II.G. Profile of the Institution

II.G.1. Degree and Certificate Programs

NJIT currently offers 122 degree programs (46 bachelors degree programs, 57 masters programs, and 19 doctoral programs) and 17 graduate certificates:

Bachelors Degrees (46 programs, CIP Code listed after program name)

Applied Mathematics[1] (B.A.) 270301	Communication and Media (B.S.) 231101
Biology[1] (B.A.) 260101	Computational Sciences (B.S.) 261103
Communication (B.A.) 231101	Computer Engineering (B.S.) 140901
Computer Science[1] (B.A.) 110101	Computer Science (B.S.) 110101
Digital Design (B.A.) 100304	Computing and Business (B.S.) 110199
History[1] (B.A.) 540101	Electrical Engineering (B.S.) 141001
Information Systems[1] (B.A.) 110401	Engineering Science (B.S.) 141301
Interior Design (B.A.) 500408	Engineering Technology (B.S.) 150000
Law/Technology and Culture (B.A.) 229999	Enterprise Development (B.S.) 529999
Science/Technology & Society[1] (B.A.) 301501	Environmental Engineering (B.S.) 141401
Architecture (B.Arch.) 040201	Environmental Sciences[1] (B.S.) 030104
Fine Arts (B.F.A.) 500701	Geoscience Engineering[1] (B.S.) 143901
Applied Physics[1] (B.S.) 400801	Human Computer Interaction[1] (B.S.) 110401
Architecture (B.S.) 040201	Industrial Design (B.S.) 049999
Biochemistry (B.S.) 260202	Industrial Engineering (B.S.) 143501
Bioinformatics (B.S.) 261103	Industrial Engineering[1] [Dual B.A. In Physics] (B.S.) 143501
Biology[1] (B.S.) 260101	Information Technology (B.S.) 110103
Biomedical Engineering (B.S.) 140501	International Business (B.S.) 521101
Business (B.S.) 520201	Manufacturing Engineering (B.S.) 143601
Business & Information Systems (B.S.) 110401	Mathematical Sciences (B.S.) 270101
Chemical Engineering (B.S.) 140701	Mechanical Engineering (B.S.) 141901
Chemistry (B.S.) 400501	Science/Technology & Society (B.S.) 301501
Civil Engineering (B.S.) 140801	Web and Information Systems (B.S.) 110401

There is now a Mathematical Sciences B.S. that will replace the Applied Mathematics B.S. and the Statistics and Actuarial Science B.S. No new students will be admitted to either the Applied Mathematics B.S. or the Statistics and Actuarial Science B.S; they will both be phased out as students currently in the programs complete.

There are 4 options within Engineering Science (B.S.):

- Materials Science and Engineering
- Pre-medical
- Pre-dental
- Pre-optometry

There are 9 specializations within Engineering Technology (B.E.T.):

- Computer Technology (not ABET accredited)
- Concrete Industry Management Technology (not ABET accredited)
- Construction Engineering Technology
- Construction Management Technology (not ABET accredited)
- Electrical and Computer Engineering Technology
- Manufacturing Engineering Technology (not ABET accredited)
- Mechanical Engineering Technology
- Surveying Engineering Technology
- Telecommunications Management Technology (not ABET accredited)

There are 4 specializations within Management (B.S.):

- E-Commerce
- Finance
- Marketing
- Management Information Systems

There are 23 undergraduate minors offered (12-18 credits required for a minor):

Applied Mathematics	History
Applied Physics	Industrial Engineering
Applied Statistics	Information Systems
Biology	Leadership and Aerospace Studies (AFROTC only)
Chemistry	Legal Studies
Communication	Literature
Computer Engineering	Management
Computer Science	Materials Engineering
Drama/Theatre	Philosophy/Applied Ethics
Economics	Science, Technology and Society
Environmental Engineering	Technology, Gender & Diversity
Global Studies	

Masters Degrees (55 programs, CIP Code listed after program name)

