Establishment of student learning outcomes

During summer 2006 a faculty group developed student learning outcomes for the GE Program. During the development process, the faculty workgroup verified that the set of student learning outcomes that they generated represented all areas of the general education program and all of the general education criteria. The list of student learning outcomes was sent to the GE Committee for approval. The proposed General Education Student Learning Outcomes document states:

General Education requirements are designed to ensure that all graduates of the University, whatever their major, have acquired essential skills, experiences, and a broad range of knowledge appropriate to educated people within a society. Students who complete the General Education program are able to:

Goal 1. Think clearly and logically. They are able to:
   - Outcome 1.1 Reason inductively and deductively.
   - Outcome 1.2 Communicate clearly and logically.

Goal 2. Find and critically examine information. They are able to:
   - Outcome 2.1 Access needed information effectively and efficiently.
   - Outcome 2.2 Evaluate information and its sources critically.
   - Outcome 2.3 Explain the economic, legal, social, and ethical issues surrounding the use of information.

Goal 3. Communicate effectively using a variety of formats. They are able to:
   - Outcome 3.1 Speak and present effectively in various contexts.
   - Outcome 3.2 Write effectively in various forms.

Goal 4. Understand the physical universe and its life forms, scientific methodology, and mathematical concepts, and use quantitative reasoning. They are able to:
   - Outcome 4.1 Conduct planned investigations, including recording and analyzing data and reaching reasoned conclusions.
   - Outcome 4.2 Solve problems using mathematical methods and relevant technology.
   - Outcome 4.3 Use graphs, tables, etc. to represent and explain mathematical models.
Outcome 4.4  Make connections between important/core/key concepts (or big ideas) in the natural sciences to describe/explain natural phenomena.

Goal 5. Cultivate intellect, imagination, sensibility and sensitivity through the study of philosophy, literature, languages, and the arts. They are able to:
   Outcome 5.1.  Analyze creative human products and ideas.
   Outcome 5.2.  Articulate personal thoughts and emotions when encountering human creations and ideas.
   Outcome 5.3.  Create original and imaginative works in philosophy, literature, language, and/or the arts.

Goal 6. Understand social, cultural, political, and economic institutions and their historical backgrounds, as well as human behavior and the principles of social interaction. They are able to:
   Outcome 6.1  Convey how issues relevant to social, cultural, political, contemporary/historical, economic, educational, or psychological realities interact with each other.
   Outcome 6.2  Discuss how social sciences conceive and study human experience.
   Outcome 6.3  Use social science methods to explain or predict individual and collective human behavior.

Goal 7. Integrate ideas and insights from multiple cultural and disciplinary perspectives. They are able to:
   Outcome 7.1  Integrate content, ideas, and approaches from various cultural perspectives.
   Outcome 7.2  Integrate content, ideas, and approaches from various disciplinary perspectives.

Goal 8. Use technology as a tool.
   Outcome 8.1  Use relevant technology in various contexts to present and/or integrate ideas. (or move as 3.3 or 7.2).

At CSUCI General Education learning is assessed in many ways. This report highlights the plan for each area and the accomplishments to date. The ways in which general education student learning is assessed are as follows (Exhibit 14a.1 General Education Outcomes Assessment Implementation Plan).

1.  Student learning outcome assessment based upon an analysis of student work products
2.  Fidelity Assessment of General Education Courses and Syllabi
3.  Alignment of the general education criteria for determining general education course suitability with course objectives as listed on course proposals
4. Assessment of student learning outcomes in the General Education Program using a standardized measure
5. Student survey regarding attainment of general education learning outcomes

**Student learning outcome assessment based upon an analysis of student work products**

Each semester one or two of the student learning outcomes will be assessed. Faculty teaching courses within the GE area being assessed will select student assignments that are representative of the student learning outcomes. Faculty will develop a rubric upon which to score student work products. Student work products from selected courses and assignments will be collected. Faculty will be trained on the scoring using the rubric, score student work, and then discuss the implications for program improvement. Summary of the report will be delivered to GE Committee and each program area.

During Fall 2006 the first area to be assessed was Goal 7: Integrate ideas and insights from multiple cultural and disciplinary perspectives. Objective 7.2 Students are able to integrate content, ideas, and approaches from various disciplinary perspectives. A leadership team of four faculty members was convened to select courses, student assignments, and organize the scoring and feedback session. Since the first student learning outcome was associated with one of our centers, Center for Integrated Studies. The Center Chair is the leader of the planning group. The group is currently circulating a draft rubric, and gathering materials needed for the assessment (Exhibit 14a.2 Upper Division Interdisciplinary General Education Assessment Rubric). After scoring the assignments, the faculty will discuss what they learned about student performance on interdisciplinarity.

During Spring 2007 outcomes from Goal 2: Find and critically examine information will be assessed as part of a CSU Information Competence Grant awarded to CSUCI. The project, *Information Competence Assessment Using First Year and Upper Division Writing Samples Grant*, is a joint effort between the English and Library programs. This fall the group is looking at existing rubrics from other universities, and will meet in January 2007 to create a rubric for assessment.

**Fidelity Assessment of General Education Courses and Syllabi**

The 2003/2004 General Education Committee passed several unresolved concerns to the 2004/2005 General Education Committee, one of which was the need to implement a policy that covered General Education course certification, decertification, and approval for modifications that would impact certification. As the committee began to craft the policy a larger concern began to dominate the discussion. How does the committee know that the proposed learning outcomes and justifications are actually being used to plan and teach the course once these courses are certified? In the end, a policy was drafted that addresses general education course certification, modification, decertification, and review. The policy was then approved by the Academic Senate in the spring of 2004 as SP 04-45 (Exhibit 14a.3). The review portion of the policy calls for all general education
courses to be reviewed on a five year cycle based on the five General Education areas (A-E). The policy also specifies that each course will be reviewed on all approved criteria even if certain criteria fall outside the area being reviewed. Each course is reviewed, and a recommendation is made to either recertify the course or place it on probation.

