



STANDARD 11: EDUCATIONAL OFFERINGS

REPORT OF WORKING GROUP 7: CURRICULUM— EVIDENCE-CENTERED RESEARCH AND PROFESSIONALLY- BASED INSTRUCTION



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11.0 WORKING GROUP ASSESSMENT CHECKLIST FOR STANDARD 11

FUNDAMENTAL ELEMENTS OF EDUCATIONAL OFFERINGS	TEAM EVALUATION
<p>(From <i>Characteristics of Excellence in Higher Education: Requirements of Affiliation and Standards of Accreditation</i>. Philadelphia, PA: MSCHE, 2009)</p>	<p>4=EXEMPLARY 3=EMERGING EXCELLENCE 2=MEETS STANDARD 1=DEVELOPING COMPETENCY</p>
➤ educational offerings congruent with its mission, which include appropriate areas of academic study of sufficient content, breadth and length, and conducted at levels of rigor appropriate to the programs or degrees offered;	3
➤ formal undergraduate, graduate, and/or professional programs—leading to a degree or other recognized higher education credential—designed to foster a coherent student learning experience and to promote synthesis of learning;	3
➤ program goals that are stated in terms of student learning outcomes;	2
➤ periodic evaluation of the effectiveness of any curricular, co-curricular, and extra-curricular experiences that the institution provides its students and utilization of evaluation results as a basis for improving its student development program and for enabling students to understand their own educational progress (see Standards 9: Student Support Services and 14: Assessment of Student Learning);	2
➤ learning resources, facilities, instructional equipment, library services, and professional library staff adequate to support the institution’s educational programs;	3
➤ collaboration among professional library staff, faculty, and administrators in fostering information literacy and technological competency skills across the curriculum;	3
➤ programs that promote student use of a variety of information and learning resources;	3
➤ provision of comparable quality of teaching/instruction, academic rigor, and educational effectiveness of the institution’s courses and programs regardless of the location or delivery mode;	3
➤ published and implemented policies and procedures regarding transfer credit. The	4

consideration of transfer credit or recognition of degrees will not be determined exclusively on the basis of the accreditation of the sending institution or the mode of delivery but, rather, will consider course equivalencies, including expected learning outcomes, with those of the receiving institution's curricula and standards. Such criteria will be fair, consistently applied, and publicly communicated;	
➤ policies and procedures to assure that the educational expectations, rigor, and student learning within any accelerated degree program are comparable to those that characterize more traditional program formats;	3
➤ consistent with the institution's educational programs and student cohorts, practices and policies that reflect the needs of adult learners;	3
➤ course syllabi that incorporate expected learning outcomes; and	2
➤ assessment of student learning and program outcomes relative to the goals and objectives of the undergraduate programs and the use of the results to improve student learning and program effectiveness (see Standard 14: Assessment of Student Learning).	3
ADDITIONAL ELEMENTS FOR GRADUATE AND PROFESSIONAL EDUCATION	
➤ graduate curricula providing for the development of research and independent thinking that studies at the advanced level presuppose;	4
➤ faculty with credentials appropriate to the graduate curricula; and	4
➤ assessment of student learning and program outcomes relative to the goals and objectives of the graduate programs (including professional and clinical skills, professional examinations and professional placement where applicable) and the use of the results to improve student learning and program effectiveness (see Standard 14: Assessment of Student Learning).	3

11.1 INTRODUCTION

11.1.1 *Précis: The NJIT Mission and the University Curriculum*

There has been significant growth and expansion of academic programs at all levels since the 2007 periodic review. As indicated in Working Group Report, Standard 5, there are nearly 140 programs of study, from bachelor to doctoral degrees and certificates. These programs were initiated in response to all constituencies urging NJIT to engage creatively the rapidly changing technological world in which students have matured and will be working upon degree completion. Their curricula complement the NJIT mission to prepare “students for productive careers and [amplify] their potential for lifelong personal and professional growth” (NJIT, *Mission*, 2011). The 2007 review commended NJIT on “the work [that] has been done in reviewing and enhancing academic programs and in advancing teaching and learning.” As we continue to strengthen academic programs, our most current concerted effort toward student engagement is the initiation of Community Connections, NJIT’s learning community pilot program, now in preparation for freshmen arriving in September 2011 (Redling, 2011). This will promote cohort-based learning across the disciplines, involving faculty, students and staff in enhanced methods of student engagement, with the goal of increasing curricular offerings and student retention while also decreasing time to graduation.