History[1] (M.A.) 540101	Environmental Engineering (M.S.) 141401
History[1] (M.A.T.) 540101	Environmental Policy Studies (M.S.) 440501
Architecture (M.Arch.) 040201	Environmental Science[1] (M.S.) 030104
Management of Technology (M.B.A.) 520299	Healthcare Systems Management (M.S.) 510702
Infrastructure Planning (M.I.P.) 040301	Industrial Engineering (M.S.) 143501
Public Health[3] (M.P.H.) 512201	Information Systems (M.S.) 110401
Applied Mathematics (M.S.) 270301	Interdisciplinary Studies (M.S.) 309999
Applied Physics[1] (M.S.) 400801	International Business (M.S.) 521101
Applied Science (M.S.) 409999	Internet Engineering (M.S.) 110901
Applied Statistics (M.S.) 270501	IT Administration and Security (M.S.) 110103
Bioelectronics (M.S.) 140501	Management (M.S.) 520201
Bioinformatics (M.S.) 261103	Manufacturing Systems Engineering (M.S.) 143601
Biology[1] (M.S.) 260101	Materials Science & Engineering (M.S.) 141801
Biomedical Engineering (M.S.) 140501	Mathematical and Computational Finance (M.S.) 270301
Biostatistics (M.S.) 261102	Mechanical Engineering (M.S.) 141901
Business and Information Systems (M.S.) 110401	Occupational Safety & Health Engineering (M.S.) 142701
Chemical Engineering (M.S.) 140701	Occupational Safety & Industrial Hygiene (M.S.) 150701
Chemistry (M.S.) 400501	Pharmaceutical Bioprocessing (M.S.) 140301
Civil Engineering (M.S.) 140801	Pharmaceutical Chemistry (M.S.) 512004
Computational Biology[1] (M.S.) 261103	Pharmaceutical Engineering (M.S.) 140701
Computer Engineering (M.S.) 140901	Pharmaceutical Materials Processing (M.S.) 142701
Computer Science (M.S.) 110101	Pharmaceutical Systems Management (M.S.) 142701
Computing and Business (M.S.) 110199	Power & Energy Systems (M.S.) 141001
Critical Infrastructure Systems (M.S.) 142701	Professional & Technical Communication (M.S.) 231101
Electrical Engineering (M.S.) 141001	Software Engineering (M.S.) 140903
Emergency Management & Business Continuity (M.S.) 110199	Telecommunications (M.S.) 141001
Engineering Management (M.S.) 151501	Transportation (M.S.) 140804
Engineering Science (M.S.) 141301	Nursing - Nursing Informatics[2] (M.S.N.) 511608
Enterprise Development (M.S.) 529999	

There are 4 options within Management (M.S.):

- Management Information Systems
- E-Commerce
- Organization Management
- Management of Technology (pending approval)

There are 6 areas of concentration within the M.B.A.:

- Management Information Systems
- Operations Management
- E- Commerce
- Marketing
- Finance

Doctoral Degrees (19 programs, CIP Code listed after program name)

Applied Physics[1] (Ph.D.) 400899
Biology[1] (Ph.D.) 260101
Biomedical Engineering [2] (Ph.D.) 140501
Chemical Engineering (Ph.D.) 140701
Chemistry (Ph.D.) 400501
Civil Engineering (Ph.D.) 140801
Computer & Information Science (Ph.D.) 110101
Computer Engineering (Ph.D.) 140901
Computer Science (Ph.D.) 110701
Electrical Engineering (Ph.D.) 141001
Environmental Engineering (Ph.D.) 141401
Environmental Science[1] (Ph.D.) 030104
Industrial Engineering (Ph.D.) 143501
Information Systems (Ph.D.) 110401
Materials Science & Engineering (Ph.D.) 141801
Mathematical Sciences[1] (Ph.D.) 270101
Mechanical Engineering (Ph.D.) 141901
Transportation (Ph.D.) 140804
Urban Systems[3] (Ph.D.) 459999

NJIT teaches, advises, and mentors doctoral students in one degree program where Rutgers University is the degree-granting institution:

- Management *(Ph.D.)* 520201

NOTES:
1. Joint degree program with Rutgers - The State University of New Jersey, Newark Campus
2. Joint degree program with The University of Medicine and Dentistry of New Jersey.

3. Joint degree program with both The University of Medicine and Dentistry of New Jersey and Rutgers - The State University of New Jersey, Newark Campus.