The committee conducted its first general education course review in the spring of 2005. (The schedule outlined in the policy called for all general education courses approved for Area B to be reviewed). The committee assigned a team of 2-3 reviewers to each subcategory in Area B. The committee gathered the recent syllabi, the original course proposal, and the approved General Education Course Approval Form for each course. The committee created a form to assist reviewers in their examination of the syllabi. The reviewers were also provided with the original course proposal and approved General Education Course Approval Form for background. The review form asked the following questions (Exhibit 14a.4 GE Program Review Form):

1. Is there any indication on the syllabus that this is a GE course?
2. Does the syllabus include learning objectives for the course?
3. If so, do the learning objectives directly address the GE criteria?
4. If so, are the learning objectives consistent with the justification on the GE Criteria Approval Form?
5. If not, are there other indications on the syllabus that the course meets the justification on the GE Criteria Approval Form?
6. Based on this syllabus, if this were the only course that a student took in this GE category or subcategory, do you feel that the student's experience would have met the criteria listed for this category and subcategory?
7. Additional Comments:

The review was by no means perfect, but yielded many useful results that can help guide the committee in future reviews, and in modifying the General Education Review Policy to increase its effectiveness.

First, the preparation for the process was incredibly time consuming to gather all materials needed. There was no centralized place for this information (what has been approved, syllabi, original GE forms, original course proposals), there was no system for gathering this information, and there were more than a few original forms that lacked crucial information. The committee had no staff so the gathering duties fell to committee members. The General Education committee co-chairs worked with a programmer over the summer to create a General Education Course Approval system to track this information (Exhibit 14a.5 GE Course Approval System). The system is now being tested on any courses that come before the committee for approval (Fall 2006), and if it is successful all previously approved courses will be placed into the system. The Provost has also assigned student time to the committee to help with the

Second, the General Education Review Policy called for the reviewers to review all criteria approved for that course. This proved too be much more difficult than expected.
The committee may want to consider revising the policy to extend the review cycle to six years and review UDIGE separately.

Third, the committee found, using the Area B course syllabi as a sample, that the campus as a whole could better communicate to faculty and students which courses were general education, and the intended general education learning outcomes for that course. The committee found that many syllabi used to teach general education courses approved for Area B:

- Do not indicate that the course is approved for that particular GE area
- Do not have learning outcomes listed, or the learning outcomes listed are not consistent with the approved GE Criteria Approval Form
- Often addressed the subcategory criteria but not the overall B criteria. This may be due to the fact that the original GE Criteria Approval Forms do not address the overall B criteria, just the subcategory.

Therefore, the committee did not recommend that any Area B courses be recertified or place probation. Instead the committee created a report that addressed these concerns for each course (Exhibit 14a.6 General Education Program Review Report 2006), and communicated the more general concerns that arose in the course the review. The report was sent to the General Education Assessment Task Force Chair, Academic Senate Chair, appropriate program chairs, Dean of Faculty, AVP for Curriculum, and Provost. The concerns were also shared with the Chairs Committee prior to the start of classes. The committee co-chair will also be working with the Faculty Affairs committee, which is developing a policy on syllabi, to insure that general education learning outcomes appear on syllabi and are addressed by syllabi content. Through these efforts the committee hopes to better communicate General Education learning outcomes to both faculty teaching and students taking courses approved for General Education, insure alignment between course proposals and actual course content, and make informed decisions on whether a course should be recertified for general education or placed on probation.

**Alignment of general education criteria with course objectives**

Each general education area (distribution requirements A through E) has been assigned a semester during which course student learning outcomes will be examined for alignment with GE criteria (Exhibit 14a.7 GE Assessment Plan). Faculty will rate the degree to which the student learning outcomes are aligned with the general education criteria on two dimensions—coverage of the GE area and focus of the GE area. Student learning outcomes from Area B were reviewed in late spring 2006. Four teams of three faculty members each examined the student learning objectives from course proposals to determine the degree to which the course learning outcomes focused on and covered the criteria for each sub-area of area B. Results have been distributed to the teams, who were analyzing them. Each team will make recommendations to the General Education Task Force.

**Assessment of student learning outcomes using a standardized measure**
During Fall of 2005 a pilot project was begun. Thirty-one students took the Measure of Academic Proficiency and Progress (MAPP), an ETS test designed to measure student learning in general education in three areas critical reading/thinking, mathematics and writing. GE Outcomes Assessment Task Force examined the results from the pilot group. They determined that the constructs measured on the critical reading/thinking section of the MAPP focused on similar concepts as taught in the critical thinking section of the general education program. The test discriminated well between first year and graduating seniors. It would be relatively easy to disaggregate student sub-populations to create portraits of students completing the GE Program. It is difficult to have sufficient students take the test voluntarily. It would need to be a part of a course or graduation requirement for it to be a viable alternative.

**Student survey regarding attainment of general education learning outcomes**

The student survey regarding general education program is being developed this fall (2006) and will be given to selected students in a variety of majors as in a pilot project. Results will be given to the GE Committee and to each Program for analysis and recommendations.

**Evidence**

14a.1 General Education Outcomes Assessment Implementation Plan
14a.2 Upper Division Interdisciplinary General Education Assessment Rubric
14a.3 SP 04-45: General Education Program Review
14a.4 GE Program Review Form
14a.5 GE Course Approval System
14a.6 General Education Program Review Report 2006
14a.7 GE Assessment Plan