

## DRAFT

### **Strengthened Campus-Based Assessment Plan** State University of New York at New Paltz February 1, 2006

We are pleased to report that SUNY New Paltz used a consultative approach in developing its *Strengthened Campus-Based Assessment* (SCBA) plan. Although time-consuming, this approach resulted in greater understanding among faculty of the issues involved in implementing *Strengthened Campus-Based Assessment*. Faculty and professional staff were asked to respond to two key issues. First, if they preferred to use SUNY-normed measures or externally-referenced measures in assessing Mathematics, Basic Communication-Written, and Critical Thinking, and second, if they preferred to use the National Survey of Student Engagement (NSSE) or another survey—not yet approved by SUNY—to measure students’ engagement in academic activities.

In addition to obtaining faculty and professional faculty responses to the key issues above, faculty were required to submit assessment plans for courses in the three SCBA areas. The GE Board has reviewed the assessment proposals that the faculty submitted and provided feedback on each plan. The feedback to faculty has centered on three key issues: (a) connecting assignments to the SCBA General Education learning outcomes; mapping each SCBA GE learning outcome to a set of standards (i.e., standards that define the level of student performance that constitutes exceeds, meets, approaches, and does not meet); and (b) using assessment results for programmatic improvements.

#### **Strengthened Campus-Based Assessment Plan**

We have used the GEAR Group’s nine criteria to organize our responses to the major actions required in the implementation of *Strengthened Campus-Based Assessment*; namely, (a) assessment of the three student learning outcome areas (i.e., Mathematics, Critical Thinking, Basic Communication-Written) and (b) assessment of students’ perception of the campus’ academic environment. Below are GEAR’s nine criteria followed by the campus’ responses.

#### **1. The objectives for student learning in General Education relate directly to the student learning outcomes defined in the *Implementation Guidelines* of the Provost’s Advisory Task Force on General Education.**

New Paltz’s objectives for the student learning outcome areas in Mathematics, Basic Communication-Written, and Critical Thinking are below. These are the objectives that have been defined in the *Implementation Guidelines* of the Provost’s Advisory Task Force on General Education.

#### **Critical Thinking**

Students will:

- Identify, analyze, and evaluate arguments as they occur in their own or others' work; and
- Develop well-reasoned arguments.

### Mathematics

Students will demonstrate the ability to:

- Interpret and draw inferences from mathematical models such as formulas, graphs, tables, and schematics;
- Represent mathematical information symbolically, visually, numerically, and verbally;
- Employ quantitative methods such as arithmetic, algebra, geometry, or statistics to solve problems;
- Estimate and check mathematical results for reasonableness; and
- Recognize the limits of mathematical and statistical methods.

### Basic Communication-Written

Students will

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

## **2. Programmatic activities intended to accomplish the campus' objectives for student learning are described.**

The campus' process for designating courses as General Education courses has remained unchanged since the GEAR Group approved our original General Education assessment plan. All of our GE courses and their assessment methods are approved through the Curriculum Committee.

## **3. The measures developed to assess student learning are designed to provide credible evidence of the extent to which students have achieved the learning outcomes or skills stated in the objectives.**

New Paltz has decided to use the scoring rubrics and standards developed by the SUNY-wide discipline panels in assessing General Education courses in Mathematics, Basic Communication-Written, and Critical Thinking.

The campus has established assessment measures and a well-defined process to help in determining the degree to which students have mastered each learning objective in the three SCBA areas. In terms of sampling, we will collect assessment data (e.g., writing samples,

portfolios, multiple choice tests) that relate to each SCBA learning objective from students enrolled in GE courses in the three SCBA areas at the time of the assessments. The data we collect will be *representative* because they will include at least 20% of the total number of students enrolled in the GE approved courses and sections offered during the semester of the assessments. The minimum 20% sample will be randomly selected.

All of the assessment plans approved by the GE Board have addressed the issue of inter-rater reliability. Norming sessions will be held during which the course instructor and another independent scorer will rate a minimum 20% sample of students' work (i.e., portfolios and writing samples). This will be done to ensure that the measures accurately reflect students' achievement of the SCBA learning objectives. Norming sessions will occur each time the SCBA objectives are assessed to establish reliability of the assessment measures.