Graduate Certificates (17 programs, CIP Code listed after program name)

Architectural Studies (Post-Bacc.) 040201
Applied Mathematics (Mast. Cert.) 270301
Architecture (Mast. Cert.) 040201
Business Administration (Mast. Cert.) 520201
Chemical Engineering (Mast. Cert.) 140701
Chemistry (Mast. Cert.) 400501
Civil Engineering (Mast. Cert.) 140801
Computer & Information Sciences (Mast. Cert.) 110101
Computer Engineering (Mast. Cert.) 140901
Electrical/Electronics & Communications Engineering (Mast. Cert.) 141001
English/Technical & Business Writing (Mast. Cert.) 231303
Industrial Engineering (Mast. Cert.) 143501
Information Sciences & Systems (Mast. Cert.) 110401
Mechanical Engineering (Mast. Cert.) 141901
Miscellaneous Biological Specialties (Mast. Cert.) 269999
Pharmaceutical Technology/Management (Mast. Cert.) 149999
Public Policy Studies (Mast. Cert.) 440501

NJIT's accelerated programs

NJIT offers or participates in 9 accelerated programs:

- B.S./M.S.
- B.Arch./M.S.
- B.S./D.M.D. with the University of Medicine and Dentistry of New Jersey
- B.S./M.D. with the University of Medicine and Dentistry of New Jersey
- B.S./M.D. with St. George's University School of Medicine
- B.S./O.D. with the State University of New York-New York School of Optometry
- B.S./D.D.S. with the New York University-College of Dentistry
- B.S./J.D. with Rutgers School of Law-Newark
- B.S./J.D. with Seton Hall University School of Law-Newark

NJIT's 2+2 and 3+2 programs

NJIT offers 2+2 programs through a joint admissions agreement with 10 county colleges:

- Bergen Community College
- Brookdale Community College
- Burlington County College
- Essex County College
- Hudson County Community College
- Mercer County College
- Middlesex County College
- Ocean County College
- Raritan Valley Community College
- Union County College

NJIT offers 3+2 programs through a joint admissions agreement with 3 colleges:

- Seton Hall University
- Stockton State College
- William Paterson University

NJIT's articulation arrangements

NJIT currently has articulation arrangements with the following 19 institutions:

- Bergen Community College
- Brookdale Community College
- Burlington County College
- Camden County College
- County College of Morris
- Cumberland County College
- Essex County College
- Hudson County Community College
- Mercer County College
- Middlesex County College
- Morris County College
- Ocean County College
- Paul Smith's College
- Passaic County Community College
- Raritan Valley County College
- Union County College
- Seton Hall University
- Stockton State College
- William Peterson University

NJIT currently offers an accelerated B.S. in Information Technology at Camden County College and partners with Camden County College to offer courses leading to masters degrees in Engineering Management, Computer Science, and Information Systems

II.G.2. Other

II.G.2.a. Continuing and Professional Education Activities at NJIT

Continuing Professional Education (CPE) at NJIT has long been recognized as a leader in industry training and workforce development, as exemplified by the diverse group of companies that rely on NJIT's expertise and understanding of corporate challenges. NJIT academic catalogues dating back to 1950 indicate the existence and important of this function. Indeed the archives of NJIT's history, which began in 1881 when the university was first established as the Newark Technical School, contain documents ascertaining that this university was "founded to meet certain technical education requirements of individuals employed in local industry." Data maintained just since 1990 NJIT reveal that CPE has provided on-site and online corporate training and education programs to more than 72,000 employees at 600 New Jersey companies. Some of the companies that benefited from this training include Verizon Wireless, Dow Jones, Burlington Coat Factory, Boston Scientific, Franklin Credit, Fletcher Creamer and CIBA. Other training partnerships were established or maintained with organizations such as NJ Transit, NJ Youth Corps, NJ Office of Homeland Security and Preparedness, US Postal Service and the Port Authority of New York and New Jersey. NJIT always partners with companies to accomplish their business objectives, both short term and long term by providing the training their employees need to achieve results.

NJIT is an original partner in North Jersey's $5.1 million US Department of Labor's Workforce Innovation for Regional Economic Development (WIRED) program and is assisting this program in obtaining an estimated $18 million in leveraged funding which will be used to strengthen the workforce of small and large companies in three high growth sectors of New Jersey's economy.

