

***The NJIT Program Review
Process:***
Toward a Cohesive Educational
Assessment Framework

Presentation to NJIT Deans

Perry Deess

Norbert Elliot

Stephen Tricamo

Fadi Deek

MSCHE Steering Committee

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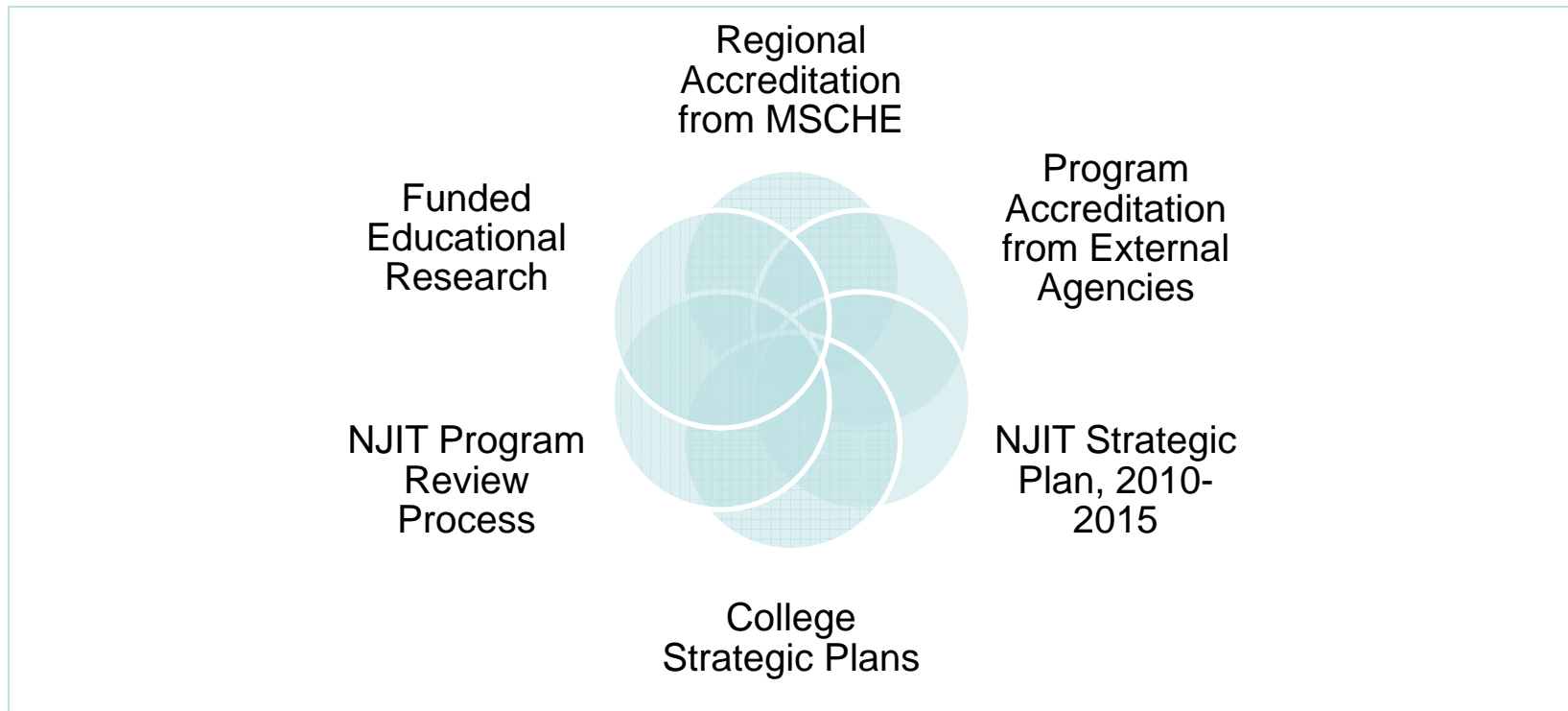
Overview

- Influences
- NJIT Strategic Plan, 2010-2015
- New Developments
- The Program Review Criteria
- Details of the Program Review Process
- Next Steps



What trends are influencing the assessment of student learning at NJIT?

