

Strengthened Campus-Based Assessment Plan

Fashion Institute of Technology
February 15, 2006

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I. Introduction

This document is intended to address two major issues: (1) FIT's proposal for Strengthened Campus-Based Assessment (SCBA) and (2) our ongoing Campus-Based Assessment now in its second Cycle. It is in response to the SUNY request that SCBA be implemented for four areas: Critical Thinking, Mathematics, Basic Communication [Written] and The Academic Environment.

While the impetus for this assessment initiative came from SUNY, it parallels developments by other bodies having accreditation and/or regulatory oversight for FIT – The Commission of Higher Education of the *Middle States Association*, the National Association of Schools of Art and Design (NASAD) and the Foundation for Interior Design Education Research (FIDER). FIT's original assessment Plan was intended to meet the requirements of these agencies as well as those of SUNY. We adhere to the principle that the major purpose of assessment is the improvement of learning, while also acknowledging its accountability role.

Assessment is a complex undertaking that includes the development and/or selection by faculty of multiple measures to assess student learning and the achievement of goals and objectives. We are currently focusing on the critical next step of implementing recommendations to strengthen student learning outcomes which are a result of the assessment process.

II. Strengthened Campus-Based Assessment

In response to the SUNY initiative for Strengthened Campus-based Assessment (SCBA), FIT's proposal is in large part based upon the college's experiences in the first cycle of general education student learning outcomes assessment.

SCBA is a continuation of Campus-Based Assessment but with an emphasis on the use of external referenced assessment instruments. This will enable us to see our results in context with a broader reference of institutions within SUNY and nationally.

FIT is proposing to use a variety of approaches for SCBA. In assessment of Basic Communication (Written) we propose to use the GEAR rubrics which are very similar to the rubrics prepared by our own English Department faculty for the first cycle of Campus-Based Assessment. In assessment of Critical Thinking we propose to use the ACT-CAAP instrument which has been prepared to map to the SUNY reporting requirements.

While there is no final nationally normed measure identified by SUNY for the assessment of Mathematics we are proposing to use the instrument that SUNY selects.

(See **attachment-A** for FIT's proposed SCBA schedule.)

Summary of GEAR Criteria and FIT SCBA Plan

The following presents a summary of the GEAR Criteria and how FIT will meet these criteria in our SCBA plan.

1) And 2) GEAR Group criteria concerning the objectives for student learning in General Education and programmatic activities intended to accomplish these campus' objectives are unchanged.

3) We are proposing to use GEAR approved direct measure of student learning that are objective or have face validity as determined by discipline-based panels' rubrics.

We plan to use GEAR rubrics in Basic Communications (Written).

We will have two independent scorers who have participated in training and norming sessions for inter-observer reliability. This process was successful in our original CBA of Basic Communications. In both Mathematics and Critical Thinking we propose to use nationally normed and SUNY recommended measures of student learning outcomes.

We intend to have a 20% sample of the relevant students with our Institutional Research Office selecting the sections and or students as required for a representative sampling of students including both Art and Design and Business and Technology undergraduate majors.

4) The Critical Thinking proposal which is the only entirely new proposal includes the standard defining the four levels of student performance. (See attachment-B). The other criteria are unchanged.

5) There are no changes in the college's mechanisms for sharing assessment results with appropriate faculty and staff to encourage programmatic improvement based on the assessment results. The Faculty Senate Ad Hoc Committee on Assessment, the Departments, Schools, Deans and Academic Vice President will all be included in sharing the information and working to improve learning outcomes.

6) The mechanism for assessing the campus academic environment is described in section II-A.

7) The current SCBA plan has been proposed by the relevant departments and faculty. It has been approved by the Faculty Senate Ad Hoc Committee on Assessment and is pending before the Executive Committee of the Faculty Senate.

8) The timetable is attached. (See attachment-A)

9) There is no change in the provisions for evaluating the assessment process itself and disseminating assessment results.

