General Education Assessment Summary

Reporting on the 2011/12 Academic Year Prepared Spring 2013

Weber State University Prepared by the General Education Improvement and Assessment Committee Steven Peterson, Chair

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2012/13 General Education Assessment Summary

I. Overview

- A. Core and breadth area subcommittees established and meeting.
- B. Courses scheduled on a three-year rotation of assessment reporting.
- C. Common reporting tool developed that includes these items:
 - 1. GE-level outcome.
 - 2. Course-specific outcome aligned to GE-level outcome.
 - 3. Identified assessment(s) for measuring learning.
 - 4. Threshold for expected performance.
 - 5. Actual performance.
 - 6. Analysis of results.
 - 7. Changes to be put in place based upon performance and analysis.
- D. Integration of GE reporting with departmental annual assessment reporting.
- E. Development of tools and functionality to support GE assessment.
 - 1. Chi Tester question-level outcome alignment tool with reporting feature.
 - 2. Exploration of Canvas rubrics and outcomes as a tool to support GE assessment and reporting at an aggregate.

F. Results of assessment:

- 1. Breadth areas Data was gathered during the 11/12 academic year in 28 of 112 courses for a yield of 25%.
- 2. Core areas Data was gathered during the 11/12 academic year in 19 of 24 courses for a yield of 79%.
- 3. Overall yield for assessment in the 11/12 academic year of 35%; we are on target for the overall goal of evaluating all courses during a three-year cycle.

II. Core and breadth assessment summaries follow.

A. Physical Science

- 1. Chemistry No data, but plans in place for assessment of 1010, 1050, 1110, 1210, and 1360.
- 2. Geography Data provided for 1000, plan in place for 1400.
 - a) Findings for 1000 All thresholds met so no significant curricular changes called for. A recommendation to encourage students to take a statistics course was made.
- 3. Geosciences No data, but plans in place for assessment of 1030, 1060, 1110, 1130, and 1350.
- 4. Honors No data, but plan in place for assessment of 2030. No plan indicated for assessment of 1500.
- 5. Physics No data, no plans indicated for assessment of 1010, 1040, 1360, 2010, and 2210.

- B. Life Science (unless otherwise noted, "acceptable" threshold is 65%).
 - 1. Anthropology Data provided for 1020.
 - a) Findings for 1020: All thresholds met satisfactorily, no curricular change called for.
 - 2. Botany Data provided for 1203 and 1403. No plans for assessment for 1303 and 1370.
 - a) Findings for 1203: Thresholds satisfactorily met in 6 of 8 outcomes. Students have challenges in areas involving math, chemistry, and photosynthesis. Students will be encouraged to take advantage of Internet resources for review and remediation in these areas. Additional measures are needed for evaluation of learning outcome 1 (nature of science). No other pedagogical or curricular changes called for.
 - b) Findings for 1403: Thresholds satisfactorily met in all 8 outcomes. No pedagogical or curricular changes called for though students will be encouraged to use Internet resources for review and remediation in challenging areas.
 - 3. Health Science No data gathered, no plan for assessment for 1110.
 - 4. Honors No data gathered, plan for assessment for 1510, no plan for 2040.
 - 5. Microbiology No data gathered, plans for assessment for 1113 and 1153. Data gathered last year for 2054; 1370 is a cross-listed course for which Zoology and Botany take the lead (due to non-existence of microbiology state standards for elementary education courses).
 - 6. Nutrition Data gathered for 1020.
 - a) Findings for 1020: Results from spring 2012 indicate the threshold was met for 7 of 8 learning outcomes, with the outcome 8 coming in at just under the threshold. No pedagogical or curricular changes called for; the department will continue to gather data for this class and will be integrating the set of agreed-upon LS questions in the spring 2013 semester.
 - 7. Zoology Data gathered for 1010, 1020, and 1030. No assessment plan for 1370.

- a) Findings for 1010: Data gathered was course grades, not acceptable as direct evidence of learning. 69% of students earned a C- or better. No pedagogical or curricular changes called for, but the department is seeking to determine direct methods to measure learning.
- b) Findings for 1020: Data gathered was course grades, not acceptable as direct evidence of learning. 76% of students earned a C- or better. The faculty are considering additional exercises that improve student understanding. As well, the department is seeking to determine direct methods to measure learning.
- c) Findings for 1030: Data gathered was course grades, not acceptable as direct evidence of learning. 85% of students earned a C- or better. No curricular or pedagogical changes called for.

