84; Attorney at Law, RatnerPrestia

Sandra A. Parker
Chief Executive Officer, Rochester Business Alliance, Inc.

Wolfgang Pfizenmaier
Retired Member of the Management Board, Heidelberger Druckmaschinen AG

Gerard Q. Pierce
MBA '77; Senior Vice President for Human Resources, Wegmans Food Markets, Inc.

Susan M. Puglia
Vice President, Global Technical Leadership, Sales & Distribution, IBM Corporation

Robert W. Rice
BS '94, MBA '97; President and Managing Partner, BayFirst Solutions LLC; also serves on NTID Foundation Board

Results of Financial Operations

Students enjoy some sunshine in RIT/NTID's Frisina Quad.

Financial Operations Highlights

Fiscal year (FY) 2014 can be considered a year of stabilization and rebuilding after weathering the effects of sequestration. During FY 2014, NTID's federal appropriation totaled approximately $66.3 million, representing a 6.9 percent increase over the FY 2013 award and an increase of about 1.3 percent over pre-sequestration levels. After taking into account an increase of approximately $757,000 in non-federal funds, total FY 2014 NTID revenue increased by approximately $5 million (5.8%) over FY 2013.

The budget reductions implemented by NTID as a result of FY 2013 sequestration, as well as continued diligence in cost management, yielded a continued reduction in total personnel compensation costs of nearly $3.6 million (7.6%) as compared to FY 2013. Further, RIT service expenditures were reduced slightly by approximately $344,000 (1.1%) to approximately $32.1 million for FY 2014.

As a result of the funding restoration experienced during FY 2014, NTID was able to resume its capital equipment expenditures program, which had been curtailed significantly in recent years, in order to ensure that its students continue to receive the very latest training on state-of-the-art equipment and technologies.

NTID's FY 2014 financial results are a testament to NTID's continued commitment to excellent stewardship of resources and sound financial management.

Financial Operating Results

In FY 2014, NTID operating revenue increased by 5.8 percent. This was a result of the January 2014 restoration and increase to NTID's federal appropriation by 6.9 percent or $4,290,851 and increased non-federal funds (tuition, room, board and fees) of $756,781.

	FY 2013	FY 2014	Variance $	Variance %
EXPENSES				
Personnel Compensation Expenditures				
Salaries and Wages	$34,237,664	$31,352,877	$(2,884,787)	-8.4%
Benefits	11,460,042	10,879,507	(580,535)	-5.1%
Total Personnel Compensation	**$45,697,706**	**$42,232,384**	**$(3,465,322)**	**-7.6%**
RIT Services Expenditures				
Direct:				
Residence Halls/Food Service, Student Services	$6,735,938	$7,391,290	$655,352	9.7%
Cross-Registered Tuition	9,064,220	8,673,972	(390,248)	-4.3%
Physical Plant Services	2,406,407	2,511,691	105,284	4.4%
Indirect:				
Overhead	14,258,211	13,544,046	(714,165)	-5.0%
Total RIT Services	**$32,464,776**	**$32,120,999**	**$(343,777)**	**-1.1%**
Other Expenditures				
Support Expenditures	$5,248,012	$5,217,047	$(30,965)	-0.6%
Grant Cost Shares	323,344	259,518	(63,826)	-19.7%
Financial Aid	2,741,242	2,655,009	(86,233)	-3.1%
Capital	210,488	918,909	708,421	336.6%
Matching Endowment	177,000	85,000	(92,000)	-52.0%
Plant Fund	360,150	8,781,484	8,421,334	2,338.3%
Total Other	**$9,060,236**	**$17,916,967**	**$8,856,731**	**97.8%**
Total Expenses	**$87,222,718**	**$92,270,350**	**$5,047,632**	**5.8%**
REVENUE				
Federal Appropriation	$62,000,149	$66,291,000	$4,290,851	6.9%
Non-federal Funds	25,222,569	25,979,350	756,781	3.0%
Total Revenue	**$87,222,718**	**$92,270,350**	**$5,047,632**	**5.8%**

Tuition, Room, Board and Other Fees

The tuition rate increased by 9.0 percent while the rates charged for room, board and fees increased by 3.5 percent for a total combined rate increase of 6.4 percent. These non-federal resource collections constituted 28 percent of NTID's total operating revenue.