A. Assessment of Critical Thinking

FIT will be assessing critical thinking for the first time in the spring 2006 term. Based on a review of the rubrics prepared by the SUNY discipline-based panel and the nationally normed instrument from ACT (with the inclusion of items that map to the SUNY reporting requirements) the decision has been made to use the ACT instrument. The test will be given to graduating seniors in their last term and will be administered in courses that will provide a 20% sample across majors from both the Art & Design and Business & Technology Schools. The actual courses and sections will be selected by Institutional Research to provide an appropriate sample. [**The Critical Thinking proposal - attachment-B**]

B. Assessment of Mathematics

FIT will be using the nationally normed measure identified by SUNY for Strengthened Campus-Based Assessment of student learning outcomes in Mathematics. Students in their final required mathematics course will be tested using the measure SUNY selects. In the first general education assessment of mathematics the mathematics faculty used their own set of tests to meet the five outcomes required. They sampled approximately 90% of the students in their last mathematics course at FIT. As the faculty have stated in their proposal [**Mathematics proposal-attachment-C**] they strongly feel that to adequately cover a highly heterogeneous student body it is necessary to include as many students as possible in the sample. Therefore they are requesting funding from SUNY to continue the practice of attempting to test the entire population. This assessment will occur in Spring 2008 according to the current FIT schedule.

C. Assessment of Basic Communication (Written)

Assessing student learning outcomes in Basic Communications (Written) FIT's English Department faculty has chosen to follow the rubrics developed by the SUNY discipline-based panel. During the first cycle of general education learning outcomes assessment the English Department at FIT constructed their own rubrics for assessment.

After review of the SUNY rubrics for writing the English Department faculty felt that they were similar to their own rubrics and recommended adopting the SUNY standards. This will require faculty training in norming sessions for the application of rubrics and will require two independent readers for evaluation of students' papers and portfolios to provide inter-observer reliability as cited in the SUNY memo of October 4, 2005.

The students selected will be a 20 % sample of those students enrolled in either EN-121 or EN-362 in the Fall 2006 term. The review of the student work will take place at the beginning of the Spring 2007 Term.

[English Department proposal -attachment – D]

D. Assessment of Academic Environment

The college has evaluating both the National Survey of Student Engagement (NSSE) and the Community College Survey of Student Engagement (CCSSE). There is a consensus that the NSSE is most appropriate for FIT. The NSSE is more focused on issues of concern to the academic environment on an urban campus with a significant and increasing proportion of students enrolled in Bachelor Degree programs. While FIT remains committed to our Community College two year programs our mission to the students and industries we serve has required an expansion in our Bachelor Degree programs. We propose to examine the results of the NSSE in comparison with the student learning outcomes to ascertain any significant patterns between the data sets and identify ways to make improvements. The NSSE will be given to a 20% sample of our student body as representative and appropriate. The NSSE survey will be given in the spring of 2007.

III. Campus-Based Assessment: Completion of First Cycle and Implementation of Second Cycle

In accordance with our original Assessment Plan for General Education, initiated in fall 2003, we have assessed eleven of the twelve General Education Student Learning

Outcomes: First year 2003-2004	Second year 2004-2005
Basic Communication	American History
Information Technology	Foreign Languages
Mathematics	Humanities
Natural Sciences	Other World Civilizations
Social Sciences	
Western Civilization	
The Arts	

The remaining area, Critical Thinking, is scheduled for assessment this spring 2006. (See attachment B)

Implementation of Second Cycle of Campus-Based Assessment in General Education

The critical thinking assessment proposal that is completing our first cycle and commencing our second cycle of assessment at FIT has already been discussed. The remaining three learning outcome areas to be assessed in spring 2006 (see schedule attached) will include; Natural Science, Social Sciences and Western Civilization. Social Sciences and Western Civilization are continuing with the assessment plans already approved.

The Natural Science faculty would like to make one change to their assessment plan. They would like to use the ACT-CAAP general science test to cover the first learning outcome under the Natural Sciences, which assesses students' understanding of the methods of science. The second science outcome will use the existing test already developed by the science faculty. In the first cycle they used their own test for both science outcomes and in the second cycle would like to use a nationally normed instrument for the first outcome which will allow for comparison with other public post secondary institutions. The CAAP test will be administered to 20% of the students fulfilling their natural science requirement during the Spring 2006 Term. This includes those students registered in Biology, Earth Science and Physical Science.

[Natural Science proposal- Attachment-E]

Attachment-A
Strengthened Campus-Assessment Proposal

FIT's Assessment Time Table

CYCLE 2

Year One 2005-2006

Natural Sciences
Social Sciences
Western Civilization
Critical Thinking (from Cycle 1)

Year Two 2006-2007 – **First Year SCBA**

The Arts
Basic Communications (Writing)
Information Management
NSSE

Year Three 2007-2008 – **Second Year SCBA**

American History
Foreign Language
Humanities
Other World Civilizations
Mathematics

