# **Report on Assessment in General Education**

# **Spring**, 2012

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**Introduction:** Assessment in General Education has definitely taken a leap forward. On the course level, every department that participates in the general education program is either collecting and reporting data or actively working on revising an assessment plan. Departments are implementing changes in assessment plans and, in some cases, changes in their approach to teaching GE courses based on assessment data.

Some highlights: The College of Natural Sciences and Mathematics has established an ad hoc committee for the assessment of the general education areas of science and math. This committee has overseen the following developments:

- a policy for inclusion of student learning outcomes in syllabi for general education courses in these two areas;
- evaluation of all data collected to date by faculty members who teach the courses
- five examples of using the process of assessment to initiate improvements to teaching and learning;
- recognition that most of their existing measures were incomplete, which led to revision of most instruments;
- collection of data with some of the revised instruments by the end of fall of 2011 and all of the revised instruments by the end of spring of 2012.

In addition, KPED has responded to its assessment data by reviewing and standardizing one section of its course, and concrete improvement in assessment plans can be seen in the Departments of History, Philosophy and Religion, EFIRM, and English. The Department of Political Science has committed itself to systematically reviewing and revising its plans and facing tough questions about how to assess GE outcomes.

On the program level, the GEC has conducted focus groups with students from two colleges and with potential employers of UCA graduates, and we will administer the ETS Proficiency Profile<sup>®</sup> to 250 seniors in Spring 2012 and 250 freshmen in Fall 2012. We still have a ways to go in our efforts to establish a culture of assessment in General Education, but we are definitely making significant progress.

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# I. Evaluation of Assessment in General Education Courses, Fall 2011

## Anthropology 1302, Sociology 1300

Methods: The original proposals for both Sociology 1300 and Anthropology 1302 (which was originally proposed as SOC 1302) state that "A final exam in each section of Principles of Sociology will assess students' basic knowledge of course content. In addition, students will be asked how helpful the course was in increasing their understanding of the sociological information." The skill of research and computer literacy will be measured as follows: "The faculty who teach Principles of Sociology will strive to include a minimum of one meaningful assignment in the course curriculum related to the development and assessment of students' research or computer literacy skills. In addition, students will be asked how helpful the course was in providing research and computer literacy skills." A survey instrument was designated to measure the students' estimation of the knowledge and skills they gained in the course, along with their development in the areas of attitudes and values. The proposal did not specify how the final exam questions or the research/computer literacy assignment will be evaluated. The chair of the Sociology department agrees that the assessment plan is inadequate and has met with the Director of General Education several times in order to clarify the GEC's assessment expectations. He reports that the department Curriculum Committee is working on a revised plan for Sociology 1300 and Anthropology 1302, which is scheduled to be approved by the department's faculty in September of 2012.

*GEC Conclusions and Recommendations*: The GEC has requested follow-up information on the proposed revisions and on the Sociology Department's response and implementation.

### **Biology 1400**

*Methods:* Along with the other departments in the College of Natural Sciences and Mathematics, Biology reviewed its past assessment efforts in 2010-11 and has begun implementing a new plan. Beginning in Fall, 2011, a common set of multiple-choice questions (developed specifically to assess UCA's Gen Ed objectives) were embedded within all BIOL 1400 final exams. The department set an initial goal of having 70% of students respond correctly to each question. Beginning in spring 2012, all BIOL 1400 final exams will also incorporate multiple-choice questions that assess critical thinking and quantitative reasoning (possibly simultaneously with the assessment of area objectives). The department is still considering how best to assess the values and attitudes outcomes and has no current plan for incorporating this component into assessment of BIOL 1400.

*Results*: In the Fall of 2011, the department met its goal of 70% correct responses to 4 of the 6 questions related to area outcomes. Students fell below the standard on questions related to evolution (14.6% correct answers) and the use of control groups and placebos (59.2%). Skills and attitudes and values were not specifically tested.

*Department Conclusions*: The department agreed to carry out the following responses to the assessment data: 1) re-evaluation of question wording to eliminate ambiguities; 2) agreement by BIOL 1400 instructors to define *scientific theory* explicitly, and provide more numerous examples; 3) development of more rigorous questions to address area objectives 4 and 5. In addition the department will be measuring skills more directly.

*GEC Conclusions and Recommendations:* The GEC is gratified to see the Biology Department "closing the loop" in BIOL 1400, using assessment data to adjust teaching emphases in the course and responding to the assessment evaluation process by developing ways to measure skills in the course. As in the case of other departments, the Biology's Department's problems with the attitudes and values category reinforces the GEC's awareness that that category should be clarified and/or redefined to fit the sciences and some other disciplines better.

# Chemistry 1400

*Methods:* The Chemistry Department participated in the College of Natural Sciences and Mathematics' review of general education assessment and has developed an assessment plan which it began implementing in Fall 2011. Four questions—two of which (designated 1a and 1b below)are specific and two of which (2a and 2b below) are broader—are included in the final exam for all students. These questions are aligned to the overall natural sciences objectives as well as general education area objectives. The questions are given ahead of time and students are informed of the point values of each question to encourage thoughtful, complete answers. The department intends to address further area outcomes in the immediate future by adding questions that measure students' performance in relation to those outcomes. The department has focused on area outcomes, since the chair of Chemistry feels that the skills and attitudes and values outcomes need to be more clearly defined and hopes that the General Education Council will clarify the relationship between area outcomes and the other categories.