Rates Charged Students

	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**
Collections	$22,849,300	$24,247,625	$24,698,576	$25,222,569	$25,979,350
Enrollment (Fall)	1,474	1,521	1,547	1,529	1,432
Collections Per Student	**$15,502**	**$15,942**	**$15,965**	**$16,496**	**$18,142**

Michael Kane, a lecturer in NTID's Business Studies Department, teaches students in his Accounting Capstone class.

Financial Aid

The average student receives significant financial aid to apply against tuition, room, board, fees, books, transportation and other expenses.

NTID Arts & Imaging Studies majors Kaitlin Newhard, from Wind Gap, Pa.; Staci Hollen, from Richfield, Minn.; and Kangni He, from Stamford, Conn.; show off their creative Commencement caps.

Financial Aid (Domestic Students)

Financial aid awards to students totaled approximately $23.2 million in FY 2014, a 5.8 percent increase from FY 2013. Institutionally sponsored aid and state and federal support increased in FY 2014 by 11.1 percent and 9.3 percent, respectively. Loans taken out by students decreased in FY 2014 by 5.7 percent, while the number of awards, including loans, decreased by 4 percent compared to FY 2013. Overall, the average financial aid per student (excluding loans) increased by 16.8 percent in FY 2014.

SOURCE OF AID	2013		2014		AMOUNT DIFF %
	Awards*	Amount	Awards*	Amount	
INSTITUTIONALLY SPONSORED SUPPORT					
Grant-in-Aid:					
NTID Grant-in-Aid	382	$1,202,041	312	$1,151,696	-4.2%
RIT Grant-in-Aid	33	101,258	30	100,049	-1.2%
Subtotal Grant-in-Aid	415	$1,303,299	342	$1,251,745	-4.0%
Scholarships:					
NTID Merit	479	$1,515,898	473	$1,479,113	-2.4%
RIT Merit	77	133,539	80	158,230	18.5%
NTID Endowments	408	600,424	480	972,577	62.0%
External Groups	106	248,184	126	359,889	45.0%
Subtotal Scholarships	1,070	$2,498,045	1,159	$2,969,809	18.9%
Subtotal Institutionally Sponsored Support	**1,485**	**$3,801,344**	**1,501**	**$4,221,554**	**11.1%**
STATE AND FEDERAL SUPPORT					
Grants:					
Pell Grants	674	$2,796,483	631	$2,751,344	-1.6%
State Grants	237	517,134	230	522,612	1.1%
Subtotal Grants	911	$3,313,617	861	$3,273,956	-1.2%
Other Federal Support:					
Vocational Rehabilitation	912	$9,319,129	933	$10,531,963	13.0%
Federal Work Study	32	55,588	29	56,438	1.5%
Subtotal Other Support	944	$9,374,717	962	$10,588,401	12.9%
Subtotal State and Federal Support	**1,855**	**$12,688,334**	**1,823**	**$13,862,357**	**9.3%**
LOANS					
Subsidized Federal Student Loan	576	$1,978,784	511	$1,757,030	-11.2%
Unsubsidized Federal Student Loan	670	2,993,238	559	2,663,798	-11.0%
Parent PLUS Loans	70	504,026	78	742,531	47.3%
Subtotal Loans	**1,316**	**$5,476,048**	**1,148**	**$5,163,359**	**-5.7%**
TOTAL ALL FINANCIAL AID	**4,656**	**$21,965,726**	**4,472**	**$23,247,270**	**5.8%**
Domestic Student Enrollment		**1,478**		**1,388**	**-6.1%**
Average Financial Aid per Student		**$14,862**		**$16,749**	**12.7%**
Average Financial Aid per Student Excluding Loans		**$11,157**		**$13,029**	**16.8%**

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* Students receive more than one form of aid; therefore the numbers of awards (grants, loans, scholarship, etc.) outnumber the student body.