Influences



NJIT Strategic Plan, 2010-2015

- Strategic priorities and objectives
 - Enhance the quality of academic and campus life for the university community
 - Objective: Refine outcomes assessment efforts in student learning to achieve continuous curricular improvement
- Outcomes Assessment Sub-Committee Members
 - John Cays, Fadi Deek, Perry Deess (Co-Chair), Norbert Elliot (Chair), Bob English, Margaret Fitzpatrick, Urs Gauchat, Narain Gehani, Blake Haggerty, Jim Lipuma, James McHugh, Ala Saadeghvaziri, Sunil Saigal, Steve Tricamo (Co-Chair), Leean Orama

Tactic 1: Standing Committee

- Create a standing committee for outcomes assessment
 - Metric: Use the existing structure for Committee for Department and Program Assessment

Tactic 2: Benchmarking

- Benchmark other universities in assessment efforts
 - Metric: Report on best practices in outcomes assessment

Tactic 3: Program Accreditation

- Identify commonalities in outcomes assessment among accrediting agencies and NJIT programs
 - Metric: Summary Report

Tactic 4: Review Criteria

- Revise current program review guidelines emphasizing best practices for programs not externally accredited
- Metric
 - Use existing Committee for Department and Program Assessment
 - Create new Sub-Committee on Assessment: Associate Deans, Faculty Council Representative, Master Teachers Representative, Academic Administrator, IRP Director (non-voting Chair)
 - Streamline review document based on core competencies, indicators of student learning, and documented process of continuous curricular improvement

Tactic 5: Program Review Process

- Create a campus-wide outcomes assessment effort
- Metric
 - Use the program review process to gather existing outcomes assessment efforts and experiment in new areas
 - Create a campus-wide education outcomes assessment document, based on the revised program review process, approved by UCRC, Graduate Council, and CAA including tracking of results from accrediting agencies

Tactic 6: Experiments

- Launch experiments in using new technologies in outcomes assessment
- Metric
 - NJIT tailored form of the Sloan QM Rubric
 - Employment of electronic portfolios

Tactic 7: Social Media

- Extend outcomes assessment efforts to graduates through Office of Alumni Relations
- Metric
 - Progress toward launching a social media effort aimed at graduates

Resolution and Coherence: The Program Review Process

Tactic 1: Standing Committee

Tactic 2: Benchmarking

Tactic 3: Program Accreditation

Tactic 4: Review Criteria

Tactic 5: Program Review Process

Tactic 6: Experiments

Tactic 7: Social Media



What new developments are influencing the assessment of student learning at NJIT?

New Developments 1: NJIT Model for eLearning

- TLT/DLA Committees
- February 24, 2010
 - Date of Unanimous Vote: The NJIT Framework for Quality Assurance in eLearning



The QM Eight Standards: Tailored to NJIT

1. Course Overview and Introduction
2. Learning Objectives
3. Assessment and Measurement
4. Resources and Materials
5. Learner Engagement
6. Course Technology
7. Learner Support
8. Accessibility