*Results:* The percentages of correct answers in Fall 2011 are as follows: 1a--80% correct; 1b—54% correct; 2a—88% correct; 2b—79% correct. These data were limited because in some cases final exam papers were inadvertently returned to students before results were collected; the minimum number of recorded responses to any question was 28.

*Department Conclusions:* The Chemistry Department concluded that the data show that the General Education student outcomes which have been examined are being achieved in the course. As a result of the process of reviewing assessment, the Chemistry Department has suggested changes in wording of the General Education Natural Sciences Area outcomes in order to state more clearly the intent of those outcomes.

*GEC Conclusions and Recommendations:* The Chemistry Department is clearly putting in place an effective assessment process. Small mistakes such as the returning of exams before data could be collected are understandable when a new plan is being implemented. At the same time, while the GEC Assessment Subcommittee understands the chair's contention that skills and attitudes could be more clearly defined, further work needs to be done to clear up confusion and ensure that the assessment data can be applied more directly to GE skills and attitudes and values outcomes. This issue will be the

subject of further discussion with the department and will be considered in the GEC's review of the program. The committee also recommends target percentages for correct answers to determine whether the course is succeeding in achieving the desired outcomes. For example, does a result of 54% correct answers on question 1b represent an acceptable outcome if students continue to score in that range in future semesters, or would it suggest that the department needs to give attention to the kind of knowledge or the skill that is being measured by the question?

### Economics 1310

Methods: The department revised its assessment plan in 2010: A short (5 question) examination addresses learning objectives of GE for social sciences, emphasizing critical thinking. The faculty administers the exam at the beginning of the semester and again as part of the final examination; students' mean score on the post-test will be statistically significantly higher than the students' mean on the pre-test. In 2011 the exam was expanded from 5 to 8 questions. Four of the five questions (1, 2,4,5) seem to address skills in addition to knowledge gained. The department uses the same test to measure attitudes and values but did not provide data in this category. In response to concerns about students learning that pretest questions will be part of the final exam, the department is working on a rotating set of questions.

*Results*: Four of the five questions used had ratios of % correct (% correct post- test / % correct pre-test) between 3.14 and 8.16, indicating a large improvement of knowledge gained. One question actually dropped from 86.96 % to 84.38% correct, and is going to be changed in future assessments. On the questions that measure skills, three of the four had large improvements, showing an improvement in % correct answers ranging from 3.14 to 8.16. As above, the one question where the % of correct answers dropped will be changed.

*Department Conclusions*: The department concludes that student performance on all but one of the questions shows that desired outcomes are being achieved. The department will change the question on which student performance is not improving.

*GEC Conclusions and Recommendations*: The department seems to be doing a good job of assessing the knowledge and skills outcomes. The GEC makes the following recommendations:

1. While some disciplines and specific courses may address these objectives more actively, and therefore perhaps be able to assess changes, it could be argued that these values as currently described in the General Education Objectives fall more in the humanities/personal perspective category and that general education courses in economics might be less able to address these objectives. On the other hand, it seems that such issues as ethics should fall within the purview of a General Education Economics course, and the department might think about how to measure students' response to ethical questions. In the meantime the GEC will continue to work on better describing the attitudes and values outcomes to assist departments in addressing them.

**3.** Departments and faculty in the College of Business have historically had to assess (and verify/quantify) their programs and courses more than almost any other College at UCA. It appears that

they may have both the experience and skills to do it better than many departments/faculty at UCA. The use of pre- and post-tests is an example of a good way to assess change over the course of a semester. Since they seem to be very actively looking at their assessment procedures and quickly changing when the needs or results indicate, we will rely on them to help in the effort to redefine the attitudes and values outcomes and to help the GEC find ways of improving assessment in the program.

#### Economics 2310

Assessment procedures in this course were revised in fall 2011. The department uses 5 pre- and posttest questions during the semester to determine what students have learned. All of the questions seem to assess knowledge, so this may be an appropriate assessment of this class. The department has proposed that this course be moved from Behavioral and Social Sciences to World Cultural Traditions. The COB curriculum and assessment committee and EFIRM department decided that this move was more representative of the role that this course plays in the overall BBA curriculum and program assessment. This course develops the foundation for cultural and global business environment awareness for majors and thus would also contribute to cultural awareness for students taking the course for GE credit. Therefore, starting with spring 2012 it will use a set of questions setting up a scenario and asking which person exhibited what cultural background/attributes. In addition, a second set of objective questions will test knowledge gained. To measure skills, the current rubric-graded assessment describes business situations and asks how different persons from different backgrounds would react. This is designed to test both knowledge and skills gained. If the course moves into the World Cultural Traditions area, the scenario questions described above are designed to test the students' ability to apply a scenario to a situation they may have not encountered before, indicating a skill. The second set of objective questions tests only knowledge. The current assessment is not designed to measure attitudes and values outcomes. The proposed evaluation for the Spring of 2012 does test the cultural attitudes of business personnel in certain situations, and does look at their value systems and how they may or may not coincide with those from other cultures.