The Life Science General Education subcommittee members have met weekly throughout the fall 2012 semester to develop an assessment tool that can be used across all courses. The group worked through the development of question sets that address each of the eight learning outcomes that Life Science courses must satisfy. These questions will be embedded in quizzes/exams of the classes in each of the LS disciplines during a pilot of the assessment in the spring 2013 semester.

C. Humanities

- 1. Anthropology Data gathered for 1040.
 - a) Findings for 1040: This course was assessed against program learning outcomes (not Humanities learning outcomes specifically). Students met all thresholds for program learning outcomes and no curricular or pedagogical changes were called for. It is likely that the Humanities outcomes align with Anthropology learning outcomes. The HU outcomes need to be directly measured or the anthropology outcomes need to be mapped to the HU outcomes.
- 2. Communication No data gathered. Assessments planned for 1020, 2010, and 2110.
- 3. Foreign Language No data gathered. No assessment plan for 1851/2851, 2020, and 2600.
- 4. Honors Data gathered for 2130. Assessment planned for 1110. No assessment plan for 1540, 2010, 2110, and 2120.
 - a) Findings for 2130: Students successfully demonstrated competence in all measured outcomes, though 'transfer of knowledge' indicated the lowest competence at 69% (overall). The faculty has agreed to include review of transfer of knowledge in all related courses and to reassess this outcome during the next cycle of the course.
- 5. English Data gathered for 2710. Assessment planned for 2200, 2220, 2240, 2290, 2510, 2710, 3500, 3510, 3520, and 3750. The department developed a "Rubric Model for Assessing Writing in English General Education Courses."
 - a) Findings for 2710: Faculty provided the rubric used for assessing and examples of three levels of student achievement. However, no aggregate data showing overall performance of this cohort was provided nor analysis of those results.
- 6. Music No data gathered. No assessment plan for 1043.
- 7. Philosophy No data gathered. Assessment plans for 1000, 1120, and 1250.
- 8. Theatre No data gathered. No assessment plan for 3323.

D. Creative Arts

- 1. Art Data gathered for 1010. Assessment planned for 1010 (ongoing), 1030, 1090, and 1100.
 - a) Findings for 1010: Course instructors determined that students were generally performing well in all outcomes with no actions needed in terms of pedagogical or curricular change.
- 2. Computer Science No data gathered. Assessment planned for 1010.
- 3. Dance Data gathered for 1010. Ongoing assessment for 1010 also planned.
 - a) Findings for 1010: Students demonstrated competence, meeting established thresholds of all measured outcomes. No curricular or pedagogical changes needed.
- 4. English No data gathered. Assessment planned for 2250 and 2260.
- 5. Honors No data gathered. Assessment planned for 1530.
- 6. Music No data gathered. Assessment planned for 1010, 1030, 1033, 1035, 1040, and 1063.
- 7. Theatre No data gathered. Assessment planned for 1013, 1023, 1033, 1043, and 1053.

E. Social Science

- 1. Anthropology Data gathered for 1000, 2010, and 2030. Ongoing assessment planned for each course.
 - a) Findings for 1000: Results for this course were based upon Anthropology outcomes, not Social Science outcomes explicitly. Alignment between the course outcomes and the GE SS outcomes is needed. Results of assessment indicate that at least 75% of students are reaching the course goals at 80% or above. No curricular change is called for.
 - b) Findings for 2010: Results for this course were based upon Anthropology outcomes, not Social Science outcomes explicitly. Alignment between the course outcomes and the GE SS outcomes is needed. Results of assessment indicate that students are meeting course goals at a competency of 78% to 100%. There is some indication that increasing critical thinking/reasoning and writing/communication abilities should receive more attention within this course.
 - c) Findings for 2030: Results for this course were based upon Anthropology outcomes, not Social Science outcomes explicitly. Alignment between the course outcomes and the GE SS outcomes is needed. Results of assessment indicate that students are meeting course goals at a combined average level of 81%; no curricular or pedagogical change called for.
- 2. Child and Family Studies No data gathered. No assessment planned for 1500.
- 3. Criminal Justice No data gathered. Assessment planned for 1010.
- 4. Economics Data gathered for 1010, 2010, and 2020. Assessment planned for 1100, however, the class has not been offered during the last academic year.
 - a) Findings for 1010: Questions not comparable across sections and semesters. Results are very sensitive to wording of questions. Student success in responding to embedded questions ranged between 55% and 96%. Faculty will be discussing findings during the spring 2013 semester.