II.5 The learning objectives address content mastery, critical thinking skills, and core learning skills	PTC 603 – In the Course Website > Course Requirements of PTC 603, the learning objectives are expressed through the ability of the students to understand and communicate the principal concepts of the assigned readings to the other students in the class and to the Professor. Critical thinking skills are expressed through the use of interaction between the students and the Professor.	2	2	
II.5 The learning objectives address content mastery, critical thinking skills, and core learning skills	PTC 604 – The assignments in PTC 604 are created within a framework that supports the learning objectives. The approach found throughout the course address the core learning skills of writing and editing, document design, problem solving skills, and rhetoric development.	2	2	
II.5 The learning objectives address content mastery, critical thinking skills, and core learning skills	PTC 605 – In the Syllabus > Exercises section, students are told that the course lessons are designed to help convert the course material from theory into practical application.	2	2	
II.5 The learning objectives address content mastery, critical thinking skills, and core learning skills	PTC 606 – This course provides all eight of the core competencies learning skills found in the Competencies Matrix section of the Weekly Outline on the PTC 606 Moodle home site.	2	2	
II.5 Summary 	Each course does address the content mastery, critical thinking skills, and core learning skills as expressed through the course assignments. Because these are not expressed in a uniform manner, one recommendation is to provide a more direct and clearly expressed description of the learning objectives in each course as detailed in the Quality Matters standards of 11.1 – 11.5.			

Advantages of an NJIT eLearning Quality Assurance Model

- ✓ Adapt QM to course design and development
- ✓ Improvement not censure

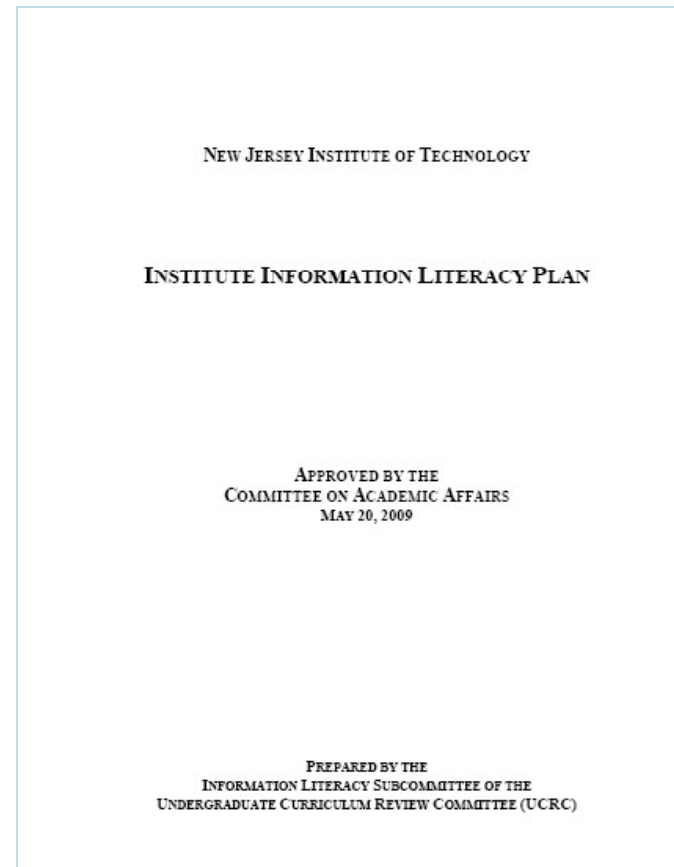
➤ ***Each programmatic unit designs unique eLearning Model based on the eight core standards***

Centered on

- ✓ research—the development of the rubric is based on national standards of best practice, the research literature, and instructional design principles.
- ✓ student learning—the rubric and process are designed to promote student learning.
- ✓ quality

New Developments 2: *The Institute Information Literacy Plan*

- Goal and Rationale
 - The goal of *The Institute Information Literacy Plan* is to ensure that NJIT undergraduate students graduate with appropriate information literacy skills.
 - Students graduate with adequate and competitive information literacy skills.