New Paltz will assess the SCBA areas of Basic Communication-Written, Mathematics, and Critical Thinking for the first time in Spring 2007. Because Critical Thinking is an infused competency, we would like to assess our General Education courses with this competency when the category assessments are conducted. We, therefore, plan to assess our General Education courses with the Critical Thinking competency according to the following schedule and report the data to GEAR every three years.

The Arts, Basic Communication, Mathematics, and Foreign Languages	Spring 2007
Humanities, Natural Sciences, Social Sciences, and Western Civilization	Spring 2008
Other World Civilizations and American History	Spring 2009

This assessment cycle for Mathematics and Basic Communication-Written will be repeated every 3 years.

**4. The plan proposes standards to which student performance relative to the learning outcomes in the objectives can be compared.**

As a campus, New Paltz relied heavily upon the rubrics and standards developed by the SUNY-wide discipline panels to assess students' performance relative to the learning outcomes in the objectives. In many cases, course instructors adapted these rubrics and standards to their specific assignments. We have included samples of course assessment plans for the three SCBA areas in appendix A.

**5. The anticipated results of the assessment are able to affirm the degree to which the learning objectives have been achieved and thus make it possible to identify areas that need to be addressed in order to improve learning.**

Our process and methodology for achieving this criterion has not changed since the GEAR Group approved our original assessment plan. We believe that our assessment methodology is

sound and anticipate that the results of the SCBA assessments will validate the degree to which students have achieved the GE learning outcomes and identify areas to be addressed in order to improve learning.

**6. Mechanisms for assessing the campus' academic environment are described.**

We would like to administer the College Student Experience Survey (CSEQ) to assess our students' engagement in academic activities. Beginning in Fall 2007—and every three years thereafter—we will administer the CSEQ to a random sample of upper division students.

The CSEQ has good psychometric properties. It is valid, reliable, and will be administered in a manner that will ensure representative sampling. With respect to content validity, the CSEQ measures students' engagement in academic activities. The CSEQ arranges questions under the general construct of how students spend their time in college—with faculty and friends and in classes. It also asks students about their engagement in social and cultural activities, extracurricular activities, employment, and use of campus facilities such as the library and student center. Table 1—found in appendix B—shows selected items from the NSSE and their correspondence to items on the CSEQ. Additional normative properties (e.g., discrimination, reliability, and validity) of the CSEQ are presented in appendix C.

We will be able to obtain separate sub-scores for each statement on the CSEQ. We will also be able to obtain CSEQ norms tables by Carnegie classification and by Barron's competitiveness ranking. As such, we will be able to use the data from this questionnaire for benchmarking purposes. Moreover, representatives from the GE Board and Offices of Academic Affairs, Student Development (i.e., the Orientation Program), and Institutional Research will examine the student learning outcomes results and the data from the CSEQ to try to discern patterns between the data sets, and, most importantly, will identify and make improvements as appropriate.

New Paltz would like to administer the CSEQ because of its strong psychometric properties—which we have previously described--and because of our interest in learning more about the experiences and expectations of our students. Over the last six years, our institution has substantially increased the quality of its incoming freshmen. Understanding the expectations of our students, both in terms of administrative services as well as their in-class and out-of-class experiences and needs is an institutional priority. We believe the CSEQ and its companion, the College Students Expectations Questionnaire (CSXQ) which we administer to incoming freshmen and transfers, will yield useful data to assist us in meeting our students' needs. It should be noted that although the CSXQ is designed for use with the CSEQ, they are distinct survey instruments.

**7. The assessment plan has been reviewed and approved through the appropriate curriculum and faculty governance structures.**

Our assessment plan has been reviewed and approved by appropriate curriculum and governance bodies.

- 8. The plan adheres to the timetable established by the GEAR Group and agreed to by the University Provost.**

The assessment of all of the SCBA learning outcomes will adhere to the 3-year cycle established by the GEAR Group.

- 9. The assessment process includes provisions for evaluating the assessment process itself and disseminating assessment results to the appropriate campus community.**

The campus' process for sharing SCBA results will be consistent with the process approved by GEAR in our original assessment plan.

