Strengthened Campus-Based Assessment Plan
State University of New York at New Paltz

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, should New Paltz use SUNY-normed measures or externally-referenced measures in assessing Mathematics, Basic Communication-Written, and Critical Thinking, and second, to choose between 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; (b) 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 (c) reminding departments to analyze assessment results to implement programmatic improvements.

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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 objectives 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. Each faculty teaching GE course(s) in the SCBA areas will be required to develop an assessment plan. 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 collected 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.

The GE Board will review each plan and will certify that the issue of inter-rater reliability has satisfactorily been addressed. This will be done to ensure that the measures accurately reflect students' achievement of the SCBA learning objectives. It is expected that 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). The raters will establish baseline (i.e., the percentage of agreement on the assignments that are scored using the rubrics) during the norming session. Thereafter, the raters will check their percentage of agreement periodically (say after three assessment cycles) to ascertain if there's consistency in their scoring. During these periodic checks, the second rater will evaluate about 20-25 percent of the student products. If the percentage of agreement falls below a pre-set acceptable reliability index, more training using the rubrics will be done.

When raters disagree, we will resolve disagreements by using one of these two approaches. In the first approach, a third rater will be used. This rater will use the rubrics to score the student products and the judgment of the 'majority' will be used (assuming that at least two of the raters make the same judgment). The third rater will receive training in the use of the rubrics to score student products. In the second approach, disagreements between/among raters will be resolved by having a meeting to discuss the ratings and arriving at consensus on the level of the students' performance.

In approving GE assessment plans for areas under SCBA, the GE Board will look for evidence that when multiple choice questions are used, that they are chosen to correspond with the BoT rubrics. One way that departments would satisfy this would be to include multiple choice questions with a range of difficulty. In addition, plans that use multiple choice questions will be approved by the GE Board when they include a large enough pool of items for each SCBA learning outcome (e.g., exceeds = 13-15 items, meets = 9-12 items, approaches = 6-8 items, and does not meet = 0-5 items).

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 plan, therefore, 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.

All New Paltz GE courses to be assessed under SCBA will utilize the SUNY rubrics and standards. In addition, New Paltz will adhere to the standards that correspond to the SUNY Mathematics discipline panel's rubric levels (i.e., "Completely correct" = "Exceeding," "Generally correct" = "Meeting," "Partially correct" = "Approaching," "Incorrect solution" = "Not meeting." 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.

New Paltz is committed to assessment. As part of a local effort to understand our students' expectations and experiences, in Summer 2005 we administered the College Student Expectations Questionnaire (CSXQ) to incoming freshmen and transfer students. We pan to administer the follow-up to the CSEQ, the College Student Experiences Questionnaire (CSEQ) in Spring 2006 to CSXQ respondents as well as to a stratified random sample of sophomores, juniors, and seniors. It should be noted that although the CSXQ and CSEQ compliment each other as pre- and post-test measures of students' expectations and experiences of a campus' academic environment, they are distinct survey instruments. We plan to administer this pair of surveys on a three-year cycle. Although we plan to administer these instruments in the future, our comments below focus only on the CSEQ, which we believe is closely aligned with the National Survey of Student Engagement (NSSE).

The CSEQ has good psychometric properties. Gonyea et al. (2003) conducted extensive research regarding its validity and reliability and conclude, through a series of statistical analyses (i.e., factor analysis and blocked hierarchical regression analysis), that both content and construct validity are satisfactorily met. A review of the CSEQ's content reveals that it measures students' engagement in academic activities. Questions on the CSEQ are arranged under the general construct of how students spend their time in college—with faculty and friends and in classes. Students are asked 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—in appendix B—shows selected items from the NSSE and their correspondence to items on the CSEQ.

In terms of reliability, the over 150–items on the CSEQ measure the following broad categories: Quality of Effort, College Environment Factors, Estimate of Gains Factors, and Satisfaction. Positive correlations within each category reflect that the instrument is reliable. Quality of Effort is measured by 13 scales, Environment Factors by three, and Gains Factors by five; the number of items per scale (#) and Cronbach's alpha reliability coefficients (α) are listed below in Table 1 (Gonyea, 2003). Note that alpha coefficients range from 0.00 to 1.00 and those greater than 0.70 are generally accepted to measure a single construct. Additional normative properties (e.g., discrimination, reliability, and validity) of the CSEQ are presented in appendix C.