Third Year SCBA 2008-2009

Critical Thinking
Natural Sciences
Social Sciences
Western Civilization

Note: Areas in **bold** reflect SCBA

Assessment of Student Learning Outcomes in Critical Thinking

Plan in Progress – Spring 2006 Implementation

Description of Assessment Plan

In response to the SUNY mandate for assessment of student learning outcomes, a plan has been developed in fall 2005 to assess student skills in Critical Thinking within the parameters established by the General Education Assessment Review (GEAR) Group in October 2005. As described below, this plan calls for the assessment to be implemented in spring 2006. Because FIT is one cycle behind in assessment of Critical Thinking, our plan calls for this first round of assessment to conform to Strengthened Campus-Based Assessment (SCBA). With this accelerated planning, the campus will be better prepared for future rounds of Strengthened Assessment. The effectiveness of this approach is nevertheless dependent upon SCBA parameters remaining constant, as we have been assured they will.

As such, the assessment will attempt to measure and report on students' general education learning outcomes in Critical Thinking in two skill sets, as defined by the GEAR group:

- the ability to identify, analyze, and evaluate arguments as they occur in their own and in others' work.
- the ability to develop well-reasoned arguments.

Rational for Proposed Plan

To fulfill the SUNY Critical Thinking assessment mandate, for this cycle we have chosen to administer the SUNY-approved Collegiate Assessment of Academic Proficiency (CAAP) Critical Thinking exam, administered by ACT as tailored for the SUNY assessment process.

We have chosen to implement the CAAP exam although the GEAR guidelines provided two assessment options other than a standardized, nationally normed measure: a locally developed instrument that was demonstrated to correlate statistically with nationally normed measures; or, a locally developed instrument employing Critical Thinking rubrics that were either written by the GEAR group or that were locally developed but approved by the GEAR group. In order to expedite the planning and implementation process, for the present time we have elected to forego locally developed instruments and rubrics, in part because statistical correlation (i.e., measuring concurrent validity) and GEAR approval of locally developed rubrics and instruments would have substantially extended the time-line of planning and implementation.

The GEAR-approved CAAP Critical Thinking exam is a 40-minute, 32-item, pencil-and-paper standardized test that, through extended reading-comprehension passages and questions, purports to measure students' skills in analyzing, evaluating and extending arguments. Limited review of sample passages and questions has confirmed that the

CAAP exam can likely conform to SUNY and GEAR expectations, both in terms of the skills measured and in terms of the score reporting. To satisfy expectations of the SCBA and the GEAR group, ACT will provide (for an additional fee) a Subscore Report that supplements their standard reporting package. The Subscore Report is specifically tailored to map to SUNY's two Critical Thinking learning objectives (noted above). Although it is expected that the CAAP exam's implementation will be successful, it is nevertheless crucial to examine the efficacy of a 40-minute, multiple-choice test in measuring a skill as nebulous, complex, and multifaceted as Critical Thinking. In some respects, the standardizations required by SUNY's mandate appear contrary to the concept of Critical Thinking itself, and to how it is cultivated and evaluated in the classroom. Therefore, we will carefully review the testing process and results to determine whether locally developed instruments and rubrics, more precisely attuned to the particular teaching and learning environment at FIT, are preferable in future cycles of Critical Thinking assessment.

Assessment Implementation, Sample Size and Standards

The CAAP exam will be administered in spring 2006 to approximately 150 graduating baccalaureate students from the schools of Art & Design and Business & Technology. This is approximately a 20% sample of graduating students, which provides the opportunity to assess students from a range of majors. It is also the maximum sample size for which SUNY will cover the assessment costs (listed below).

In consultation with Diane Philips, Director of Institutional Research at FIT, we will examine enrollment to determine the sections in which the CAAP exam will be administered. Targeted sections will include those with primarily graduating students; other enrollment factors will include the number of students in different sections, as well as the distribution of majors within courses. Presently, we estimate that the CAAP exam will be administered in approximately eight to ten sections. If, after considering the most effective sample group and sections, it appears that the distribution of majors or schools is uneven, this imbalance can be corrected in future rounds of Critical Thinking assessment. It should be noted that it is not possible to achieve a statistically perfect sample when incorporating the assessment examination into regular course sections; nevertheless, this remains the most effective approach because of the minimal impact on student schedules and because of the need to achieve high compliance and motivation. Once appropriate sections have been identified, the forty-minute CAAP exam will be administered following the midterm. This will ensure full attendance and will also minimize the loss of classroom time, since most midterm exams do not occupy an entire class meeting. Students who are not graduating can be identified and will be excused before the assessment exam, and will therefore be excluded from the test sample. The CAAP Standard Reporting Package documents student achievement levels on individual, group, and institutional bases.¹ We may also purchase the supplemental CAAP Critical Thinking SUNY Subscore Report, which will provide results for the two mandated learning objectives and will classify students into ACT-defined proficiency groups. With the wide range of data provided in the CAAP score reports we will also be