## Appendix B

Table 1: Examples of CSEQ and NSSE Item Correspondence

NSSE	CSEQ
1a. Asked questions in class or contributed to class discussions	<ul style="list-style-type: none"> <li>• Contributed to class discussions.</li> <li>• Used information or experience from other areas of your life (job, internship, interactions with others) in class discussions or assignments.</li> </ul>
1c. Prepared two or more drafts of a paper or assignment before turning it in	<ul style="list-style-type: none"> <li>• Revised a paper or composition two or more times before you were satisfied with it.</li> </ul>
1d. Worked on a paper or project that required integrating ideas or information from various sources	<ul style="list-style-type: none"> <li>• Worked on a paper or project where you had to integrate ideas from various sources.</li> </ul>
1i. Used an electronic medium (listserv, chat group, Internet, instant messaging, etc.) to discuss or complete an assignment	<ul style="list-style-type: none"> <li>• Participated in class discussions using an electronic medium (email, list-serve, chat group, etc).</li> </ul>
2e Applying theories or concepts to practical problems or in new situations	<ul style="list-style-type: none"> <li>• Applied materials learned in class to other areas (your job or internship, other courses, relationships with friends, family, co-workers, etc.).</li> </ul>
3b. Number of books read on your own (not assigned) for personal enjoyment or academic enrichment	<ul style="list-style-type: none"> <li>• Read articles or books about personal growth, self-improvement, or social development.</li> <li>• Read articles about scientific or mathematical theories or concepts in addition to those assigned for class.</li> </ul>
5. Mark the box that best represents the extent to which your examinations during the current school year have challenged you to do your best work.	<ul style="list-style-type: none"> <li>• Worked harder than you thought you could to meet an instructor's expectations and standards.</li> </ul>
6a. Attended an art exhibit, gallery, play, dance or other theatre performance	<ul style="list-style-type: none"> <li>• Went to an art exhibit/gallery or play, dance or other theatre performance on or off the campus.</li> </ul>
7d. Worked on a research project with a faculty member outside of course or program requirement	<ul style="list-style-type: none"> <li>• Worked with a faculty member on a research course.</li> </ul>

Reference: Pace, C. R., & Kuh, G. D. (1998). *College students experiences questionnaire* (4th ed.). Indiana University.

## Appendix C

### College Students Experiences Questionnaire Norms

#### Background from "Part I: Introduction"

- 1979: CSEQ was introduced as a multi-institutional survey tool
- 3 revisions -- 1983 (2nd), 1990 (3rd), 1998 (4th)
- Has been administered to over 300,000 students total; over 100,000 student 4th ed.
- Has been administered by over 400 institutions total; over 200 institutions 4th ed.

#### Highlights from "Part II: Psychometric Properties:"

##### Discrimination

- Variance - majority of scores fall within plus or minus two standard deviations of the mean
- Normal Distribution - skewness (left-right symmetry) & kurtosis (peakedness/flatness) - within acceptable range
- Missing Data (within norms data) - minimal

##### Reliability

- Correlations: items within a scale are moderately related to one another
- Cronbach's alpha reliability coefficient (internal consistency within a scale): within acceptable range

##### Validity

- Content Validity
- Quality of Effort (QE) scales: factor analysis - all scales but one (Campus Facilities) co-firm one factor
- Construct Validity
- scales correlate with external/similar measures of same psychological construct, are consistent with other research (p. 22-3)
- Evidence of Construct Validity using Regression Analysis
- blocked hierarchical regression - demonstrates that QE scales account for a sizeable portion of variance

##### The Validity of Self-Reported Data

- done within a reasonable timeframe, self-reported data can reveal information not directly observable via outcomes measures

##### Factor Analysis of Environment and Gains Items

- 10 College Environment items load on 3 factors
  - i. scholarly & intellectual emphasis
  - ii. vocational & practical emphasis
  - iii. quality of personal relationships

- 25 Estimate of Gains items load on 5 factors
  - i. gains in personal development
  - ii. gains in science & technology
  - iii. gains in general education
  - iv. gains in vocational preparation
  - v. gains in intellectual

Reference: Gonyea, R. M., Kish, K. A., Kuh, G. D., Muthiah, R. N., & Thomas, A. D. (2003). *College students experiences questionnaire norms for the fourth edition*. Bloomington, IN: Indiana University Center for postsecondary Research, Policy, and Planning.