11.1.2. *An Overview of Group 7’s Standard 11 Charge and Questions Addressed*

The standards of excellence associated with Standard 11 include “sufficient content, rigor and depth to be characterized as collegiate or graduate level learning, as appropriate, with a clear distinction between pre-college and college level study, and between undergraduate and graduate study; clear linkages between the design of specific courses, programs, and learning activities and the articulated goals of the specific programs of which they are part and to the overarching mission of the institution; and responsiveness to new research findings and modes of inquiry” (*Characteristics of Excellence*, 2009).

To investigate NJIT’s educational offerings, the Steering Committee and Working Group 7 jointly developed the following charge questions to determine the extent to which NJIT’s educational offerings allow mission fulfillment:

- 1) How do NJIT’s academic programs display academic content, rigor, and coherence appropriate to our mission? (Section 11.2.1)
- 2) How does the university ensure the maintenance of academic content, rigor, and coherence? What role do accreditation agencies play in this assessment process? (Section 11.2.2)
- 3) By what strategies does each degree program have articulated core competencies, learning outcomes, student advancement and progression standards, and an outcomes assessment plan? (Section 11.2.3-11.2.4)
- 4) How well do we disseminate the purpose and interrelationship of the requirements of the students’ degree programs? (Section 11.2.4)

- 5) Through what articulated strategies are students taught to think critically, analytically, and creatively within their majors? (Section 11.2.5)
- 6) How has the curriculum been improved since the last self study in order to increase student engagement and retention? (Section 11.2.6)
- 7) How effective are the processes that allow new degree programs to emerge at NJIT? Are the standards and processes required for program approval on the institutional and state level sufficient to facilitate NJIT's needed mission differentiation? (Section 11.2.7)

11.2 SELF STUDY INQUIRY AND OUTCOMES

11.2.1 The NJIT Mission and its Academic Programs

NJIT's mission commits to the pursuit of excellence in undergraduate, graduate, and continuing professional education, preparing students for productive careers and amplifying their potential for lifelong personal and professional growth. Academic programs, when initially proposed, go through a rigorous internal and, in most cases, external peer-review process to confirm the appropriateness of the academic content in line with the NJIT mission, the needs and requirements of industry, and accreditation agency, where applicable. In addition, active programs go through a continuous improvement process through the application of assessment tools that include assessment of core values among others. Core values include program outcomes (i.e., those we want our students to have at time of graduation) and program objectives (i.e., those we want our recent alumni to achieve after several years of graduation). Accreditation agencies often require a minimum set of program outcomes. For example, ABET Engineering Criteria (EC 2000) requires a minimum set of generic program outcomes (a-k) for all engineering programs.

Program objectives and the resulting curriculum of the program are maintained based upon input from several different constituencies that contribute to improving the effectiveness of the program. These generally include:

Industry and Alumni

NJIT has traditionally maintained a strong tie with industry. The original Newark College of Engineering, for example, was started in response to the needs of industry in the early 20th century. It is noted that the University is geographically situated in the New York/New Jersey Metropolitan area, which is an ideal location to foster this industrial relationship. Departments generally solicit direct input for the program from industry/alumni through the periodic use of surveys. The Employer Survey (IRP, 2003) queries about general and specific skills that employers desire, and it also inquires about satisfaction with NJIT graduates. The Alumni Survey (IRP, 2010) provides program specific feedback about the general undergraduate experience, employability, and progress towards licensing, where applicable. Another important connection with industry/alumni

is through our faculty, who actively participates in local professional organizations where they maintain continuing dialogue with practicing professionals about the needs of industry. In fact, a significant number of our faculty serve in leadership positions and on various committees within the professional organizations. In addition many Departments use a number of adjunct faculty who work in the profession and who help to assure that the program is relevant and up-to-date.