*Results*: Their assessment procedure has been changed three times in the last five semesters. In the Fall 2009 through Fall 2010 semesters, the students failed to achieve the expected increase in performance on a set of pre-test and post-test questions. The COB curriculum and assessment committee suggested a review of the assessment question content and methodology. In response to this review, in Fall of 2011, a writing assignment and presentation on a global business issue was initiated. The overall average score on all rubric areas was a passing 75.8%. As mentioned above, the current assessment procedure does not explicitly address attitudes and values, though it does assess knowledge of cultural awareness.

*Department Conclusions*: As noted above, the assessment process has led the department to propose moving the course to the World Cultural Traditions area, where it fits better, both in terms of the foundation it provides for majors and in terms of the way it contributes to cultural awareness for non-majors.

*GEC Conclusions and Recommendations*: The department is clearly working to define the role of the course and change assessment strategies in appropriate ways. The GEC will be reviewing the

assessment plan that is submitted with the proposal to move the course to ensure that it fits with the outcomes of the World Cultural Traditions area; for example, the attitudes and values outcomes should involve the students' own attitudes and values and should not be limited to recognizing "the cultural attitudes of business men in certain situations." The Council will be following up on the department's assessment efforts as the role of the course is more clearly defined.

### English 2305, 2306

*Methods*: The English Department revised its assessment of these courses in 2009. The plan adopted at that time was the following: Each semester, one third of the instructors who teach a World Cultural Traditions course will randomly select 5 student responses to a writing assignment from each class, to be systematically evaluated by the Department Assessment Committee. The committee will determine the extent to which the students are achieving the knowledge, skills, and values goals for the course. The Assessment Committee will use a rubric developed specifically to ensure that the assignments are evaluated according to the specific goals: i.e., knowledge of Western and Non-western traditions, critical thinking skills (including writing), and awareness of the diversity of human values. After implementing the plan for two semesters, the department decided that the sample size was too small and revised the plan to include a random sample of written assignments from all instructors. Each instructor will evaluate his/her own randomly chosen samples, using a rubric, and then a second reading will be done by a member of the Assessment Committee. If there is a significant difference in the results of the two evaluations, a third reader will evaluate the sample. The original target for the evaluation was that at least 80% of the samples would show that students are achieving the desired outcomes in knowledge, skills, and attitudes and values.

In addition, a survey has been given to determine the extent to which students perceive their knowledge, skills, and awareness of cultural diversity to have been enhanced by the course. Again, 80% of students should respond positively to the questions.

*Results*: In 2010 and 2011, the results of the evaluation of the assignments were satisfactory in ENGL 2306, with 93%, 95%, and 98% scoring at least "satisfactory" in the three categories of the rubric. In ENGL 2305, however, when the rubric was used in 2009, the results suggested that the sample size was inadequate. Students scored 65%, 77%, and 60% satisfactory in the three categories, but almost all of the negative scores came from one class, which skewed the results because of the small sample size. In addition, a call for volunteers turned out not to produce enough sample assignments to allow for assessment of 2305 in subsequent semesters. As mentioned above, these problems led to a revision of the plan so that all instructors will be required to submit writing samples and to participate in the evaluation of samples using the rubric. The new plan will be implemented in Spring 2012.

The results on the survey have been consistently good, though the department has not always hit the goal of an 80% positive response on every question. In particular, questions 4 (on better understanding the relation between Western and non-Western cultures) and 6 (on better understanding the student's own values) have elicited responses that fell below the target (though consistently above 70%). The

department is discussing whether an 80% positive response is reasonable, but it also plans to discuss possible problems that may be indicated by the lower scores on those two questions.

*Department Conclusions*: The English Department realizes that it has a ways to go in establishing effective assessment in general education courses but hopes that recent discussions and changes to the plan will address the problems. The scores in ENGL 2306 indicate that students are meeting outcomes there, but assessment in ENGL 2305 clearly needs work before clear results can be seen.

*GEC Conclusions and Recommendations*: The GEC agrees with the department's conclusions and will follow up to see how the issues are addressed. The English Department now has a faculty member who has one course release time per year to deal with departmental assessment, and the Director of General Education has met with him several times and will continue to do so.

## Health Education/Kinesiology and Physical Education 1320

**Context:** The health-studies general education requirement is met through the completion of a threecredit-hour double-listed course, H ED/KPED 1320 – Concepts of Lifetime Health and Fitness. Course content is taught by faculty from the Health Sciences Department and the Kinesiology and Physical Education Department. Students spend one half of the term with an instructor from each of the departments.

## Health Section of the Health Studies Course

*Methods:* To measure area knowledge outcomes, the HED department uses a pre-test and post-test and reports the percentage of increase in scores. They plan to measure skills and attitudes and values using a survey instrument which will determine whether students have adopted, maintained, or planned a personal behavior change to move toward behavior advocated in the class. This survey will also measure the students' attitudes and values regarding a healthy lifestyle. *Department Conclusions:* The departments report that "the post test scores were between 69% and

72% greater than the pretest scores." There are no data as yet from the survey instrument.

*GEC Conclusions and Recommendations:* The pre- and post-tests seem to be a good way to measure the area knowledge that students gain. The GEC has two recommendations, though: 1) that the departments also report the percentage of students who score at an acceptable level on the post-test, to ensure that a reasonable number of students are actually achieving the desired knowledge outcomes; 2) that the departments set target percentages to specify levels that represent success in achieving the outcomes. In the area of skills, the GEC recommends that a direct measure be implemented to determine if skills outcome goals are being met. The course proposal lists critical thinking, research, and written communication as skills to be enhanced in the course, so perhaps the pre- and post-tests could also measure those skills. The student's determination to adopt, maintain, or plan a personal behavior practice seems to belong in the category of attitudes and values rather than skills, though it might be further elaborated to show what skills might be measured by it and how they can be measured.