Timeline and Objectives: IL Plan

Timeline

The planned implementation timeline is as follows:

- 1) Departments or colleges develop their own IL plan (using form in Appendix II), for each of their undergraduate programs, due to UCRC by October 15, 2009. The plan should demonstrate where and how each of the eight competencies as they are expressed in the major area are (or will be) taught and assessed. The assessments may be graded assignments such as researched essays, oral presentations, field projects, examinations, theses, and researching codes, regulations, standards, etc. The information plan, the course curricula, syllabi and examples of student work will be demanded by our accreditation bodies as evidence of NJIT's incorporation of IL skill development in each program.
- 2) UCRC reviews the IL plans and responds to the departments or colleges by December 1, 2009.
- 3) All programs start implementing their IL plans in Spring 2010 semester.
- 4) All programs archive assessment evidence supporting their IL plans (i.e., graded examples of student work) in Fall 2010 and Spring 2011, in time for the May 2011 accreditation visit.

OUTCOMES	DESCRIPTION
1. Define the research topic and the need for information	<ol style="list-style-type: none"> a. Articulating a research question, problem, or issue. b. Obtaining background information to identify and define key concepts and terminology related to the research (e.g., putting the research question in context). c. Defining a manageable focus and timeline for completing the project. d. Identifying the types of materials that can be used for research (books, journals, Web sites, government documents, primary sources, datasets, media, technical reports, etc. (and that are needed and appropriate for the project). e. Recognizing that information may be limited, unavailable, or may not exist on a given topic.
2. Develop and implement an effective search strategy appropriate for an information need	<ol style="list-style-type: none"> a. Differentiating among the types of reference sources (specialized encyclopedias, article databases, citation indexes, bibliographies, library catalogs, search engines, etc.) and the purposes of each. b. Choosing and accessing appropriate reference sources for a given research question. c. Using search terms appropriate to the research tool and the topic. d. Transferring skills learned in previous research efforts to new projects.
3. Locate and retrieve information	<ol style="list-style-type: none"> a. Using the library's online catalog, online union catalogs, article databases, Web search engines, and other research tools effectively, in print and online. b. Interpreting citations accurately and using appropriate components of a citation to search for the items. c. Recognizing key elements of call numbers and URLs and using them to locate library materials and Web sites.
4. Evaluate information	<ol style="list-style-type: none"> a. Investigating the author's or sponsoring body's expertise, credibility, and points of view. b. Assessing the authority, accuracy, reliability, completeness, and timeliness of the information found in books, articles, Web sites, etc. c. Distinguishing between reliable and unreliable sources of information, scholarly and popular sources, substantiated facts and points of view.
5. Assess the research strategy	<ol style="list-style-type: none"> a. Determining whether the information retrieved is relevant and sufficient for the project or whether additional sources are needed. b. Analyzing successes and failures, revising research topics, and trying different techniques and research tools as needed.
6. Employ principles consistent with the ethical and legal uses of information	<ol style="list-style-type: none"> a. Demonstrating knowledge of the issues regarding intellectual property and plagiarism in a U.S. academic setting. b. Citing and acknowledging sources appropriately. c. Creating accurate references using a consistent citation style.
7. Organize, synthesize, and communicate information	<ol style="list-style-type: none"> a. Examining, categorizing, and storing citations to the materials discovered while conducting research, e.g., in reading and online searching. b. Managing the information selected and the research materials consulted. c. Using and integrating information from a variety of sources appropriate to the research question. d. Presenting the information in an effective and coherent manner to communicate it to others.
8. Effectively navigate the body of knowledge within the student's major discipline	<ol style="list-style-type: none"> a. Recognizing how the literature in the major discipline is organized. b. Distinguishing among primary, secondary, and tertiary sources in the major discipline and their uses. c. Using key research tools and databases in the major discipline.

How can the NJIT program review process serve as the centerpiece of the university student learning effort?