External Funding Sources

In February 2014, RIT hosted its first Thank A Giver (TAG) Day, an effort to show how donor contributions make a difference in the daily lives of RIT/NTID students. Red tags are placed on any items made possible by donors, such as this video relay booth, similar to a phone booth.

The NTID Foundation

NTID received $2,201,175 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 2014 include:

$250,000 - $999,999 Level:	The Nippon Foundation Kathryn L. Schmitz, Ph.D. '95
$100,000 - $249,999 Level:	Mr. Marion L. Navrat, Estate Way Trust
$50,000 - $99,999 Level:	Paradigm Environmental Services Mr. David J. Nelson '81, '85 Ms. Debbe A. Hagner '79, '81
$25,000-$49,999 Level:	Motorola Solutions Foundation Mr. and Mrs. Andrew N. Brenneman '86, '88 ZVRS
$10,000 - $24,999 Level:	Dow Chemical Co. Foundation Jephson Educational Trust Dow Chemical Company J.M. McDonald Foundation Mr. David Strine Swordspoint Foundation, Inc. Morgan Stanley Global Impact Funding Trust
$5,000 - $9,999 Level:	Daisy Marquis Jones Foundation Fred & Floy Willmott Foundation Sprint Foundation Easter Seals, Inc. Mary S. Mulligan Charitable Trust Baird Foundation William G. McGowan Charitable Fund Mr. Robert W. Rice '94, '97 Mr. Mark C. Feder '74, '76 Dr. and Mrs. Ronald R. Kelly
$1,000 - $4,999 Level:	Bank of NY Mellon Financial Corp. Foundation Mr. and Mrs. William Urich Mr. Andrew R. Jacobson '90, '96 Ms. Kathleen G. Darroch '86 Mr. Christopher D. Felo '77, '79, '86, '00 Mr. and Mrs. Sean Flanagan Mr. and Mrs. Jameson Crane, Jr. Dr. Pamela L. Carmichael '04 Louis S. & Molly B. Wolk Foundation Dr. Karey T. Pine '93 Northrop Grumman Foundation Stefano La Sala Foundation, Inc. Dr. and Mrs. T. Alan Hurwitz

$1,000 - $4,999 Level:	Mr. Gordon J. Hewitt '73, '75 Mr. Erwin J. Smith Dr. and Mrs. James J. DeCaro Mr. John T. Reid '79 Dr. and Mrs. Terry Feigenbaum Quota International of Bath Mr. James J. Stefano Mr. Anthony S. Napoli '01 Ms. Marianne M. Gustafson Drs. Chris A. '95 and Kim L. Kurz '93, '95 Dr. and Mrs. Harold M. Mowl, Jr. Dr. Laurie C. Brewer Dr. Robert I. Harris Dr. Vincent A. Daniele Frank B. Sullivan Memorial Foundation, Inc. Mr. Chris Montan Mr. Michael S. Servé '76 Mrs. Cheryl A. Bovard '86, '91, '11 Mrs. Eleanor P. Scouten Mrs. Sidonie Merkel Roepke Ms. Katharine F. Gillies Ms. Sue Ann Eatherly Jennings Rochester Area Community Foundation TACTYC Dr. and Mrs. Gerard J. Buckley '78 Mr. Thomas M. Otto-Bruc Mr. Gerald Nelson '74 and Ms. Nancy Bloch Mrs. Kathleen M. Martin Mr. and Mrs. Christopher D. Wagner '94 Mr. Daniel J. Schreiner Dr. Richard V. Burkhauser Interpretek Drs. Robert J. '70 and Susan M. '74 Mather

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 2014, NTID development activity generated $1,321,580 for endowment and restricted purposes. Of that amount, $85,000 was matched with federal dollars and directed toward NTID's endowed scholarship funds.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Endowment and Restricted Funds	$2,602,401	$2,975,368	$1,460,336	$935,832	$1,321,580
Equipment and Software	$94,100	$1,028,004	$141,740	$29,380	$57,117
Total	**$2,696,501**	**$4,003,372**	**$1,602,076**	**$965,212**	**$1,378,697**

NTID students perform in an adaptation of William Shakespeare's The Taming of the Shrew.