- b) Findings for 2010: Student success in responding to embedded questions ranged between 65% and 99%. Faculty will be discussing findings during the spring 2013 semester. Some test questions will be evaluated as to level of difficulty and ability to discriminate students of different ability.
- c) Findings for 2020: Student success in responding to embedded questions ranged between 43% and 79%. Faculty will be discussing findings during the spring 2013 semester. Instructors used common questions, but different numbers of detractors, making comparison across sections more difficult. Q1 is a question on applying AD/AS, also a learning outcome targeted for econ majors. The result of 52% of correct answers suggests that instructors need to increase practice and application of AD/AS in ECON 2020.
- 5. Geography Data gathered for 1300. Assessment planned for 1520.
 - a) Findings for 1300: Students met or exceeded the stated threshold of 70% for all outcomes. Instructors noted one area of concern student ability to discern good resources from questionable or bad resources and have implemented a librarian presentation early in the semester as well as faculty review of proper citation style.
- 6. Gerontology No data gathered. No assessment plan for 1010.
- 7. Health Promotion No data gathered. Assessment planned for 1030.
- 8. History No data gathered. Assessment planned for 1500 and 1510.
- 9. Honors Data gathered for 2130. No assessment planned for 1520, 2110, and 2120.
 - a) Findings for 2130: students successfully demonstrated competence in all measured outcomes, though 'transfer of knowledge' indicated the lowest competence at 69% (overall). Faculty have agreed to include review of transfer of knowledge in all related courses and to reassess this outcome during the next cycle of the course.
- 10. IS&T No data gathered. Assessment planned for 1100.
- 11. Political Science No data gathered. Assessment addressed, but not scheduled for 2100, 2200, and 2300.

- 12. Psychology Data gathered for 1010. Ongoing assessment planned for 1010 and 2000.
 - a) Findings for 1010: Through a mix of indirect and direct measurement, students show they not only think they are achieving GE outcomes, but actually are achieving them. "These findings from the Misconception test suggest that Introductory Psychology students were learning to revise simplistic in favor of complex explanations. The complex explanations highlight interactive processes in understanding natural and socio-cultural phenomenon in psychology. Further research will explore the changes from the beginning to the end of the semester in students' tendency to give interactive explanations of psychological phenomenon."
- 13. Social Work No data gathered. Assessment discussed, but not planned for 1010.
- 14. Sociology Data gathered for 1010. Assessment planned for 1020.
 - a) Findings for 1010: Results for this course were based upon Anthropology outcomes, not Social Science outcomes explicitly. Alignment between the course outcomes and the GE SS outcomes is needed. The instructor used a mix of questions embedded in exams and an essay question. 75% of students are meeting the objectives at an acceptable standard (though thresholds are not indicated); no curricular or pedagogical change is called for.
- 15. Women Studies Data gathered for 1500.
 - a) Findings for 1500: Two outcomes measured. Results indicated that students met the established thresholds. This specific instructor plans to raise the threshold on the writing assignments used to determine mastery.

F. Composition

- 1. English Data gathered for 1010 and 2010.
 - a) Findings from 1010: A composition working group looked at faculty selected samples of works from a random sample of sections of English 1010 and 2010. The 48 pieces were evaluated against the 28 current goals/outcomes for composition. The following conclusions resulted from this effort:
 - (1)Because we did not use a common assessment artifact across all sampled sections (that is, there was no uniform assessment 'assignment' produced by students), the presence or absence of outcomes in all artifacts was unpredictable. Some assignments were works of creative writing. Some assignments were personal responses and did not require working with sources. For this reason, establishing a threshold at a level I would like (75%) means that many outcomes will underperform. We are convinced, therefore, that future assessment of the Composition program will possibly need to use a common piece of student writing, a portfolio of student writing, and, more importantly, distinguish between ENGL 1010 and ENGL 2010. We will also likely need to create separate outcomes for ENGL 1010 and 2010.
 - (2) These outcomes were constructed by combining the outcomes of both the Composition outcomes approved by the Board of Regents and the outcomes of the Council of Writing Program Administrators. Our belief was that combining these sets of outcomes would provide us with a clear and assessable set of outcomes. What has emerged over the course of this assessment process, however, is the very real sense that the result of this combination was largely a list of values. It is our intention to revisit our (admittedly long) list of outcomes and remove those that we deem unassessable statements of value. Our hope is that result is a smaller number of clearly assessable outcomes.