### **Fitness Section of the Health Studies Course**

*Methods*: The chair of KPED has offered the following report: "The KPED department uses pre and post written tests to assess students' knowledge regarding (a) the components and underlying principles of health-related fitness, (b) university and community preventive services and events related to health and fitness, (c) the barriers to a physically active lifestyle as well as accompanying strategies to overcome these barriers, and (d) the short- and long-term consequences of physical inactivity and unhealthy dietary practices as well as the benefits of engaging in physical activity and maintaining healthy dietary practices. The standardized written pre-post- fitness tests are a common set of 50 multiple choice questions emphasizing the "application and analysis" levels of Bloom's Taxonomy with a limited number of questions at the knowledge level.

*"Results*: Students' pre/post-test mean score for 2010 -2011 academic year based on 1583 students was 43.4 and 79.1 with a standard deviation 9.37 and 9.08 respectively. Students' performance from the pre-to the post- test indicate the greatest amount of increased knowledge was related to the role of cardiovascular health, body composition, and dietary practices in achieving and maintaining a physically active lifestyle , with the least amount of knowledge gained regarding the understanding and contribution of muscular strength and endurance to overall health and fitness. The department is still considering how to best assess students' valuing of maintaining a physically active lifestyle.

*Department Conclusions*: The department will continue an analysis of each item on the pre and post tests as a means of eliminating and or refining questions due to wording ambiguities. Additionally, the item analysis from the 2010-11 pre and post test indicated that students' gain in knowledge was lowest on questions related to the understanding of and the role muscular strength and endurance plays in overall health and fitness. Faculty reviewed the amount of time spent on this issue as well as the instructional delivery mechanisms and application activities related to muscular training for the upcoming academic year and standardized each of these areas.

To assess physical activity values and attitudes the faculty are in the process of designing an on-line survey to be given to a random sample of students within one year after completion of the general education health studies course. The first administration will be given following the spring 2012 term to students who completed H ED/KPED 1320 during fall 2011."

*GEC Conclusions and Recommendations:* The KPED Department seems to be doing a good job of assessing area knowledge, and the GEC is encouraged by the department's willingness to use assessment data to standardize a section of the course. As is the case in HED, it is not clear how the skills component of the course is being assessed. For example, if both departments are committed to teaching writing, critical thinking, and research skills, a research project resulting in a paper and evaluated with a rubric might offer a direct measure of those skills.

### Mathematics 1390

*Methods:* To measure area knowledge and skills, the department administers a common final exam with a total of 25 items. Seven of the 25 items are multiple choice; 18 items are "response format." The

exam tests for 3 of the 7 area outcomes and all 6 of the skills outcomes. Items are graded using a common rubric. The department has set 60% as the target percentage of students demonstrating the achievement of each outcome. This test has been consistently administered since 2001. In 2010-11 10 items from the final exam were administered as a common pretest and the department measured improvement on those questions. Unlike the final exam itself, the pretest doesn't measure all the GE outcomes; nevertheless it is intended to give a sense of the extent to which students are improving in the area of quantitative reasoning. Currently there is no measure of the attitudes and values outcomes in Mathematics.

*Results:* in Spring 2011 the Math Department reported the following results in area outcomes: 53% of students demonstrated the ability to translate problems into mathematical form; 56% could construct and interpret visual representations of mathematical relationships; 65% could determine mathematical relationships and solutions to problems. In the skills outcomes over 60% of students answered correctly in every area except for constructing and interpreting visual representations of mathematical relationships. The comparison between the pre- and post-test in 2011-11 showed improvements in the number of students answering questions correctly ranging from 25% to 68% in fall 2010 and from 27% to 63% in spring 2011. The assessment report does not specify a target percentage.

*Departmental Conclusions:* The department reports that students are meeting the area knowledge outcomes in that overall correct answers were 62% of the total, though the percentage of students meeting the objectives on two of the area outcomes was below the 60% target. Students met the target percentage for the skills outcomes, since the overall percentage was above 60% though students scored below the target on one skill. The department offers no conclusions based on the results of the pre- and post-test.

As part of its examination of assessment the department has concluded that MATH 1390 may not be the best course for students to take in order to achieve General Education outcomes. College Algebra is a prerequisite for students going into fields that require a fairly specialized knowledge of mathematics, but it does not necessarily work best for students who need knowledge and skills that reflect the demands of fields that require a less specialized use of mathematics and that comprise the kind of mathematical literacy that enables citizens to evaluate mathematical information and claims. With this in mind, the department is examining MATH 1360, Mathematics in Society, to see if a revision of that course might result in a more appropriate way of achieving general education outcomes.