NTID Endowment Programs

A total of $170,000, including matching federal funds* of $85,000, was added to the Federal Matching Endowment Fund corpus in 2014. The market value of NTID's Federal Matching Endowment portfolio stands at $52,434,869.

The market value of NTID's total endowments, which include privately raised funds prior to the establishment of the Federal Matching Endowment program, is $57,839,133.

Value as of September 30, 2014

	Contributed Value	Market Value
Funds Subject to Federal Investment and Spending Guidelines		
Private	$6,531,728	$11,216,465
Federal	$6,544,205	$10,715,022
Subtotal	$13,075,933	$21,931,487
Funds No Longer Subject to Federal Investment and Spending Guidelines	$14,530,472	$30,503,382
Total Federal Endowment	**$27,606,405**	**$52,434,869**

Other Endowments	Contributed Value	Market Value
Private	$1,891,940	$5,404,264
Total Endowments	**$29,498,345**	**$57,839,133**

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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.

External Funding Sources

Scholarships, Endowed Funds and Estate Commitments

The generosity of a large number of friends of
NTID has resulted in the following scholarships,
endowed funds and estate commitments
benefiting NTID students.

Barlow Endowed Scholarship Fund

Alice Beardsley Memorial Endowed Scholarship Fund for Interpreting Students at NTID

Ned Behnke Memorial Endowed Scholarship Fund

Frank P. Benz Jr. Memorial Scholarship

Doris W. Blanchard Endowed Scholarship Fund

Farid Bozorgi Memorial Endowed Scholarship Fund

Bernard Bragg Deaf Theatre, Signed Arts and Deaf Cinema Endowment Fund

Andrew and Mary Brenneman Annual Scholarship

Gladys Brooks Endowed Fund for the Laboratory Science Technology Program

Dr. Gerard Buckley Student Leadership Endowment

Caption First Scholarship at NTID

Citicorp/Citibank Endowed Scholarship Fund at NTID

Dr. Karen K. Conner Annual Scholarship Fund

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

Dreyfus Foundation Laboratory Science Technology Endowed Student Support Fund

Dorothy E. Ann Fund (D.E.A.F.) Endowed Scholarship Fund

Mr. and Mrs. Joseph F. Dyer Endowed Scholarship Fund

Joseph F. and Helen C. Dyer Arts Center Endowed 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

Curt and Jean Feuer Scholarship at NTID

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

Scholarships, Endowed Funds and Estate Commitments (continued)

Allen and Gloria Gopen Endowed Scholarship Fund

Debbe A. Hagner Endowed Lecture at NTID

Mildred F. Hall Endowed Scholarship Fund

Hamilton Relay Scholarship

Jennifer Van Atta Hayes Memorial Endowed Scholarship

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

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

M. L. Navrat Endowed Scholarship Fund for NTID

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 Endowed Scholarship in the Visual Arts Disciplines

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

Milton H. and Ray B. Ohringer Endowed Scholarship Fund

Robert F. Panara Endowed Scholarship Fund

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

Edward L. Scouten Endowed Fund for English Literacy

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

Dr. Frank B. Sullivan Memorial Exemplary Business Student Award

Frank B. Sullivan Memorial Scholarship

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

Al Van Nevel Memorial Foundation Scholarship for Excellence in Business Studies at NTID

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

In July 2014, RIT/NTID lost Professor Emeritus Robert F. Panara, left, RIT's first deaf professor and Dr. E. Ross Stuckless, right, NTID's first hearing professor. Panara also was an author, poet, historian and international authority on deaf figures in literature, and founded the NTID Drama Club. Before joining NTID, Stuckless, whose younger brother was deaf, published a study on the underemployment of individuals who are deaf, helping to generate Congressional interest in establishing NTID.

