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To: Subcommittee on Assessment: John Bechtold, Bruce Bukiet, John Cays, Barry
        Cohen, Perry Deess, Atam Dhawan, Norbert Elliot (NJIT Self-Study Committee
        Chair), Shanti Gopalakrishnan, Judith Redling (Subcommttee Chair), William
        Reynolds (Advisor), Ala Saadeghvaziri

From: Ad Hoc Committee on Assessment of the GUR Core Competencies: John Bechtold,
        Perry Deess, Norbert Elliot, Shanti Gopalakrishnan, Katia Passerini, Judith Redling,
        Richard Sweeney,

Assessment of the NJIT Core Competencies

On Friday, January 28, 2011, the Subcommittee on Assessment will meet to review progress
on the degree program assessment process. I am writing to update the Subcommittee on the
findings and recommendations of the Ad Hoc Committee on Assessment of the GUR Core
Competencies.

Distinct yet related to the program assessment process, assessment of the GUR Core
Competencies is required by the Voluntary System of Accountability (VSA). In order to
fulfill our commitment to this system and to comply with Standard 14 (Assessment of
Student Learning) of the *Characteristics of Excellence in Higher Education* (2009), we are
requesting that the Subcommittee review our recommendations and act rapidly to support the
assessment.

Background

At NJIT, assessment of student learning in all degree programs in all majors is performed
according to five Institutional Level Goals: (1) research-based inquiry, (2) ethical conduct,
(3) economic opportunity, (4) collaboration, and (5) engagement. Design of these
assessments are recorded in one-page reports; results of the assessments, as part of the
program review process, are recorded in ten-page reports submitted for review in a five year
cycle.

In a distinct yet related process, there are four performance-based NJIT Core Competencies
that are the foundation of the GUR assessment. These four competencies, their designated
tests, the test bank, test administrating details, and the expiration dates are identified below:

NJIT Core Competency	Test	Test Bank	Test Administration	Expiration Date
A. Writing	ETS Proficiency Profile	500	Online, non-proctored (2 hours)	None
B. Reading / Critical Thinking	ETS Proficiency Profile	500	Online, non-proctored (2 hours)	None
C. Mathematics	ETS Proficiency Profile	500	Online, non-proctored (2 hours)	None
D. Information Literacy	iCritical Thinking (ETS and Certiport)	500	Online, proctored (90 minutes). (Proctoring is necessary for students achieving proficiency to earn Certiport certification in this skills area.)	May 9, 2011

Hence, two tests are involved: The ETS Proficiency Profile and the iCritical Thinking (iCT) test.

To review and recommend the use of these tests, the Ad Hoc Committee met on November 22, 2010, to review and discuss the tests. The committee then met with NJIT Self Study Consultant Robert Clark on December 6, 2010. As well, the iCT test was field-tested by librarians on December 23, 2010.

Based on our meetings, e-mail discussions, conversations, and field-test, the Ad Hoc Committee makes the following ten recommendations with accompanying rationales:

Recommendation	Rationale
1. The NJIT Core Competencies should be assessed within each of the NJIT Colleges and Schools.	1. Adaptation and localization of the GUR are important to student learning as it relates to retention and graduation within Newark College of Engineering, the College of Science and Liberal Arts, the College of Computing Science, the College of Architecture and Design, the School of Management, and the Albert Dorman Honors College.
2. The test bank should be divided among the six NJIT Colleges and Schools.	2. While Institutional Research and Planning (IRP), in coordination with the Office of the Provost, will coordinate sampling plan design, members of the Sub Committee on Assessment will be most able to identify the more relevant courses and students for assessment.

3. The ETS Proficiency Profile and the iCT should be viewed both as assurances of student learning and as experimental in nature.	3. While it is important to gather norm and criterion-referenced information about student performance, it is equally important to use the tests to investigate student learning in areas where curricular innovation is underway. Use of the tests in experimental settings is especially recommended in learning communities and in curriculum using locally-developed tests measuring related constructs (e.g., Mathematical Sciences for mathematics, Humanities for writing, Federated History for critical reading, and School of Management for iCT). The use of the iCT is also recommended in courses identified as information-literacy intensive in accordance with the NJIT Information Literacy Plan.
4. Students must be prepared for the tests.	4. A budget of $9,600 has been allocated for support. This staff member should work with the six colleges to ensure that students are prepared and that the test data is collected and prepared for analysis by IRP.
5. To better understand the tests, members of the Sub Committee on Assessment should take the tests.	5. As the librarians have discovered, preparing for the test administration and taking the test reveal aspects of the tests that are important to sampling plan design and administration.
6. Immediately, pilot the tests with 60 to 90 students.	6. Field-testing the ETS Proficiency Profile and the iCT with a designated group of students will allow the Sub Committee on Assessment to understand more fully test administration and reporting details.
7. Administer and deplete the test bank (500 tests) of the ETS Proficiency Profile and the iCT to senior students who have taken 90+ credits (seniors) from every academic department during the Spring 2011 semester.	7. This administration will serve as a "post-test" administration so that we can learn more about student ability, through norm and criterion referenced analysis, of our students as they prepare to leave the institution.
8. Order and administer a new test bank (500 tests at a cost of approximately $18,000) of the ETS Proficiency Profile and the iCT to inbound first-year students during the early fall of 2011.	8. This administration will serve as a "pre-test" administration so that we can learn more about student ability, through norm and criterion referenced analysis, of our students as they enter the institution.
9. Create and initiate a follow-up survey for the Spring of 2011 and the Fall of 2011 administrations.	9. This survey, as well as other ancillary studies, will allow us to judge the efficacy of these tests to capture the constructs in the NJIT Core Competencies.

10. On the basis of empirical evidence of construct validity and test functionality, recommend continued use of the ETS Proficiency Profile and the iCT. As well, recommend continuation or withdrawal from the VSA.	10. MSCHE is clear in its advocacy of those tests and procedures that truly capture assessment of student learning. The NJIT community needs to understand more fully the match between tests and the NJIT Core Competencies and if participation in the VSA yields institutional value.

 We look forward to the review of the Sub Committee of our recommendations. The Ad Hoc committee believes that the plan sketched above will yield VSA and MSCHE compliance. As well, we believe that the plan will allow the institution to gain important information about undergraduate student competency, compared to benchmark institutions, on the NJIT Core Competencies.