The Program Review Criteria: New Vision

- Core Values
 - Student-Centered
 - Useful
 - Economical
 - Evidence-based
 - Planned
 - Sustained
- Core Metrics
 - Articulated Program Goals Consistent with NJIT Mission
 - Delineated timetables
 - Use of Multiple Measures to Document Action
 - Shared Information

The Program Review Criteria: New Vision

- Core Strategies: Direct Evidence
 - Locally-developed Assessment
 - Embedded Course Assessment
 - Across-Course Assessment
 - Portfolios
 - Capstone Projects
 - Employer and Supervisor Surveys
 - Standardized Tests
- Core Strategies: Indirect Evidence
 - Retention, Graduation, and Placement rates
 - Surveys of Students and Alumni
 - ***Indirect evidence is necessary but not sufficient. Direct assessment is required.***

The Program Review Criteria: New Vision

The NJIT Outcomes Assessment Process is designed to answer:

1. Do NJIT leaders support and value a culture of assessment?
2. Are program and course goals integrated and articulated?
3. Are learning outcomes tied to these goals?
4. Have planned assessment processes been implemented?
5. Do assessment results provide convincing evidence?
6. Have appropriate actions been taken as a result of these decisions?
7. Have assessment results been shared with a variety of shareholders?
8. Have the use of assessment results led to appropriate decisions?
9. Have assessment processes been reviewed?
10. What is the direction of assessment at NJIT?

What are the details of the new program review process?

Orientation of Program Review

- Holistic
- Information-based
- Objectives-centered

- *To document indicators of student learning*
- *To demonstrate a process of review and revision*
- *To promote excellence*
- *To achieve transparency*

Committee Structure

- Committee for Department and Program Assessment
- Deans (Ex Officio), Faculty, Administrator, IRP Director
- Sub-Committee on Assessment:
 - Associate Deans
 - Faculty Council Representative
 - Master Teachers Committee Representative
 - Academic Administrator
 - IRP Director (non-voting Chair)

Evaluation Categories

- The Sub-Committee on Assessment makes one of three levels of recommendations:
 - Exemplary
 - Qualified Program
 - Not Qualified Program
- If Program is not qualified
 - Document case
 - Monitor for one year.
 - Formal review at end of two years
 - At end of two years if program not qualified, recommend to discontinue

Institutional Research and Planning Support

- Student enrollment by semester
- Student quality indices: SAT/GRE scores, applications/admissions
- Freshmen retention
- Student graduation rates
- Student course passing rates in major
- Student course passing rates in program
- Student GPA
- Students ratio of attempted and earned credits
- Student gender and ethnic diversity
- Barrier courses for the program (if appropriate)
- Faculty diversity
- Time to graduation

Program Director Responsibility

- Program oversight and management
- Aim of curriculum
- Objectives
- How curriculum meets objectives
- How delivery and resources contribute to meeting objectives
- Resources—human, physical, financial—to support the curriculum
- Measurement of student performance in courses
- Measurement of student performance across courses
- Measurement of student attitudes
- Perceived obstacles to meeting objectives
- On-going curriculum iteration
- Signature features, such as undergraduate research experience
- ***Evaluate and respond to student learning outcomes measures.***

Program Director Responsibility

- If eLearning Involved
 - *The Institute eLearning Quality Assurance Report*
- *The Institute Information Literacy Report*

Level of Reporting

- For accredited programs
 - Indicate sections of accreditation report that meet NJIT Program Review Standards
 - Submit *Institute Information Literacy Report*
 - Submit *Institute eLearning Quality Assurance Report* (if applicable)
- For not accredited programs
 - Completion of full report

Communicating Results: A Social Media Model

- New NJIT Outcomes Assessment Website
 - Description of NJIT Cohesive Program
 - Forum for Report Presentation
 - Presentations to Faculty and Administration
 - Educational Research
 - Web-based Promotion of Best Practices

What are the next steps to implementing the NJIT Program Review Process?

Process

- Committee for Department and Program Assessment Drafts *The NJIT Program Review Process*.
- Spring 2010 Field-Test Review of Model Programs
- Revisit and Review Document after Field Test
- Review by UCRC, Graduate Council, and CAA
- Fall 2010: Program Review Sequence Launched for all NJIT degrees



NJIT

THE EDGE IN KNOWLEDGE