Grants and Contracts

During FY 2014 NTID had 35 new grant proposals totaling $12,179,131 that were submitted for funding. Seventeen, totaling $1,806,215, were funded; 14 are still pending; four were not funded.

As of September 30, 2014, the annual reimbursed expenditures of all grants and contracts at NTID totaled $4,261,333 with a total value over the lives of the projects of $12,869,012.

Project Title	Grant Provider	Year	Amount FY 2014	Total Value
The Science of Learning Center on Visual Language Visual Learning	National Science Foundation	2 of 2	$40,162	$144,763
National Center for the Deaf	National Institutes of Health	1 of 1	$10,001	$10,001
Spoken Language & Literacy	Department of Education	1 of 1	$59,926	$59,926
Collaborative Research: Real-Time Captioning by Groups of Non-Experts	National Science Foundation	2 of 3	$48,934	$147,794
Factors Associated with Positive High School and Post-High School Outcomes for Deaf and Hard-of-Hearing Students	Department of Education – SRI International	2 of 2	$41,810	$77,703
Addiction Treatment Services for Deaf and Hard-of-Hearing Individuals	NYS Office of Mental Health – Rochester Psychiatric Center	2 of 5	$15,281	$276,988
Language, Learning and Cognition Among Deaf Students With and Without Cochlear Implants	National Institutes of Health	2 of 4	$640,153	$1,148,511
FutureQuest and Technical Job Training	BNY Mellon	3 of 3	$18,302	$45,000
Android Development Collaboration with VL2	National Science Foundation	1 of 1	$19,837	$19,837
Pre-College Education Network (P-CEN)	The Nippon Foundation	1 of 1	$817,800	$817,800
Intensive Summer Research Experience for Postsecondary	National Science Foundation	3 of 5	$7,500	$15,000
Substance and Alcohol Intervention Services for the Deaf	NYS Office of Mental Health – Rochester Psychiatric Center	1 of 1	$162,132	$162,132
Investigation of CISCO Technologies and Access Solutions	CISCO Systems Inc	5 of 5	$5,886	$60,620
Deaf STEM Community Alliance: Supporting Postsecondary Deaf and Hard-of-Hearing Students	National Science Foundation	3 of 5	$223,636	$1,318,003
DeafTEC: Technological Education Center for Deaf and Hard-of-Hearing Students	National Science Foundation	3 of 4	$1,389,224	$4,459,327

Grants and Contracts (continued)

Analyzing the Use of C-Print Mobile Technology in STEM Lab Settings Across Multiple Postsecondary Sites	National Science Foundation	4 of 4	$112,530	$465,966
Accountability Initiative with Special Emphasis on Recruitment of STEM and Minority Teachers of Deaf and Hard-of-Hearing Students	Department of Education	3 of 5	$310,114	$997,319
Nippon Project	The Nippon Foundation	3 of 3	$54,230	$1,299,900
Stereotype Threat Effects on Deaf and Hard-of-Hearing College Students	National Science Foundation	1 of 3	$676	$534,204
Deaf Learners' Lexical Acquisition of English Verbs and Their Component	National Science Foundation	2 of 4	$82,746	$300,502
Rochester Bridges to the Doctorate Program (R25) for Deaf and Hard of Hearing	Department of Health Services	1 of 2	$194,203	$501,466
Center for Undergraduate Research in Math	National Science Foundation	1 of 1	$6,250	$6,250
Total			**$4,261,333**	**$12,869,012**

NTID students performed in …and melodies unheard, *a multimedia performance honoring RIT/NTID Professor Emeritus Robert F. Panara and inspired by Panara's own poetry.*