

Interdisciplinary Perspective 1999

General Report

Outcome

Through the General Education interdisciplinary core courses, Core 320: Human Condition, and Core 340: Sustainable Planet, honors courses, and other course work across the curriculum students will learn how to use interdisciplinary perspective.

Faculty and Personnel Involved

1. Faculty teaching the Core 320 and Core 340 helped in the collection of the data.
2. Cathy Henley-Erikson, Janice Pilgree, and Aghop Der-Karabetian developed the assessment rubric.
3. The following faculty were involved in the evaluation of the responses of students to the final exam questions in the interdisciplinary core courses: Yvonne Davis-Keith, Aghop Der-Karabetian, Janis Dietz, Carol Fetty, Cathy Henely-Erikson, Ells Johnson, Janice Pilgreen, Lynn Stanton-Riggs, Ann Wichman, and Dorena Wright.
4. Ann Wichman did the content analysis of student comments in the course evaluations of the core courses.
5. Dan Merritt and Rita Thakur developed and piloted special course evaluation forms for the interdisciplinary core courses.
6. Shelly Millone, a senior psychology student, helped with the computer data analysis.
7. Faculty and personnel involved in the development and administration of the senior exit survey.

Methods and Procedures

1. Senior Exit Survey

The ACT College Outcomes Survey administered to seniors during 1997-1998 had one somewhat indirect question related to this outcome. One supplemental question was added. There were 134 traditional and 191 nontraditional age students in the sample of seniors. The items and student responses are attached.

2. Course Embedded Performance Measure

Interdisciplinary Core 320 and Core 340 classes during the Fall, 1997 and Spring 1998, semesters participated in the assessment effort. Altogether 129 students were involved in the process.

The performance samples were responses to final exam questions prepared by the faculty teaching the courses, and were uniquely related to the topic of the course (The same samples were also used for assessing the writing competency). Students were given 20 minutes to respond to the question. Several weeks prior to the exam students were told that there would be a special question on the final exam to anonymously assess the interdisciplinary skills of students as a class, but that they would still be graded on the question for the exam. The same percentage weight of 20% was given to this final exam question in all the courses. A copy of the exam questions and the information sheet given to students are attached. The information sheet included the criteria of the rubric that was to be used in the assessment process.

The rubric measured the competency in four levels Poor (1), Fair (2), Good (3), and Excellent (4). Each response was evaluated by two faculty independently. If there was one point discrepancy the mean was taken. If more than one point discrepancy was present a third faculty member also evaluated the response. The assessment rubric is attached.

3. Course Evaluations

Ten Core 320 and Core 340 courses taught between 1996 and 1998 were used to identify the sample of student evaluations. From each course 10 student evaluations were randomly selected for a total sample of 100 forms.

All the evaluation forms (not just the sample) were read through once to identify thematic categories. Then each of the sample evaluation forms was examined for types of comments. Areas of satisfaction and dissatisfaction were analyzed separately.

Results

1. Senior Exit Survey

About 60% of the seniors in all subgroups agreed or strongly agreed that required courses outside of their major helped them think about their major in the context of a larger worldview. This was similar to the normative national sample. Also, about 60% said they much or very much increased their knowledge at ULV of how to examine issues from the perspective of different disciplines. About 50% of the transfer students said so.

2. Course Embedded Performance Measure

The following table shows the distribution of students across the four levels of the competency to use interdisciplinary perspective.

Table 1
 Percentage of students at different levels of competency in the use of interdisciplinary perspective (n=129)

Level of competence		Number	%
Poor	1.0	12	9
	1.5	16	12
Fair	2.0	31	24
	2.5	32	25
Good	3.0	19	15
	3.5	11	9
Excellent	4.0	8	6

The frequency distribution of the competency shows that there is a tendency for scores to be on the lower end of the scale. However, the distribution is balanced enough to suggest that the rubric may be sensitive to capturing differences among students. About 20% of the sample scored below the level of fair, and about 30% scored at or above the level of good. The overall average was 2.37 (SD = .80), with a median of 2.50. The distribution shown here presents a good baseline for future comparisons.

3. Course Evaluations

The following table shows the percentage of top 5 themes present in student comments in interdisciplinary courses in areas of satisfaction and dissatisfaction. Altogether 80 comments were identified in the area of satisfaction, and 80 in the area of dissatisfaction. It was possible for each comment to generate more than one theme. Therefore the percentages are not expected to add up to 100.