Current Students

Current students provide direct input into the program by several different modes. One mode is through the Student Senate (2011) organized feedback sessions, which are held once each semester. Discussion at the sessions ranges from compliments and complaints about individual instructors to suggestions about course content. It is noteworthy that a substantial number of students are employed with engineering firms and agencies either part time or during the summer. Thus, they can often provide perspectives that are based in part on work experience. Another opportunity for students to impact the program is through exit surveys of graduating students. Departments conduct exit surveys. Yet another means for students to impact program effectiveness is by one-on-one interaction between students and faculty.

Industrial Advisory Boards

Departmental Industrial Advisory Boards review Department activities and provide a professional perspective for program development. The Board, in conjunction with the Department faculty, plays an important role in establishing and maintaining the program objectives.

Faculty and Staff

Departments hold frequent faculty meetings that include discussions about the program. Faculty and staff also serve on a variety of Department, College and NJIT committees where academic as well as administrative topics are discussed. Frequently, these meetings generate new ideas that are considered by the Department to enhance the academic program. Another important source of program input is individual faculty, who generate suggestions based upon course-specific feedback. Eventually the item is either placed on the agenda of the monthly Department meeting or referred to the Departmental curriculum committee. Before a proposal is brought forward to the Department faculty and the UCRC or Graduate Council, if applicable, for further deliberation before final implementation.

11.2.2 The Role of Program Accreditation at NJIT

An integral component of the continuous improvement process that ensures the maintenance of the academic programs' content, rigor and coherence, is assessment (See Working Group Report, Standard 14). Each professional accrediting agency—ABET for

engineering and computing programs, AACSB for programs within the School of Management, and the National Architectural Accreditation Board for programs within the College of Architecture and Design—determines the scope and nature of assessment tools to determine if the current academic content, rigor and coherence are within the needs and requirements of industry and the accrediting agencies. For programs elsewhere, particularly in the College of Science and Liberal Arts that are not professionally accredited, the five-year strategic plan (Deek, 2009) articulates the program outcomes and other goals, both curricular and growth. In addition, the program objectives and the resulting curriculum of the program are maintained based upon input from several different constituencies that contribute to improving the effectiveness of the program. These include industry and industrial advisory boards, alumni, students, faculty, and staff.

Traditionally, individual student performance has been measured by course materials such as homework, examinations, presentations, projects and grades. These are important performance indicators because they provide both the student and his/her professor with measured feedback on the student's ability within the context of a specific course. These measurement tools will continue to be used and course materials, and examples of student work including videotapes of student presentations will be available to the evaluator. However, additional tools are used to assess the overall effectiveness of the program.

Departments have generally developed specific assessment tools with pre-determined frequency to measure how well they are accomplishing their program outcomes. For example, these tools may include Exit Surveys, Employer Surveys, Alumni Surveys, Student Feedback Sessions, Standardized Exam Results, External Board Review, Course Evaluations and Laboratory Evaluations, to name a few. A relationship between each tool and the program outcomes is also developed. Results of the assessments are reviewed by the Departments where recommended changes, if any, are initiated to maintain the academic content, rigor, and coherence of the program as part of a continuous improvement process.

Among our innovations designed to strengthen program review, we now have in place an outcomes-based, evidence-centered review of all NJIT degree programs and the NJIT Core Competencies associated with the General University Requirements. For more on these programs, designed to solidify and render cohesive the NJIT assessment effort praised in the 2007 review of the NJIT periodic review report by Katherine Mayberry and Herman Berliner, see Working Group Report, Standard 14.

11.2.3 The Role of the R.W. Van Houten Library at NJIT

The University's Robert W. Van Houten Library building was constructed in 1992 and supports study, research and computing, with comfortable browsing, reading and collaborative work areas. Students and faculty can access most of the library's resources 24/7 anytime and from anywhere via <http://library.njit.edu>. The library also houses ample equipment for photocopying and handling non-print formats including videos and

microform resources. Since 2000 the Library has spent almost \$2 million acquiring new books to support the university curricula. (See Appendix X for details.)

The print collection of 170,186 volumes, including books and bound periodicals, resides in the Van Houten Library building, also known as the Central Avenue Building, and the Architecture Library in Weston Hall. Students and faculty may supplement the NJIT library's print resources by borrowing directly from other libraries, and there are walk-in book borrowing and onsite database privileges at Rutgers- Dana Library (Rutgers, 2011) with similar privileges available at UMDNJ, Newark and Essex County College, Newark. In addition, undergraduate and graduate students and faculty have access to the New Jersey VALE (2005) Reciprocal Borrowing Program (VALE or Virtual Academic Library Environment).