Table 1: Number of Items per Scale and Cronbach's α Reliability Coefficients

Category	Scale	#	α
Quality of Effort	Library Experiences	8	0.80
Quality of Effort	Computer and Information Technology	9	0.78
Quality of Effort	Course Learning	11	0.83
Quality of Effort	Writing Experiences	7	0.78
Quality of Effort	Faculty Experiences	10	0.88
Quality of Effort	Art, Music, and Theatre	7	0.86
Quality of Effort	Campus Facilities	8	0.74
Quality of Effort	Clubs and Activities	5	0.83
Quality of Effort	Student Acquaintances	10	0.91
Quality of Effort	Personal Experiences	8	0.84
Quality of Effort	Science and Quantitative Experiences	10	0.92
Quality of Effort	Information in Conversations	6	0.86
Quality of Effort	Conversation Topics	10	0.87
Environment Factors	Scholarly	3	0.75
Environment Factors	Practical Factor	4	0.75
Environment Factors	Personal Relations	3	0.70
Gains Factors	Personal Development	5	0.83
Gains Factors	Science and Technology	4	0.87
Gains Factors	General Education	6	0.81
Gains Factors	Vocational Preparation	3	0.78
Gains Factors	Intellectual Skills	7	0.81

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, to identify and make improvements as appropriate.

Special Note: Although GEAR approved our request to administer the CSXQ and CSEQ, we have decided to administer the National Survey of Student Engagement (NSSE) to measure students' engagement in academic activities.

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.

References

Gonyea, R. M., Kish, K. A., Kuh, G. D., Muthiah, R. N., & Thomas, A. D. (2003). *College Student Experiences Questionnaire: Norms for the fourth edition.* Bloomington, IN: Indiana University Center for Postsecondary Research, Policy, and Planning.

Pace, C. R., & Kuh, G. D. (1998). *College Student Experiences Questionnaire* (4th ed.). Bloomington, IN: Indiana University Center for Postsecondary Research, Policy, and Planning.

Appendix A

Samples GE Assessment Plans for Mathematics, Basic Communication-Written, and Critical Thinking

Appendix B

Table 1: Examples of CSEQ and NSSE Item Correspondence

NSSE	CSEQ
1a. Asked questions in class or contributed to class discussions	• Contributed to class discussions. • Used information or experience from other areas of your life (job, internship, interactions with others) in class discussions or assignments.
1c. Prepared two or more drafts of a paper or assignment before turning it in	• Revised a paper or composition two or more times before you were satisfied with it.
1d. Worked on a paper or project that required integrating ideas or information from various sources	• Worked on a paper or project where you had to integrate ideas from various sources.
1l. Used an electronic medium (listserv, chat group, Internet, instant messaging, etc.) to discuss or complete an assignment	• Participated in class discussions using an electronic medium (email, list-serve, chat group, etc).
2e Applying theories or concepts to practical problems or in new situations	• Applied materials learned in class to other areas (your job or internship, other courses, relationships with friends, family, co-workers, etc.).
3b. Number of books read on your own (not assigned) for personal enjoyment or academic enrichment	• Read articles or books about personal growth, self-improvement, or social development. • Read articles about scientific or mathematical theories or concepts in addition to those assigned for class.
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.	• Worked harder than you thought you could to meet an instructor's expectations and standards.
6a. Attended an art exhibit, gallery, play, dance or other theatre performance	• Went to an art exhibit/gallery or play, dance or other theatre performance on or off the campus.
7d. Worked on a research project with a faculty member outside of course or program requirement	• Worked with a faculty member on a research course.

Source: Pace, C. R., & Kuh, G. D. (1998). *College Student Experiences Questionnaire* (4th ed.). Indiana University.

Appendix C

College Student Experiences Questionnaire Norms