*GEC Conclusions and Recommendations:* The Department of Mathematics is providing good assessment data. The picture is somewhat muddled, however, largely by problems beyond the control of the department. For one thing, there is not really a clear distinction between area knowledge outcomes and skills outcomes in the General Education guidelines. The department has tried to differentiate between the two by using different problems for each outcome, but the General Education Council clearly needs to work on making the distinction clearer. Moreover, as the department's report points out, the scores in College Algebra have dropped as high schools offer more advanced mathematics courses and thus lower the number of higher performing students who need to take MATH 1390 after admission to UCA. Within this context, the pre- and post-test model seems worth pursuing and expanding, since it will

measure improvement in scores and thus reflect the extent to which students with deficiencies in math are really improving in math knowledge and skills by taking the course. The GEC recommends that the department continue to discuss a revised version of MATH 1360 as a more appropriate GE course for students who do not need College Algebra for their majors.

### Philosophy 1301, 2305, 2325, and 2360, and RELG 1330

Methods: In response to the General Education Council's recommendations on assessment of its World Cultural Traditions courses, the Department of Philosophy and Religion revised its assessment strategy in its Humanities courses as well as those used in World Cultural Traditions. The department still uses a survey to determine the extent to which students perceive that they have achieved the area knowledge outcomes. The goal is that at least 75% of students will report that they have achieved the desired outcomes. To measure knowledge and critical thinking skills, the department has developed the following process: Each semester, faculty present 10 "anonymized and randomly selected essays from each general education course they teach, representative of the critical reasoning skills acquired by the students enrolled in the courses." These essays "will be randomly exchanged among the faculty the following spring, enabling the faculty to evaluate the quality of critical reasoning exhibited in them." Each essay is assessed on a scale of 1 to 5, with 5 representing the highest level of critical thinking skills. The goal is that at least 75% of the essays will score at the level of 3 or higher. Though it did not provide a rubric for evaluating the essays, the department did spell out specific criteria to be used in scoring. Student perception of skills acquisition and student attitudes and values are also measured by the survey, with a target outcome of over 75% of students agreeing that their skills have improved and that they have examined their attitudes and values based on the course.

*Results:* The department reports that it has met its goals in its Humanities classes in 2011, with over 75% of essays scoring at an acceptable level. In addition, over 75% of students reported that they had improved their critical thinking skills. Over 75% of students reported positive outcomes in the attitudes and values area.

Department Conclusions: The Humanities courses are achieving the desired GE outcomes.

*GEC Conclusions and Recommendations*: The use of randomly selected essays to measure area knowledge and critical thinking skills is a significant improvement. The committee recommends that the department spell out more clearly how the rubric-evaluated essays also measure knowledge skills; the way the assessment tool is described makes it seem as if it measures skills alone. The committee has asked that assessment data for each course be reported separately, since course content varies considerably among the Philosophy and Religion courses offered for Humanities credit, and overall numbers might not reflect what is happening in a specific course. However, the chair has pointed out that reporting results separately would add considerably to the department work load and would also mean that sample sizes would be very small in courses that have only one or two sections offered each semester. The chair and the Director of General Education have agreed to work together to address this problem.

#### Physics 1400, 1401

*Methods*: The department uses the Physical Science Assessment Instrument at the end of the semester to measure students' "understanding of the scientific method and of its relevance and applicability to their daily lives." This instrument is designed to measure area knowledge, skills, and attitudes and values, and has recently been used in both PHYS 1400 and PHYS 1401, replacing a knowledge-based test used previously in 1401. The department is developing a new survey to be incorporated in the final exam. This will be piloted in spring 2012 and will be used in both Physical Science (PHYS 1400) and Descriptive Astronomy (PHYS 1401). The department keeps records of student response percentages but hasn't set target percentages.

*Results*: The department concludes that "The current Physical Science tool is basically doing its job but is too long, and is not amenable to setting targets. . . . The general trend was for student attitudes to more strongly align with scientific methodology. Students who strongly disagreed with the scientific method at the beginning of the course were likely to shift to disagreement or agreement. Students who agreed were shifted into the strongly agreeing category."

*Department Conclusions*: As noted above, the department concludes that outcomes are being achieved in a general way. Based on the results of the Assessment Survey, the department has undertaken two revisions in the courses:

1) More technology has been adopted in labs to allow multiple trials instead of a few. More sophisticated analyses have been incorporated.

2) Attitudes and values are now directly addressed throughout the course (PHYS 1400). This will be addressed further in astronomy sections.

*GEC Conclusions and Recommendations*: The Physics Assessment instrument seems to address most of the area outcomes, with the exception of the ones most directly related to area knowledge—enabling students "to understand current principles and theories used to explain natural phenomena" and giving students "an understanding of how human activity affects the natural environment." It is not clear just how the survey is assessing these. For example, the question listed as assessing the students' understanding of the impact of human activity on the environment (#19) actually seems designed to measure the student's perception of science's ability to explain natural phenomena.

The skill listed on the original proposals for PHYS 1400 and 1401 is quantitative analysis, and it is also not clear just how the survey is measuring student achievement of the outcomes associated with that skill. The instrument seems better suited to measuring critical thinking, since it asks students to respond to questions based on their ability to understand the way scientific thinking works.

The questions on the survey seem to do a very good job of measuring student attitudes and values in relation to the scientific approach to the world.

The department's use of assessment data to make changes in the courses is laudable.

The GEC recommends that the department adopt direct measures of area knowledge (this could be easily done by having a faculty team look at content questions on a randomly selected sample of final exams, for example), and clarify the skills outcomes for the course.