Books and article copies not owned by NJIT are obtained by the Library staff through InterLibrary Loan (ILL) and commercial document delivery services. In 2009 NJIT Library joined RapidILL.org, an interlibrary loan resource sharing program, consisting of a prominent nationwide group of academic libraries. It is significant to note that 94% of requests made by NJIT via RapidILL were emailed within a 24 hour period to NJIT requestors.

In addition to eleven group study rooms and one "Quiet Study" room on the second floor, the R. W. Van Houten Library also hosts the teamspot smartplace collaboration program that facilitates a small group of 2 to 8 members who are engaged in a group project. TeamSpot users interact via a large display screen as they edit and share group documents while they work at their notebook computers (Hoang, 2011). The Library's Information Literacy training room is equipped with 17 workstations and associated equipment for information literacy workshops.

A key focal point is the heavily used Information Commons, a computer lab of over 120 computers located on the main floor of the Van Houten Library. These computers provide students with access to the library catalog and licensed and publicly available electronic resources including books, journals, indexes and databases. Computers are also configured with all the software used to support basic and specialized computing needed across the curriculum. Computer lab assistants as well as professional reference librarians are available nearby to help users.

Journal literature in engineering, science, management, architecture, and other subject areas is accessible through a variety of bibliographic and full-text databases. Today, in keeping with the rapidly changing world of online information, the College of Engineering has access to more than 32,000 unique electronic journal titles by database and direct subscription of which only about 76 are print-only. The library currently subscribes to 19 core databases. Most critical in the engineering disciplines are IEEE Xplore, SCOPUS, Science Direct, and Sci-Finder Scholar and the ACM Digital Library.

The library's four full-time technical reference librarians provide individualized consultations upon request and staff the actual and virtual Research HelpDesk approximately 45 hours per week. Virtual reference help is available via email, instant messaging, and through QandANJ.org, a 24/7 collaborative online endeavor of NJ librarians. Frequently asked questions are answered 24/7 via a self-help online service powered by IntelliResponse. The NJIT librarians have strong subject knowledge in technology, and among them hold degrees in Industrial Engineering, Chemistry, and Mathematics as well as in Library and Information Science. The technical reference librarians serve as liaisons to each College and School Department, providing customized library services and support such as information literacy consultation and library instruction, literature searching, promotion of library services, and collection development with solicited input from faculty and students. A total of 24 full-time employees support the activities associated with traditional and electronic library use.

11.2.4 The Role of Program Review at NJIT

There are two ways degree programs document and update articulated core competencies, learning outcomes, and outcomes assessment: full internal self-studies that are conducted every five years, along with yearly updates provided by all of the 137 programs; second, programs that maintain professional accreditation such as ABET, Inc., are required to provide this information in their self-study documentation prior to on-campus visits . (See Working Group Report, Standard14). Moreover, undergraduate program advisors meet at minimum once a semester with each student to review progress, plan for upcoming semesters and provide advice that is focused on balancing academic workload demands with those of family, socialization and employment. These meetings are effective strategies for maintaining progress and retaining students through completion of their degrees.

11.2.5 Communication with Students Regarding Academic Expectations

NJIT is dedicated to producing graduates who have the knowledge, skills and motivation necessary to advance the state-of-the-art knowledge in their respective fields. Graduates must understand the complexities of contemporary society and have a deep understanding of and appreciation for science and technology and the ethical and societal issues involved in their pursuit. A fundamental guiding principle in the development of the General University Requirements (GUR) is the formulation of a foundational curriculum encompassing the necessary preconditions for success in undergraduate disciplines, a curriculum that establishes a devotion to lifetime intellectual discovery and personal development (See Working Group Report, Standard 12). In a larger sense, the GUR are intended to provide an educational grounding for our students, a set of educational experiences harmoniously attuned to the mission of NJIT and its responsibilities to its constituents. In essence, the completion of the GUR is a necessary step in the fulfillment of the implicit intellectual and social contract that NJIT has with its students and its local, national and global communities. The specific GURs are presented

in the online undergraduate catalog. However, individual degree programs include specific GURs applicable to the degree programs.