Another example of NJIT's commitment to education and training in partnership with industry need is NJIT's participation in the Innovation Partnership Institutes program, a joint effort of the Commission on Higher Education, the Department of Education, and the Department of Labor and Workforce Development focused on specific NJ business sectors. NJIT both led and participated on teams dedicated to the individual sectors of Financial Services, Advanced Manufacturing, Biotechnology, and Transportation, Logistics and Distribution. The Innovation Partnership Institutes are collaborations among businesses in these key sectors and New Jersey's colleges, universities and public high schools, to develop cutting edge curricula that meet the evolving training needs of businesses. Curricula is developed with input from industry and posted online to

best disseminate to high schools and two-year as well as four-year educational institutions.

NJIT's Division of Continuing Professional Education (CPE) is a coordinated unit focusing on the development, management, and execution of five major educational programs that fall into two major categories:

Academic Credit Learning (Degree and Certificate Programs)

- NJIT eLearning Program
- Graduate Certificate Program
- Extension Programs

Non-Credit Learning (Training and Certificate Programs)

- Corporate Training
- Professional Development and License Reviews

II.G.2.b. NJIT eLearning Program

NJIT offers seven complete undergraduate and graduate degree programs, seven graduate certificates completely online, eight graduate certificate partially via eLearning, and more than 218 individual eLearning college courses in an academic year. eLearning courses are available three times per year in the standard NJIT Fall and Spring semesters and in a ten-week Summer Session. NJIT eLearning courses consist of both an electronic lecture component conducted by an NJIT faculty member and an electronic discussion through which students conduct dialogue with their instructor and other classmates at any time of the day or night. Courses utilize computer conferencing platforms (e.g. WebCT, WebBoard), and multimedia methodologies delivered via CD-ROMS, streaming audio/video, and/or videotapes. Over the past five years, the number of eLearners and eLearning course enrollments have grown as much as 21% averaging 16% a year growth. During the 2008-2009 academic year, there were about 4,800 eLearning students who totaled an eLearning enrollment of more than 6,000 in over 190 eLearning academic credit courses during Fall and Spring semesters and Summer sessions. NJIT's has an inventory of over 200 courses produced in-house within 27 academic disciplines:

- Accounting
- Chemistry
- Chemical Engineering
- Computer Science
- Economics
- Electrical and Computing Engineering

- Electrical Engineering
- Engineering Management
- English
- Environmental Engineering
- Finance
- Human Resource Management
- Humanities and Social Sciences
- Industrial Engineering
- Industrial Management
- Information Systems
- Information Technology
- Literature
- Mathematics
- Management
- Management Information Systems
- Manufacturing Engineering
- Marketing
- Physics
- Professional and Technology Communication
- Science Technology & Society
- Social Science

Over 100 NJIT faculties have originated courseware for NJIT's eLearning Program.

Seven undergraduate and graduate degree programs are available through eLearning as well as, seven graduate certificates completely online and eight graduate certificates offered partially via eLearning:

Undergraduate Degrees via eLearning in whole or in part

- Computer Science (B.S.) 134 credits
- Information Systems (B.A.) 129 credits
- Information Systems (B.S.) 130 credits
- Information Technology (B.S.) 127 credits

Graduate Degrees via eLearning

- Engineering Management (M.S.) 30 credits
- Information Systems (M.S.) 36 credits
- Professional & Technical Communication (M.S.) 30 credits

Graduate Certificates in whole or part via eLearning (each 12 credits)

- Bioinformatics
- Business Management Fundamentals
- Construction Management

- Health Communications
- Information Assurance
- Information Systems Auditing
- Information Systems Design
- Information Systems Implementation
- Internet Applications Development
- Management Essentials
- Management of Technology
- Operations Productivity
- Pharmaceutical Management
- Pharmaceutical Technology
- Practice of Technical Communications
- Project Management
- Sustainable Architecture
- Telecommunications Networking
- Virtual Tools for Professional Communities

In the last five years, the number of NJIT learners and eLearning course enrollments in academic programs has increased an average of 16% each year and over the last ten years has grown nearly 2600%.

II.G.2.c. Graduate Certificate Program

Structural shifts in the economy have caused many individuals in technological and managerial specialties to feel insecure about their jobs. Others see a reduction in opportunities for advancement in their current careers. For many, education is the key to career transition but earning a Master's degree is not always necessary or appropriate. The NJIT Graduate Certificate Program is designed to facilitate a return to formal advanced education for people whose schedules are too busy to enroll in a more traditional program.