As noted above, percentages of student responses are recorded but not interpreted. It is hard for an outside observer to determine the extent to which the answers to the questions represent a successful outcome. If "disagree" is the desired response to question 1, for example, does a "disagree" percentage of 41 represent achievement of the desired outcome? The GEC recommends that the department develop clear target percentages, based on the desired level of correct responses and/or the percentage of change in student responses over the course of the semester.

# **II.** Follow-Up on Evaluation of Course Assessment in Spring 2011

# Geography

The chair of Geography reports that the department is busy working on program assessment and plans to review general education assessment as soon as the program assessment is revised.

**Response:** The GEC will follow up on this plan in Spring 2012.

### History

The General Education Council received the following update from the History Department:

"At a March 9, 2012 department meeting Roger Pauly presented the Fall 2011 History Assessment report. A very productive discussion followed and the department as a whole was able to agree on a target goal for improvement of our assessment quiz results. Brent Ruswick, who as a historian of science has some background in mathematics pointed out that a 5% rate of improvement would be quite impressive given the size of some of the courses. This was particularly true with regard to World History I which enrolled over 800 students in the fall semester.

The department decided to have the faculty teaching American History and those teaching World History to meet separately as subcommittees prior to the start of the Fall 2012 semester to consider whether our course content was meeting the expectations of the American History and Government and World Cultural Traditions General Education Categories.

On March 13, 2012 the World History Faculty subcommittee met for this purpose. Faculty members decided to experiment and try David Neilson's model and therefore two faculty members (Roger Pauly and Chris Craun) contributed new content-reports. David O'Hara also agreed to complete one in the near future. The subcommittee was generally supportive of this exercise and felt it was a good tool to make sure History courses are in fact meeting the obligations of the General Education World Cultural

Traditions area of study. It was decided that Kenneth Barnes as chair would be the point person to collect these reports to eventually be submitted to the General Education Council.

The subcommittee understood Dr. Ruswick's point made above but felt optimistic nonetheless and voted to adopt a goal of a 10% rate of improvement .

Lastly, the subcommittee voted to re-write part of the critical reasoning section of the assessment quiz to better reflect the goals of the General Education Program's Critical Thinking requirement. Roger Pauly agreed to undertake this task as part of his duties as History General Education coordinator."

**Response:** The History Department is clearly taking concrete steps to improve assessment in its general education courses. The GEC will follow up in Fall 2012 to make sure that a revised plan is developed and implemented.

# Linguistics/World Languages

The General Education Council received the following report from Phillip Bailey in World Languages:

"LING 2350 and WLAN 2350 faculty have met to discuss assessment of World Languages. We have agreed on a revised Bulletin description for the courses. We have discussed the assessment of the skill area--research-- and have agreed on assessing that with a final poster/paper project. We have not submitted any curricular revision form at this point however. I would suggest that we could use some direction/guidance/training in coming up with a final assessment procedure. There are only 4-5 faculty in any given semester teaching the courses and it hardly seems valid to have me reading my colleague's student papers to assess whether they meet the outcome. That said, we will all have a final assessable product."

**Response:** The Director of General Education has offered to meet with the faculty involved to help address the issues mentioned above. The GEC will follow up to see what the department does in the near future.

# Philosophy and Religion

The General Education Council received the following report from the chair of Philosophy and Religion, which has been slightly edited to reflect further conversation with the chair concerning the way in which area knowledge is assessed:

"Assessment Procedure for Philosophy & Religion General Education Courses

1. Student Self-Assessment

At the end of each fall semester, questionnaires will be administered to all students in philosophy and religion general education courses. These questionnaires will be designed to allow students to assess their own progress with regard to the development of their knowledge, skills and values, thereby

providing a measurement of the courses' abilities to achieve general education goals from the perspective of the student body. Satisfactory achievement is defined by a minimum 75% positive response on questionnaire items. The data generated through this process will be provided in the departmental annual report and used by the department to monitor and assess the quality of its general education courses.

# 2. Faculty Peer Assessment

At the end of each fall semester, all faculty will gather 10 anonymized and randomly selected essays from each general education course they teach, representative of the [knowledge and] critical reasoning skills acquired by the students enrolled in the courses. The essays will be randomly exchanged among the faculty the following spring, enabling the faculty to evaluate the quality of [knowledge and] critical reasoning exhibited in them. The [essays] will be assessed on a scale of 1 to 5, with a ranking of 5 achieved when the essay demonstrates strong abilities to: a) identify and state arguments b) identify assumptions and implications of arguments c) critically evaluate arguments in terms of the strength of evidence and reasoning. Satisfactory achievement is defined by a minimum of 75% of essays achieving a ranking of 3 or higher. The data generated through this process will be provided in the departmental annual report and used by the department to monitor and assess the quality of its general education courses."

**Response:** This shows real improvement in assessment procedures. As noted above, the General Education Council has recommended that data on different courses be reported separately instead of combining data from all courses in each area (Humanities and World Cultural Traditions) as is currently done, and the department chair and the GEC will work together to address this issue.