Individual degree programs are presented in the online catalog (NJIT Catalog, 2011). In general, program objectives, program outcomes, and list of courses, electives, specializations or concentrations are included for each program. This includes the specific GURs for undergraduate programs. Students can also access individual course descriptions and lecture/lab/studio content of each course in the program. In addition, certain departmental web pages include more detailed program information that maps interrelationship between program objectives and outcomes as well as the individual program courses' objectives and outcomes.

NJIT employs a mandatory advisement system. Each semester, every student is required to see one of the advisors within the Department prior to registration. In order to ensure compliance, a registration hold is placed on each student's computer file. During the meeting the advisor reviews the student's progress and discusses what courses should be taken in the upcoming semester. A curriculum checklist sheet is maintained in each student file to track student progress, and the advisor also completes a registration authorization form. The advisor also makes other notations in the file as appropriate. Following the meeting with the advisor, the registration hold is removed and the student then registers on-line following the NJIT standard procedure. The mandatory system has proven effective in preventing students from taking courses out of sequence as well as making sure that students fully understand the purpose and interrelationship of the requirements of their degree program.

11.2.6 Students and Critical, Analytical, and Creative Thinking

In order to increase student engagement and literacy a number of efforts are underway at NJIT; Enhancing Information Literacy, Learning Communities (student engagement), developing team building skills (senior and industrial collaborative projects) and Industrial Advisory Boards (developing real work skills).

There is a collaborative effort between the Library and all Departments to provide information literacy instruction to all students within their subject domain

Information Literacy

The following are links to NJIT documents and tutorials detailing NJIT's information literacy efforts.

- <https://blogs.njit.edu/infolit/>
- <http://library.njit.edu/researchhelpdesk/tutorials/>
- Detailed links to other resources such as SAILS: Standardized Assessment of Information Literacy Skills that can be used to access literacy skills
library1.njit.edu/staff-folders/sweeney/Millennials/FDU-May-22-2008.ppt - 2008-05-22

For more on the assessment of information literacy, an NJIT Core Competency, see Working Group Report, Standard 14.

These materials include

- Library Basics: citations, academic search premier database, etc
- Writing Guidelines for Engineering and Science Students
- Developing research skills: research plan, searching databases, evaluating and documenting sources
- Mapping information literacy skills to ABET criteria
- Creating abstracts
- Copyright issues
- Tools for academic integrity
- Evaluating the authenticity of web resources
- Developing a narrative of the flow of information: attributes (audience, authorship, duration, etc.)

Student Engagement

For an analysis of curriculum improvement to increase student engagement and retention engagement since the last self study, see the report of the Task Force on Retention and Graduation, examined by the Working Group for Standard 8 (Section 8.2.2).

Developing Team Building Skills

All engineering disciplines require senior projects classes that require teams of students to work with one or more of the faculty to develop real world projects. These projects connect students with resources both internally and externally to engage students. They have to develop project plans, identify resources, create a risk analysis plan and complete and demonstrate their proficiency by completing and presenting some aspect of the design. These projects are documented on the NJIT YouTube site to guide other students in future projects (Weinsten, 2004, 2005).

Advisory Boards

Advisory Boards for each Department connect NJIT faculty with local industry to align each discipline with the needs of particular disciplines. These Advisory Boards provide resources for working on student projects to develop real world solutions and develop collaborative skills. At least once a year campus wide these Boards meet in April at NJIT. These Boards and documentation regarding these efforts are coordinated through the Provosts Office (ET, 2011) (ECE, 2008).

These Advisory Boards also address another issue mentioned in the National Survey of Student Engagement (NSSE) in 2004 that NJIT students were not gaining sufficient job

related skills. Students are provided access to and work with local Advisory Boards/industry partners to complete real world projects (refer to NJIT YouTube links).