b) The Composition program is in the early stages of deploying a new curriculum for ENGL 1010. This new curriculum emphasizes reading comprehension and synthesis of multiple texts. More specifically, the major assignments of the course are 'literature reviews' in which the students describe the scholarly or critical conversation surrounding an issue. We feel that this is a more coherent and consistent curriculum that better prepares students for both ENGL 2010 and for the kinds of writing expected of them in their other classes. We have piloted 20 sections of the new curriculum over the last year, and the results are promising; 66 out of 70 students in the pilot outperformed their peers in their ENGL 2010 classes (i.e. received a higher grade than the class average).

G. American Institutions

- 1. Economics Data gathered for 1740.
 - a) Findings for 1740: Embedded questions with student success ranging from 43% to 94% (one outlier of 23% not included).
 - (1) Faculty discussions regarding student achievement of general education learning outcomes center on appropriateness and coordination of embedding common exam questions. Data has not been used to make any changes.
 - (2) Faculty groups who teach the various general education classes will analyze assessment tools and results during fall 2012. Additional data will be collected in fall 2012.
- 2. History Data gathered for 1700. No planned assessment of 2700/2710 provided (these courses can be used to satisfy the AI requirement in place of 1700).
 - a) Findings for 1700: Two sections of students were given a pretest at the beginning of the semester and a posttest at the end. Students in one section improved scores by an average of 5.6% while students in the second section improved scores by an average of 10%. No further discussion or analysis is provided. The department will continue to administer the pretest/posttest in several sections each semester.
- 3. Political Science No data gathered for 2011/12. Assessment planned for 1110 in fall 2012.

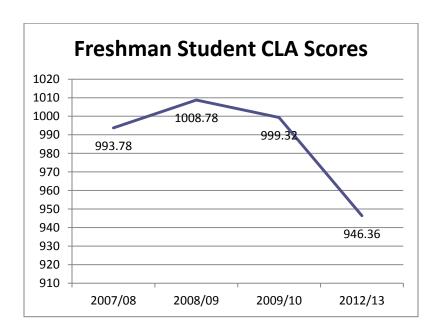
- H. Computer Information Literacy
 - 1. IST No data gathered. No assessment plan for 2010.
 - 2. NTM Data gathered for 1700, 1500, 1501, 1502, 1503, 1504, 1701, 1702, and 1703.
 - a) Findings (aggregated): Students are achieving most of the outcomes at or above the established threshold of 73%.

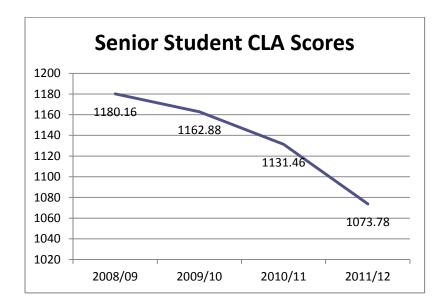
 Spreadsheet competencies are the most problematic with students not passing some area and barely passing the tests. Action planned is to revise outcome goals to allow a critical review of student output. Outcome goals for other areas are being considered for modification as well, to allow for the critical review of student output.
 - 3. Library Science Data gathered for 1704 and CIL NTM 1504. 2604, 2704, 2804, and 2904 will be assessed in Spring 2013.
 - a) Findings for 1504: Students passed all outcomes at or above the established threshold of 73%. However, the library faculty will evaluate the 1504 test and review questions for revision, update, or deletion as necessary. Additional questions will be added.
 - b) Findings for 1704: This was a two section pilot. Students passed three of four outcomes at or above the established threshold of 73%. Outcome D2, 'Find Information Effectively', came in below the threshold at 68%. Instead of making changes immediately the assessment will be given to all sections of 1704 during the spring 2013 semester. Based upon those results the faculty will examine a more detailed breakdown of the standards to determine needed revisions.
 - c) The library's annual assessment report will be posted with other annual reports. The library will also be asked to participate in the 5-year program review process.