¹ Refer to the *2005-2006 CAAP Reporting & Research Services Manual* for further details and for sample score reports.

able to classify scores further, including with standards similar to those used for the Humanities and the Western Civilization assessments:

<u>correct answers</u>	<u>standard</u>
90-100%	exceeding
70-89%	meeting
60-69%	approaching
below 60%	not approaching

Costs:

According to the ACT website, the 2005-2006 CAAP exam will include the following fees.

annual participation fee:	\$350.00	\$350.00
test scoring fee (approx. 150 students)	\$11.55 per student	\$1732.50
SUNY subscore report fee:	\$150.00	\$150.00
CD report fee:	\$32.00	\$32.00
Total:		\$2264.50

(additional subscore reports, supplementing the Standard Reporting Package and the special SUNY report would be \$32.00 each.)

Tentative Schedule:

Fall 2005

- Consult with Diane Philips (Institutional Research) and consider potential sections in which to administer the CAAP Critical Thinking exam.
- Consider how the SCBA Critical Thinking proposal can be modeled on the current Critical Thinking Assessment.

February 2006

- Consult enrollment statistics and determine the sample size and the specific sections in which the CAAP Critical Thinking exam will be administered.
- Order CAAP Critical Thinking exams.

March 2006

- Administer CAAP Critical Thinking exam.

Spring 2006

- Deliver CAAP Critical Thinking score reports to SUNY.

Fall 2006

- Discuss and analyze exam implementation and results.
- Discuss potential changes to be implemented in future cycles of SUNY-mandated Critical Thinking assessment
- Consider the possibility of locally developed instruments and rubrics.

Attachment-C

Fashion Institute of Technology Second Round Mathematics Assessment Plan

The first round of FIT's mathematics assessment was successfully completed in the fall 2003. The assessment produced valuable information which has led to a strengthening of a number of aspects of the FIT mathematics program. The first round assessment process used locally constructed tests and attempted to test the entire population of students taking their last mathematics course at FIT. The tests were administered in the mathematics classes. Each student was randomly given one of the five possible tests corresponding to the five mathematics topics covered in the assessment.

The second round mathematics assessment plan, which is scheduled to take place during the spring 2008 semester, proposes a structure similar to that used in the first round. The main difference, other than the change in mathematics topics covered by the assessment as mandated by SUNY, is that the second round will use commercially produced, nationally-normed, tests recommended by SUNY. In all other respects the second round plan follows the first round assessment process.

The first round tested approximately 90% of all students taking their last mathematics course at FIT. There was little extra cost associated with testing nearly the entire population in the first round because the tests were created in-house. Because the second round plan proposes using tests that are commercially produced, administering the test to the entire population instead of to the 20% sample recommended by SUNY would incur extra costs. For a number of reasons the mathematics faculty feels, however, that administering the test to the entire population is necessary to obtain an accurate picture of the level of mathematics achievement at FIT.

The main reason, as explained below, that the mathematics faculty recommends testing the entire population is the difficulty of obtaining a representative and sufficiently large sample of students in all majors from a sample of 20% of the population.

FIT students are highly heterogeneous. Entering students are admitted into majors whose curriculum and mathematics requirements vary greatly. Since most of the classes students take are determined by their major, an unintentional tracking by major exists. For example, students in a particular section of a course such as MA 213, Quantitative Methods, may be primarily from a small number of majors because the section fits their schedules. Another section of the same course may have no students from these majors. Therefore it would be difficult, if not impossible, to choose a sample of sections that would fairly represent all majors. Another difficulty lies in the small number of students in some majors, which may have as few as 15 students taking a terminal mathematics course at any one time. Since an important goal of the assessment process is to perform an analysis of the data by major, a 20% sample could produce so few students in a given major so as to be meaningless. This situation is compounded by the fact that five different tests are given, which means that a 20% sample would yield on average a 4% sample for each test.

Attachment-D

English and Speech Department
Fashion Institute of Technology-SUNY
October 2005

Proposal for **Strengthened Campus-Based Assessment: Written Communication**

During the academic year 2006-2007, the English and Speech Department will conduct its first round of strengthened campus-based assessment of written communication, to occur thereafter on a biennial basis. This proposal outlines the timeline, process, and criteria to be used by the department in conducting this first-round assessment.