11.2.6 Analysis of Curriculum Improvement Processes

Establishing NJIT Learning Communities

NJIT has begun efforts to create learning communities (Redling, 2011) that will be implemented in the fall of 2011 to engage and connect students and faculty in core areas utilized for each curriculum. Learning Communities engage students within a network of faculty, advisors, and peer mentors focused on facilitating their transition to college and enhancing their learning experience. The Learning Community structure creates an environment where students can celebrate a common purpose with integrity and civility. This will begin to address previous potential shortcomings described by students in a survey National Survey of Student Engagement (NSSE) in 2004 that indicated the need to enhance communication and rapport between students and faculty (IRP, 2004). The following is a description of NJIT's efforts from a recent Learning communities seminar (Gatley, 2010).

Each of the seven Learning Community discipline-based cohorts will be composed of approximately 25 students who are enrolled in the same set of three to four sections of linked or cluster courses. To support these cohorts, peer mentors will facilitate joint study sessions, extracurricular, paraprofessional and social activities. The goal is to increase student satisfaction and student engagement in their learning. The Engineering cohorts will be linked through courses in Humanities, Fundamentals of Engineering Design and Freshman Orientation. The Business cohort will travel among Humanities, Mathematics, Management 190 and Freshman Orientation. The Computer Science cohort will be taking courses in Mathematics, CS, and Humanities together.

11.2.7 The Process of New Program Approval

New programs result primarily from student and industry demand, disciplinary advances and faculty strengths. The process begins with a Department or program writing a program proposal that elucidates both the need for the program and its potential success. The proposal contains a rationale; an overview of the constraints and benefits the program will place on and bring to the offering unit; a description of core and required courses and their placement in a four-year curriculum; a clear articulation of how the program best utilizes other NJIT strengths and resources and incorporates the General University Requirements; a comparison of program offerings with NJIT benchmark universities; a listing of comparable programs within New Jersey as well as in the region; expected student FTE yield; and an external consultant's report that indicates the strengths, weaknesses and feasibility of success.

This report is presented to the Undergraduate Curriculum Review Committee (UCRC), in the case of a BA or BS degree program, or the Graduate Council (GC) in the case of an

MA, MS or PhD program. Should the program be offered as a joint degree with another institution, memoranda of understanding are created that articulate the full scope of expectancies on the parts of both institutions. In the case of programs developed within Federated Departments with Rutgers-Newark, the process described here is conducted in parallel with both units. At a UCRC/GC meeting, a representative of the Department offering the program proposal discusses the findings of the external evaluator and the other content of the proposal itself and presents a motion for adoption of the program. An affirmative vote results in the proposal being re-presented to the Committee on Academic Affairs (CAA), where discussion among Chairs, Deans and senior administrators concludes with a vote. Passage through CAA results in the program being presented to the full faculty, where comments, critiques and questions are brought up by voting members, discussion leads to a motion for approval, and an affirmative vote is presented to the Board of Trustees for consideration. An affirmative Board of Trustees vote results in a request from the President to the New Jersey Commission on Higher Education (2011), through the New Jersey Presidents' Council, for program adoption. The program is then listed in the *Inventory of Degree and Certificate Program Offerings at New Jersey Institutions of Higher Education*, which, updated regularly, contains information about the over 4,100 approved degree and certificate programs at licensed New Jersey institutions of higher education.

11.3 CRITICAL ANALYSIS AND CONCLUSIONS

Clearly, a coherent, engaging and professionally oriented curriculum for each program of study is fundamental to accomplishing the mission of the University, as well as providing a firm foundation for our students' future success. Advisory Boards and professional accreditation agencies compliment NJIT on its consistent provision of academic programs whose contents are rigorous; however, community engagement – both on campus and in Newark – another cornerstone of our mission, can be encouraged through a wider implementation of cohort-based learning communities and service learning opportunities.

NJIT programs that are professionally accredited undergo a comprehensive assessment protocol as part of their cyclical reviews, each requiring course objectives and program outcomes to align with our mission, and each employing strategies and tactics that have proven to be effective in maintaining quality in a continuous and rigorous fashion. Similar methodologies are being deployed for programs that are not professionally accredited, and these efforts should be monitored for effectiveness as the processes are implemented.