I. Quantitative Literacy

- 1. Math Data gathered for 1030, 1040, 1050, and 1080.
 - a) Findings for 1030: Students met all but one objective at or above the established threshold. For the objective not met ('represent mathematical information symbolically, visually, numerically, and verbally'), there was concern about instructor coverage of the topic action to be taken is to increase emphasis of the area in the classroom and be sure that topics are uniformly covered. Note, two measures were used; students were successful meeting one, but not both.
 - b) Findings for 1040: Students met all objectives above the established threshold.
 - c) Findings for 1050: Students met all but two objectives above the established thresholds ('represent mathematical information symbolically, visually, numerically, and verbally' and 'estimate and check answers to mathematical problems in order to determine reasonableness, identify alternatives, and select optimal results'). For the two objectives for which thresholds were not met, faculty will verify the appropriateness of the problem(s) presented and be sure that topics are uniformly covered. Note, two measures were used for each outcome; students were successful meeting one measure for each, but not both.
 - d) Findings for 1080: Students met all but two objectives above the established thresholds ('represent mathematical information symbolically, visually, numerically, and verbally' and 'estimate and check answers to mathematical problems in order to determine reasonableness, identify alternatives, and select optimal results'). For the two objectives for which thresholds were not met, faculty will verify the appropriateness of the problem(s) and increase emphasis in the classroom.

III. College Learning Assessment (CLA) Trend Analysis





The College Learning Assessment (CLA) is an 'authentic' assessment given to a group of approximately 100 freshmen in the fall and 100 seniors in the spring. If you are not familiar with the instrument, you can learn more from their website: http://www.collegiatelearningassessment.org/index.html.

Discussion

Weber State has administered the CLA every year but one since the fall of 2007. It is intended to be given to a random sampling of freshmen and senior students, but we've been challenged in achieving a true random sample. Various means of recruiting students have been attempted, including providing incentive for participation, but these means don't insure that students take the test seriously.

For freshmen participants we have focused on FYE courses. For senior participants, this past year we focused on students in Senior Seminar/ Capstone type courses and asked the instructors to require student participation. We had a good cross-institution representation (history, communication, construction management, chemistry, dental hygiene, HPHP, interior design); however, this is still very much a convenience sampling.

For the past two years, CAE – the organization that administers the CLA – has included a field in the results that reports 'time spent' on the assessment. For those two years and going forward we can eliminate the students who take less than a specified amount of time, when we report results.

The graphs show a decline in performance during the last few years. This may be due to the way the sample was selected (sampling error) or may be an actual decline in performance.

IV. Conclusions and Recommendations

- A. The implementation of outcomes is creating an environment of continual improvement. This is evidenced by:
 - 1. English taking a look at revising the outcomes for ENGL 1010 and 2010. They are preparing to submit a proposal to GEIAC.
 - 2. NTM is preparing to submit a proposal to GEIAC to revise the outcomes for Parts A, B, and C of CIL.
 - 3. Many instructors are implementing changes in their courses to improve student learning.
- B. Currently the only measure of student learning for general education at the time of graduation is the CLA exam. Improvements in the sampling need to be made to insure that the data collected is representative. These improvements include (1) eliminating students who spend less than a specified time (say 20 minutes) on the exam from the sample population, and (2) increasing the sample size. With regards to the apparent decline in performance, the committee recommends that we assume that there has been a decline in performance and take steps to mitigate this decline, until we can clearly state that it is a sampling error. In this matter we prefer to error on the side of caution inasmuch as it will not hurt the student to be better prepared in this area.
- C. With the move to outcomes, the duties of faculty have changed. The committee recommends that the Policies and Procedures Manual and all Promotion and Tenure documents, be reviewed to determine if changes need to be made to address the move to outcomes, and to reflect faculty's responsibility for setting, measuring, and reporting outcomes data.

V. Committee Members

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