Key features of the Graduate Certificate Program include the following: 12-credit Graduate Certificates are milestones in their own right or springboards to MS degrees at NJIT or elsewhere. Graduate Certificates are offered in fields of study designated by outside authorities as likely to offer the highest growth opportunities for employment. Program duration is one calendar year.

Study is possible through distance learning, which provides greater flexibility for the busy professional to study any time, anywhere. Entry is open to applicants with a BA/BS degree with a satisfactory grade point average.

The following is the list of the 26 current Graduate Certificates offered during Academic Year 09-10:

- Applied Statistical Methods
- Biostatistics Essentials
- Business and Information Systems Implementation
- Business and Computing
- Construction Management
- Data Mining
- Emergency Management and Information Assurance
- Emergency Management Design Essentials
- Engineering Soft Skills
- Environmental Sustainability
- Finance for Managers
- Firmware Engineering
- Information Management for Managers
- International Commerce
- IT Administration
- Management Essentials
- Management of Technology
- Network Security and Information Assurance
- Pharmaceutical Management
- Pharmaceutical Technology
- Physiology and HCI
- Power Systems Engineering
- Project Management
- Sustainable Architecture
- Technical Communications
- Web Systems Development

II.G.2.d. Extension Programs

NJIT's Division of Continuing Professional Education provides access to their courses and programs to part-time, evening students who prefer to attend classes at locations throughout the state. The extension program began in 1974 when courses in Computer and Information Science were offered at Drew University.

During AY09-10, NJIT will offer courses at 6 extension sites throughout New Jersey including:

Public Extension Sites:

Communiversity at Brookdale Community College- Lincroft

Courses Leading to Degree(s) in:

- B.S. in Information Systems,
- B.S. in Computer Science,
- B.S. in Information Technology

Department of Environmental Protection - Mercer

Courses Leading to Degree(s) in:

- M.S. in Environmental Science and Environmental Policy Studies

Department of Transportation - Mercer

Courses Leading to Degree(s) in:

- M.S. In Transportation

Gloucester County College, Sewell, NJ

Courses Leading to Degree(s) in:

- BSET

New Jersey City University, Jersey City, NJ

Courses Leading to Degree(s) in:

- M.S. Computer Science,
- M.S. Information Systems

Certificate Programs:

- Data Mining,
- Information Systems Implementation

Weekend University - Newark, NJ with online components

Courses Leading to Degree(s) in:

- B.S. in Information Technology,
- B.S. in Information Systems,
- M.S. Engineering Management,
- M.S. Information Systems

Certificate Programs:

- Project Management,
- Information Systems Implementation

II.G.2.e. Private Extension Sites

- Schering Pharmaceutical
- Wyeth Pharmaceuticals - Pearl River, NY (Open to employees only)
  Certificate Programs: Pharmaceutical Manufacturing

II.G.2.f. Customized Corporate Training

For fifty years, NJIT has been designing and conducting customized non-credit courses that meet technology-based organizations' needs for high-quality, lifelong workforce education. Representing the arm of NJIT that brings the university's areas of academic specialization into the workplace, this unit has developed particularly close relations with the NJ Department of Labor (DOL). The DOL's Office of Customized Training implements aspects of the NJ Workforce Development Partnership Program through which eligible New Jersey companies can receive state subsidization for sixty percent of the cost of initiating on-site training programs. Qualified educational providers (such as NJIT's Customized Corporate Training Program) oversee these programs. In FY 08-09 NJIT's Customized Corporate Training program executed training contracts with over 50 companies and trained over 2,000 employees.

II.G.2.g. Professional Development and License Review

The Professional Development and License Review Program offers non-credit short courses, certificates, and license reviews. In AY 08-09 over 145 non-credit courses were offered.

In Academic Year 08-09 many new courses were added to the program, bringing the total number of courses offered to over 60 courses. Among the new offerings, a Certification in Open Source Unix was initiated. At this time, NJIT is the only University nationwide that offers this program and is endorsed to offer a professional development certificate in Open Source Operating Systems

Also added was an expansive Architecture Program for Review and Professional Development. NJIT is the only facility in New Jersey to offer this array of courses and NJIT is an approved provider in the American Institute of Architects' Continuing Education System.