Retention is obviously a serious concern for NJIT, and many of the recommendations in this and other reports of the Working Groups speak to a variety of ways to increase the number of students who demonstrate tenacity and persistence in their studies. We believe that a set of general university requirements need not be relegated to disciplinary silos and be achieved solely within classroom walls. Rather, general education courses, often referred to as service courses, should reflect the applied, professional orientation of

the majors of study for which students attend NJIT. Recent changes in the both Mathematics and English composition, coupled with learning communities and service learning opportunities, will go a long way toward providing students with an understanding of the purpose and interrelationship of the requirements of their degree programs as they also are taught to think critically, analytically, and creatively. We firmly believe that increased student engagement and retention will result from a palpable demonstration of the interrelationships of disciplinary fundamentals in a professional context.

11.4 COLLABORATION WITH OTHER WORKING GROUPS

In scheduled meetings hosted by the Rapid Assessment and Steering Committee, our Working Group collaborated with other groups. Collaboration was also strengthened through meetings with the self study consultant (Robert Clark). Asynchronous communication was fostered through the open source content management system (Moodle); in that platform, the Working Groups collaboratively reviewed each stage of the planning and reporting process, from question design to outlines of the Working Group Reports, to edited review, to final copy.

Group 7's Chair and Co-chair often consulted with leaders of Working Group 4 and 14, sharing data and other information resources to enhance content and share related questions and scope.

11.5 RECOMMENDATIONS FOR IMPROVEMENT

Our first recommendation is to provide a professional orientation to all undergraduate degree programs and clearly align each program's vision with the goals of the NJIT mission, thereby reinforcing the relevance of professionally-oriented curricula for a technologically sophisticated audience. To accomplish this vision, programs should continue to update and align, through the annual self-study process, core courses of each major with objectives of the general university requirements. This can be accomplished through the UCRC process, designed to uncover commonality among course objectives and the curricular vehicles to correlate them.

This Working Group's second recommendation is to strengthen university-wide objectives and curricular assessment plans. We can achieve the vision of this recommendation by engaging program directors, department administrators, the Division of Continuing Professional Education and the curriculum committees in an integrated process of continuous improvement review protocols.

Our third recommendation from our Working Group is to assess strenuously the Community Connections pilot program in advance of developing a more comprehensive undergraduate experience. By increasing student engagement with their courses and with one another, students will have an opportunity to realize in myriad ways that successful ends come through collaboration, exchange of ideas and mutual support. A methodology

that could be instituted is strengthening the casement process, so that the faculty, peer mentors, administrators and advisors meet regularly to discuss the progress of individual students.

11.5.1 Recommendations Table: Standard 11: Educational Offerings

RECOMMENDATION 1	Provide a professional orientation to all undergraduate degree programs
➤ VISION: The desired future for the recommendation	Clearly align each program’s vision with the goals of the NJIT mission, thereby reinforcing the relevance of professionally-oriented curricula for a technologically sophisticated audience.
➤ STRATEGY: The methodology recommended to achieve the vision	Continue to update programs through the annual self-study process and align core courses of each major with objectives of the general university requirements.
➤ TACTIC: The specific action recommended to implement the strategy	Through UCRC, identify and index course objectives.
➤ ASSESSMENT: The metric recommended to measure achievement of the vision	
RECOMMENDATION 2	Strengthen university-wide objectives and curricular assessment plans.
➤ VISION: The desired future for the recommendation	Develop a university-wide program assessment system.
➤ STRATEGY: The methodology recommended to achieve the vision	Engage program directors, department administrators, the Division of Continuing Professional Education and the curriculum committees in an integrated process of continuous improvement review protocols.
➤ TACTIC: The specific action recommended to implement the strategy	Create a template-driven reporting system to be housed in Moodle.
➤ ASSESSMENT: The metric recommended to measure achievement of the vision	
RECOMMENDATION 3	Rigorously assess the Community Connections pilot program in advance of developing a more comprehensive undergraduate experience
➤ VISION: The desired future for the	Increase student engagement with their courses

recommendation	and with one another to realize successful ends that come through collaboration, exchange of ideas and mutual support.
➤ STRATEGY: The methodology recommended to achieve the vision	Review the relevance of existing social science GUR courses with the goal of revising their curricula to facilitate service learning.
➤ TACTIC: The specific action recommended to implement the strategy	Strengthen the student review process so that the faculty, peer mentors, administrators and advisors meet regularly to discuss the progress of individual students.
➤ ASSESSMENT: The metric recommended to measure achievement of the vision	

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