Table 2
 Percentage of top 5 most frequently occurring comments in areas of satisfaction and dissatisfaction in interdisciplinary core Courses

Comment Categories	%
<u>Satisfaction</u>	
1. Interesting and appropriate	66
2. Good uses of field trips, projects, audiovisuals	15
3. Good student involvement and/or use of group projects	13
4. Relevant, applied	11
5. Effective teaming by the faculty	10
<u>Dissatisfaction</u>	
1. Disorganized (lack of structure, unclear requirements, tests unrelated to course material covered, delayed feedback, lack of	50

relationship of syllabus to course material, poor pacing, project or field trip problems)	
2. Inappropriate or Uninteresting assignments	25
3. General negative (course irrelevant, waste of time)	20
4. Requirements too difficult for core	19
5. Ineffective teaming by faculty	19

Evaluator's observations about the nature of the comments suggested that comments within each course tended to be quite consistent, attesting to the reliability of the assessment. There was variability between courses, with some courses being rated as quite satisfactory and others being rated as quite unsatisfactory. There did not seem to be a relationship between class size and satisfaction ratings.

The frequency of the themes shows that two-thirds of the comments in the satisfactory category indicated that the courses were interesting and appropriate. The aspect of the course that was found to be most unsatisfactory involved disorganization of some kind. Half of the themes under dissatisfaction referred to this issue. The fact that students seem to be experiencing the courses as disorganized needs special attention. The novelty for the students may come from its format of being taught by two faculty members who are in the class at the same time.

Dissemination and Dialogue

These results were shared with several groups and led to spirited and productive conversations. The most prominent issues dealt with what interdisciplinary teaching really means, and why the course is being experienced as disorganized. The following groups discussed the issues:

1. Faculty who have taught the Core 320 and 340 courses met several times
2. The General Education Committee
3. Faculty at large
4. Student representatives from the Associated Student Federation

Conclusions and Recommendations

About 60% of the seniors indicated that they improved on their interdisciplinary thinking skills at ULV. While this represents the majority there is room for improvement. Not everyone in this group of graduating seniors took the Core 320 and 340 courses, since they started under a different set of G.E. requirements. It would be reasonable to expect that the next group of seniors will show some improvement in this regard.

The performance based measure showed a normal distribution of the competency to use interdisciplinary perspective. This shows the sensitivity of the rubric and the assessment procedure to detect differences. However, as the institution gets better at helping students learn this competency, the distribution may become more skewed in favor of higher scores.

Analysis of the course evaluation forms showed a real concern on the part of the students about the way the course was being experienced. Discussions of the findings with the

students confirmed the mixed reaction the course has received by the students, and identified the need to clarify expectations in process and learning outcomes. Faculty discussions of the issue led to several recommendations:

1. Find ways to better prepare students about what to expect in format and learning outcomes.
2. Develop a specialized course evaluation form that addresses the unique aspects of the course in terms of process and expected outcomes.
3. Create opportunities for faculty to continue to dialogue on the pedagogical issues, as well as the meaning of “interdisciplinary perspective.”

Actions for Program Improvement

Based upon the recommendations and suggestions of the faculty and the students, the following actions have been taken so far to improve the course.

1. A task force was put together that came up with an information sheet that specified the unique aspects of the course in term of how the course is taught, and what kind of learning outcomes are expected. Starting Fall, 1999 this information sheet will be distributed and discussed early in the course, and referred to later during the course as a reminder of expectations. A copy of this sheet is attached.
2. A specialized end-of-course evaluation form was devised by two faculty members teaching the course, and was piloted in two courses. It is completely open-ended in format to invite thoughtful reflection by students about process and learning outcomes. It appeared to generate meaningful comments about how the courses were taught and what was learned. A copy of the evaluation form is attached. In the Fall of 1999, the subcommittee of the Assessment Committee looking at course evaluations will evaluate the form and make a recommendation. Also, faculty teaching the course is encouraged to do a mid-term evaluation (for their eyes only) to assess the progress of the course, and to make adjustment if necessary.
3. In an effort to create opportunities for ongoing dialogue, the Dean of the College of Arts and Sciences selected “interdisciplinary thinking” as the theme of the year for 1998-1999. A special time was dedicated to this topic during regular faculty meetings. Several handouts (attached) were distributed to frame and guide the conversation.
4. Since the Core 320 and 340 are designed for upper division students, advisors were reminded to ensure that freshmen were not signing up for the courses. Also, for the Core 340: Sustainable Planet, advisors were encouraged to sign up students who have had some background in the natural sciences, which is the primary area for this course.
5. G.E. Committee approved that students have Eng 111 completed as prerequisite for Core 320.
6. G.E. Committee approved that students have Eng 111 completed, have Junior or Senior status, and have a G.E. Life Science course completed as prerequisite for Core 340.

Table 2

Percentage of ULV Seniors (97-98) reporting **interdisciplinary perspective** at ULV, compared to the ACT norms of national private universities.

ACT Items	ULV Trad Undergrad n=134	Fresh Entry n=73	Trans Entry n=57	CAPA n=85	SCE n=106	National Privates
1. Required courses outside my major helped me think about my major in the context of a larger world view (Strongly Agree/Agree) (II-B1)	59	60	57	68	61	59
2. Increased knowledge of how to examine issues from the perspectives of different disciplines as a result of ULV courses (Very Much/Much) (ULV-8)	59	64	52	63	64	-