The non-credit Professional Development program escalated in course demand and variety. Additional courses were added to the program and include:

Architecture

- Architecture Review Courses
- Design of Steel and Wood Structures
- Marketing/Communications for Design Firms

Cable Telecommunications Industry

- Introduction to the Cable Telecommunications Industry
- Cable Telecommunications Installation
- Digital and High Speed Data
- Customer Service
- Broadband Telephony

Cisco Networking Academy

- Preparing for the CISSP Credential

Computing and Technology

- A+ Certification
- .Net Comprehensive
- C Sharp Basics and Advanced C# programming
- Fireworks MX
- Windows Application Programming using Visual C#
- Web Application Development using Visual C#
- XML Comprehensive
- Voice XML
- Introduction to EDI – Electronic Data Interchange
- Advanced EDI Concepts

Open Source UNIX Operating Systems – NJIT is the only University nationwide that offers and is endorsed to offer a professional development certificate in Open Source Operating Systems

- Introduction to UNIX Free BSD
- UNIX Administration I
- UNIX BSD Administrator II

Oracle Database Technology

Safety and Environment

- Hazwoper Refresher
- Supervisor Training
- OSHA Hazwoper Training
- Certified Hazardous Materials Manager (CHMM)
- NJ's Underground Storage Tanks Regulations

Web Master

- Web Manager
- Web Developer
- Web Author
- Dreamweaver
- Flash
- Fireworks MX
- Programming for the Web

- Visual Basic Programming
- Multimedia:SMIL

II.G.2.h. Pre-College Programs

The Center for Pre-College Programs at NJIT is a comprehensive academic service department that provides technical assistance to schools and districts in New Jersey helping them expand and develop innovative educational programs and help for K-12 teachers as they create connections between the science and mathematics used in engineering applications in the workplace, careers in the STEM (science, technology, engineering, and mathematics) disciplines, and the standards-based curricula that teachers must adhere to in the classroom. Serving a widening geographical audience of over 4,000 students, teachers, parents and educational professionals from kindergarten through twelfth grade, The Center has established many partnerships and collaborations with schools and districts across New Jersey. Among the recent activities of the Center related to career awareness and workforce development:

- A three-year effort funded by the New Jersey Commission on Higher Education helped established the Pre-Engineering and Outreach Program (PrE-IOP) to inform students, teachers, parents, and school counselors about careers in engineering, and to provide training programs for hundreds of secondary school teachers with pre-engineering curricula that not only better prepared students to study engineering but helped increase their attitudes towards engineering. The curricula, aligned with State Content Standards, focused on pre-engineering skills and included instructional strategies that emphasized connections between science, mathematics and real-world engineering.

- A 3-year grant from the National Science Foundation (NSF), entitled Medibotics (Merging of Medicine, IT, and robotics) that introduce teachers and students to bio-medical applications of robotics using LEGO Mindstorms Robotics kits for Schools and NXT Software. The Medibotics pre-engineering curricula incorporates grade-appropriate prototypes of robotic surgeries into middle and high school pre-engineering curriculum providing students with hands-on experiences that simulate real-world problems to encourage their interest in engineering and information technology and provide information on careers in these fields.

- For the past three-years, CPCP, in collaboration with the Engineering Research Center at NJIT, has hosted a Research Experiences for Teachers (RET) program, in which high school science teachers are part of research groups in the pharmaceutical engineering research labs of NJIT, as they participate in research and gain knowledge about the pharmaceutical industry. CPCP faculty and staff

guide the teachers in the development of instructional modules, related to their research experience, and which they can use in their classrooms.

- The Center has collaborated with colleagues in Industrial and Mechanical Engineering, with funding from the State to develop instructional materials in manufacturing engineering for high school teachers and their students.

- The Center recently developed a career skills database as part of the Northern NJ WIRED program. The STEM Resource Database is designed to inventory and connect skill development programs on a national, state, and local level, with an emphasis on northern New Jersey. The purpose of the STEM Resource Database is to raise awareness of the career possibilities and job opportunities in the fields of transportation, logistics, and delivery; health care and life sciences; and entertainment, arts, and retail.

Methodologies and instruments for measuring Attitudes toward Engineering, and Knowledge of Engineering, as well as instruments for measuring teacher change have been developed or adapted during the operation of these programs. These instruments are still in use and adapted as necessary for other programs. Also, these instruments are also being used in other universities across the country and have been cited in the professional literature. These instruments and methodologies have been utilized to document the successes of all our programs.