# **Political Science**

The General Education Council received the following report, which has been edited to reflect a recent update, from the chair of Political Science:

"In August, 2011 the Department of Political Science created a Department of Political Science Assessment Committee composed of 4 faculty members. This committee is working on an assessment proposal that will be distributed to faculty and discussed at our January department meeting. [This proposal is now scheduled to be presented in the Fall.] The [draft] proposal is as follows:

- A) General Education Area Objective
  - The Assessment Committee proposes to continue the practice of giving a 25-question, multiple choice exam to test area knowledge. The multiple choice exam for PSCI 1300 and PSCI 2300 tests area knowledge for the Behavioral & Social Sciences area. The multiple choice exam for PSCI 1330 tests area knowledge for the American History and Government and the Behavioral and Social Sciences areas.
- B) General Education Skills Objective

In all three general education courses, the General Education Council found an inadequate assessment of the skills objective. The Assessment Committee proposes the following for assessing the skills objective.

- The Assessment Committee recommends critical thinking as the general education skills objective for all three of our general education courses (PSCI 1300, PSCI 1330 and PSCI 2300). Currently, PSCI 1330 and PSCI 2300 use the information and computer literacy skill objective.
- 2) The Assessment Committee proposes a short in-class written essay to assess critical thinking skills in each of the three courses. All students in the general education course would complete the in-class written assignment, but a random sample would be chosen for review.
- 3) The Assessment Committee will devise a rubric for grading the written assignments based on the five objectives for critical thinking.
- 4) The Assessment Committee will be creating guidelines for how the written assignments are graded (who grades? committee members or departmental faculty?) and the standard of success or target pass rate.
- C) General Education Attitudes and Values Objective

Again, in all three general education courses, the General Education Council found an inadequate assessment of the attitudes and values objective. The Assessment Committee proposes the following for assessing the attitudes and values objective.

- 1) The Assessment Committee proposes a Likert-type survey to assess attitudes toward diversity.
- 2) The Assessment Committee will create a survey during the spring semester."

**Response:** The process outlined here seems to be appropriate, and the General Education Council anticipates a revised assessment plan. The GEC will check on progress in Fall 2012.

# Writing

The Writing Department has added questions to their rubrics for WRTG 1310 and WRTG 1320 which will allow them to address the general education outcomes more directly. They will report data from the added questions on the new form developed for reporting general education assessment data.

**Response:** This revision of the rubric should enable the department to assess the courses and report the data in a way that clearly addresses GE outcomes.

# **III.** Program-Level Assessment

### **General Education Student Focus Groups**

Background: The General Education Council recommended in 2009 that the university conduct student focus groups involving 2 colleges each year as part of the assessment plan for the General Education Program. The groups were not conducted until 2011 because the university's financial problems precluded funding them. In the summer of 2011, as part of the university's strategic planning process, the provost made assessment of General Education a high priority and allocated funding. Mr. Phil Bartos, Executive in Residence in the Department of Marketing and Management and an experienced facilitator of focus groups, agreed to facilitate for a minimal fee, which he asked to be given to his department. The deans of the colleges of Business and Liberal Arts asked faculty members to provide lists of seniors who had taken all or nearly all of their GE hours at UCA to participate in the groups. From those lists, 10 student participants were selected from Business and 11 from Liberal Arts. The groups were held on December 9, 2011, with Mr. Bartos as facilitator and Travis Rhodes, a graduate student in English, taking notes. Students were asked to discuss three questions, which they were given ahead of time and asked to reflect on: 1) What did you find especially helpful about your general education experience? 2) What did you find unhelpful or frustrating? 3) Do you think the general education course requirements provided a well balanced program of study (cultural perspectives, sciences, mathematics, the arts, social sciences, etc.)? That is, do you think they helped prepare you in a balanced way to understand issues that you need to deal with as an informed student and citizen?

Students were compensated by receiving \$20 each in "Bear Bucks," which can be spent at campus facilities. Six of the students in Business and all 11 Liberal Arts students actually attended and participated.

### **Results:**

*Question 1--What did you find especially helpful about your general education experience?* Students felt that GE courses helped them in discovering what they wanted to major in and also felt that many of the courses offered a foundation for the major (e.g. writing skills in both Writing and Literature classes). Liberal Arts students liked GE courses that were clearly designed for broad knowledge instead of specialized skills they would not need in the major (e.g. Chemistry in Society). Both groups of students mentioned that GE courses offered a break from the intensity of major courses, and also appreciated that some GE courses could also count as credit for the major. They liked the way GE courses encouraged them to become "culturally diverse and open-minded" and "well rounded." Business students especially appreciated the option of using CLEP and/or AP scores to receive credit for knowledge they already had.

*Question 2--What did you find unhelpful or frustrating?* Perhaps the most significant issue mentioned in response to this question had to do with the quality of teaching in GE classes. Students felt that some of their GE teachers were unqualified, that others were just going through the motions with little interest in the subject, that GE teachers and/or classes are looked down on by the department, and creativity in

teaching and curriculum is discouraged. Students felt that often neither the students nor the teachers wanted to be there. The suggestion was made that instructors be allowed to design their GE courses to better reflect their interests and/or specialties. Students also complained that many GE courses simply repeated material they learned in high school. They were also frustrated that more courses could not count for both GE credit and the major (e.g. Business Communication instead of Oral Communication). While Liberal Arts students focused mostly on the quality of teaching and engagement in classes, Business students expressed frustration that they had to pay for courses that did not count in their major, for textbooks that were used only once, and for the number of GE courses required ("The literature classes were enjoyable, but were they \$700 enjoyable?") They also thought that Personal Finance should be a GE requirement.