I. Overview

The English and Speech Department will assess written communication in EN 121 and EN 362, the two courses SUNY has approved for this Knowledge and Skill area at F.I.T.

II. Learning Objectives

The learning objectives the English and Speech Department will use for the assessment are the two established SUNY learning outcomes for written communication: Students will be able to

- Produce coherent texts within common college-level written forms
- Demonstrate the ability to revise and improve such texts

III. Schedule

A. Spring 2006

1. Departmental assessment coordinator works with Director of Institutional Research to determine number of students necessary for sampling.
2. Instructors teaching EN 121 and EN 362 in the fall 2006 are reminded of the plan and given guidelines and suggestions for participating.

B. Fall 2006

1. Department conducts assessment of written communication for EN 121 and EN 362 courses.
2. Students are given a handout explaining the assessment process.
3. Norming sessions are offered during the semester for faculty committed to evaluating student writing samples.
4. Writing samples are obtained at the end of the semester.
5. Samples are evaluated by two instructors (who are not teaching the students being evaluated) during the week of spring 2007 convocation.

IV. Assessment Process

- A. *Assessment Measures.* To determine student mastery in the established outcome areas, the English and Speech Department will use a sampling of student papers, drawn from work they have done for their classes during the fall 2006 semester.
- B. *Sampling.* A 20% sample size is required by SUNY for strengthened campus-based assessment. Based on past enrollment and based on the written communication assessment conducted in 2003-2004, approximately 200 students from EN 121 and EN 362 courses will need to be selected. These students will be determined at random from class rosters on Banner and their instructors will be notified and asked to provide a sample of student work.
- C. *Composition of Sample.*
 - 1. Number of Essays. The department has yet to determine the sample's exact composition, whether an individual essay (plus an early draft of that essay) or a portfolio of student work.
 - 2. Evidence of Revision. The sample will include two versions of an essay: an early draft and a revised version.
- D. *Standards and Criteria for Evaluation.* The English and Speech Department will use the rubric developed by the Writing-Discipline Committee of GEAR to evaluate the student writing samples.
(<http://www.cortland.edu/gear/WritingRubrics.Final.pdf>.)

Attachment-E

NATURAL SCIENCES ASSESSMENT PLAN

THE DEPARTMENT OF SCIENCE AND MATHEMATICS FASHION INSTITUTE OF TECHNOLOGY

INTRODUCTION

In accordance with the State University of New York's mandate to assess learning outcomes, the Fashion Institute of Technology (FIT), department of Science and Mathematics is planning to assess students using the two defined learning outcomes. The first learning outcome (Learning Outcome #1) assesses students' understanding of the methods scientists use to explore natural phenomena, including observation, hypotheses development, measurement and data collection, experimentation, evaluation of evidence and employment of mathematical analysis. The second learning outcome (Learning Outcome #2) assesses student's application of scientific data, concepts and models in one of the natural sciences. For the Spring 2006 administration of the Natural Science Assessment at FIT it is proposed that the following two instruments be used. The College Assessment of Academic Proficiency (CAAP) standardized general science exam will be used to satisfy learning outcome #1 and a departmentally prepared subject specific exam (10- 15 questions) will be used to satisfy learning outcome #2. The completion of the assessment outlined above will result in data that can be used to improve department offerings and student understanding of core scientific concepts.

ASSESSMENT INSTRUMENT & SAMPLING METHOD

The Natural Sciences assessment of students completing their liberal arts science requirements at The Fashion Institute of Technology will address two distinct learning outcomes. To assess learning outcome #1, the CAAP general science exam will be administered to 20 % of the students fulfilling their liberal arts requirement during the Spring 2006 semester. Participating sections will be chosen by FIT's office of Institutional Research. The CAAP exam is a 45 question exam that requires 40 minutes to complete. The use of standardized CAAP exam will replace the departmental exam developed and used to satisfy learning outcome #1 in the Spring 2004. Transition to the standardized CAAP exam will allow for the comparison of FIT students completing their liberal arts science requirement with students at other public and private post secondary institutions completing their liberal arts science requirement. The previous instrument used in the Spring 2004 semester compared only FIT students. Assessment of student's proficiency within one of the major disciplines (Learning outcome #2) will be assessed using a subject specific multiple choice exam developed by the department. The Spring 2006 assessment instrument for learning outcome #2 will include slight modification to the instrument used in Spring 2004. A minimum of 20 % of the students taking their liberal science requirement will be assessed within each of the major areas including Biology, Earth Science and Physical Science.