*Question 3*: One important issue that emerged in both groups in response to this question was the quality of advising. Students felt that their major advisors were generally helpful, but that advising in GE was not helpful and often kept students from achieving a balance in their choices of GE classes. Students felt that advisors often treated them as "an annoyance" and advised them against their wishes. Students also felt that choices in some areas should be expanded (e.g. KPED, Mathematics) to allow students to take courses that seemed more relevant to their interests. Liberal Arts students felt that the program provides a good balance of subjects but mentioned that some classes could be better designed to teach application of knowledge, rather than just concepts. Business students felt that GE requirements took too much time, expense, and effort that could be better spent on their majors.

#### Conclusions:

The remarks about the quality of teaching in GE courses point to the need for faculty development. The GEC is developing a faculty survey to help assess faculty views of and attitudes toward the GE program and to ask faculty what might be done to help them in teaching their GE courses. Hopefully this survey will help us identify ways to improve teaching in the program. On the other hand, a lack of enthusiasm for teaching probably can't be separated from the perception of an instructor that the course he or she is teaching has little relevance to his or her interests, and a review of the program should look for ways to address this issue. The Biology Department has taken a laudable step in this direction by offering three versions of BIOL 1400, one of which is the traditional introduction, one of which focuses on health issues, and one of which focuses on environmental issues. This approach seems likely to make the course more relevant to both student and instructor, and the GEC will be looking at course assessment in Biology to see if the more focused versions of BIOL 1400 are affecting student satisfaction with the course. The GEC has also been encouraging departments to consider proposing upper-division courses for GE credit, which might also help faculty approach the subject in ways that engage them and their students more readily. One issue that didn't come up directly but may have an impact on student and faculty attitudes is class size. It can be difficult for a faculty member to introduce creative approaches or work on skills such as writing when the number of students in the class makes nontraditional approaches or writing assignments difficult to manage. Finally, the perception that GE courses don't "count" when it comes to evaluating faculty performance really needs to be addressed. If our GE program is indeed the core of an undergraduate education at UCA, teaching GE courses should be treated as a valuable part of what we do, and not left to part-time or adjunct faculty who get little

institutional support or treated as a burden by regular faculty. We should be looking for creative ways to address this concern.

Advising is another important concern. To be sure, students can feel that they are advised against their wishes for a number of reasons; for example, the course a student wants to take may be full, so the advisor might recommend a different class that is open but that the student doesn't really want. Nevertheless, the perception that advisors treat students as an "annoyance" must be taken seriously. The GEC clearly should be working with the Advising Center to look for ways to convey the message that GE choices are important and to work with students to help shape a balanced and thoughtful approach to taking the GE requirements. Here again, moving some GE requirements to the upper-division level may help students understand that GE requirements aren't simply classes that they need to get out of the way before they can take major classes. The Director of General Education will meet with advisors in the Advising Center this semester to address these concerns.

The student comments also point to confusion about the program in some instances. In some cases the confusion is quite specific—one student wonders why Business Calculus can't substitute for College Algebra when that substitution is spelled out on the GE check sheet. But there is also a larger source of confusion: The tendency of Business majors in particular to refer to a dichotomy between GE courses and "classes that will . . . help in life" suggests that we haven't done a very good job of demonstrating and communicating the ways in which the skills and knowledge provided in GE classes contribute to lifelong learning and students' ability to participate in a democratic society, not to mention success as an employee in a work environment that demands flexibility, critical thinking, and the ability to relate to people from diverse cultures. We need to do more to make these connections clear.

Overall the student comments reinforce our decision to review the program, as we have begun doing. As faculty members we need to remind ourselves of what we want the program to accomplish and look for ways of achieving that more creatively and communicating it more clearly, both among ourselves and to our students.

### **Further Assessment Measures**

# ETS Proficiency Profile©

With the discontinuation of the rising junior exam in 2007, UCA has lacked a way to measure the overall impact of its general education program on student learning outcomes. To address that issue and the Higher Learning Commission's concerns about our assessment of student learning, the General Education Council recommended in 2009 that UCA use the ETS Proficiency Profile exam to assess skills in reading, writing, mathematics, and critical thinking. The Council of Deans has approved administering the exam to 250 seniors in Spring 2012 and 250 freshmen in Fall 2012. The GEC is working with the college deans to provide students to take the exam and will be analyzing and reporting on the results.

# **Employer Focus Group**

In response to the Higher Learning Commission's recommendation that UCA conduct focus groups with "principal outside stakeholders," the GEC set up a focus group with potential employers of UCA graduates in a number of areas: Business, Secondary Education, Accounting, Health Care, Law, Journalism, and Public Relations. Deans and faculty from different areas were asked to identify potential participants, and from the list of names submitted, 11 individuals were contacted. Once again, Mr. Bartos agreed to facilitate. Five of those contacted were able to attend a focus group on March 28, 2012; three other individuals expressed an interest in participating even though they had prior commitments on March 28, so Mr. Bartos will interview them individually.

Participants were asked to comment on the following:

Participant expectations of UCA graduate skills in the following categories:

- Communication
- Collaboration
- Critical thinking
- Computing intelligence

Identify other skills or knowledge that participants expect graduates to possess.

What is the individual participant and group evaluation of UCA graduates' preparation for success as employees in central Arkansas?

As with the student focus groups, participants were given the questions ahead of time and asked to reflect on them before the session. The results of this focus group will be summarized and reported whenever they are available.