

Sustainability 1999

General Assessment report

Summary

Outcome

Through the General Education Core 340: Sustainable Planet course, and other curricular and co-curricular activities students will develop an understanding and awareness of environmental issues and act to promote sustainability.

Faculty and Personnel Involved

Faculty who have taught the G.E. Core course, faculty, students, and staff who helped conduct the senior exit survey and the alumni survey, students in an honors class on ethics and sustainability, and a sociology student.

Methods and Procedures

1. Course evaluations
2. Senior exit survey
3. Alumni survey
4. Attitude and behavior survey
5. Sustainability campus scan

Results

1. About 1 in 4 students in the core course explicitly mentioned learning about environmental issues as one of the most satisfactory aspect of the course.
2. About one-half of seniors and alumni were satisfied with their preparation and progress at ULV concerning environmental issues.
3. The preliminary results comparing attitudes and behaviors of those who have and have not taken the core course were inconclusive at this time.
4. The sustainability campus scan by students pointed to concrete learning outcomes and identified areas that need attention.

Actions for Program Improvement

So far not much deliberate dialogue has taken place because of the recency and exploratory nature of much of the effort. However, a committee of faculty and students formed after the Natural Science faculty discussion of assessment issues will take recommendations generated from the campus scan to the Executive Vice President for possible action in the Fall of 1999. The General Education Committee may consider combining a Core 340 section with a service learning core course in the Fall of 1999.

Sustainability

Outcome

Through the General Education Core 340: Sustainable Planet course, and other curricular and co-curricular activities, such as celebration of earth week, and activities of the Society of Physical and Life Science Scholars (SPLSS), students will develop an understanding and awareness of environmental issues and act to promote sustainability.

The Core 340 course is one of the ways the University tries to live out its Mission developing environmental awareness around issues of the sustainability of the planet. This is an interdisciplinary course taught by two faculty who are in the class at the same time, and one of whom is always a science professor and the other is from another discipline.

Faculty and Personnel Involvement

1. Instructors who have taught the courses and have developed evaluation forms.
2. Faculty, students and staff involved in conducting the senior exit survey, and the alumni survey.
3. Students in an honor class who did projects scanning the campus about the sustainable use of resources, such as power and paper.
4. Lizbeth Ulloa-Davila, a sociology student, is in the process of surveying the environmental attitudes and behaviors of students as part of her senior project.

Methods and Procedures

The assessment efforts related to this outcome are in the pilot and exploratory stages, although some results have been obtained from these efforts. The faculty of the Natural Sciences Division met in the Fall of 1998, and explored various ways this outcome may be assessed. The following are the methods used so far.

1. Course evaluations

A total of 120 student comments on standard course evaluation forms, from six Core 340 courses between Fall 1997 and Spring 1999, were examined for unprompted references to learning about sustainability issues in response to the question, “ What aspects of this course have been most satisfactory for you.” Also, faculty in one section of the Core 340 class, Dr. Merritt and Professor Thakur, developed a more specialized course evaluation form. On this form, among other questions, they asked about what the goals of such a course should be, in what ways these goals were met, and how students changed by

taking this course. These questions have the potential of being adopted in the evaluation of other sections.

2. Senior Exit Survey

The ACT College Outcomes Survey had only two items related to this issue. One question was added to the list of supplemental questions. These questions with student responses are attached. During the 1997-98 academic year 134 traditional and 191 non-traditional age students participated in the survey. The questions and student responses are attached.

3. Alumni Survey

Altogether 84 undergraduate and 125 graduate alumni from 1995 were surveyed by phone using an internally developed questionnaire. There were two questions about sustainability: a) "Please tell me if the preparation you received at ULV was excellent, good, fair or poor concerning sensitivity to environmental issues." And, "Compared to your peers or co-workers from other colleges and universities were you better prepared, about equally prepared, less than most prepared, or no basis for comparison concerning sensitivity to environmental issues."

4. Attitudes and Behavior Survey

This survey utilizes the Ecology Scale developed by Maloney, et. al. (1975, American Psychologist) to assess students verbal and behavioral commitments to pro environment issues. The survey includes additional questions that relate to the ULV experiences and coursework. It will be used to compare the responses of those who have and have not taken the Core 340 course on sustainable planet. The responses to select questions will also be compared to responses of students to the survey conducted in 1992, which is published by Der-Karabetian, et al (1996, *Perceptual and Motor Skills*). Only the preliminary data will be reported here at this time, since the study will take another semester to complete. A copy of the survey is attached.

5. Sustainability Campus Scan

This campus scan was used to help assess the campus climate in terms of the degree to which it is sensitive to the environment in its utilization of resources such as water, power, and paper. It was based on the projects of students in an honors class on "The Ethics of Sustainability" taught by Dr. Neher and Dr. Gingrich in the Spring of 1999. This course will be offered as a Core 340 class in the near future.

Results

1. Course Evaluations

In the standard course evaluation forms, 26% of the 120 students explicitly mentioned that learning about environmental issues was most satisfying for them about the course. About 13% did not respond to the question or indicated that “nothing” was satisfactory about the course (dissatisfaction issues will be dealt with in some detail under the assessment topic of “Interdisciplinary thinking” below). The majority of the comments related to satisfaction with process aspects of the course. It seems that minimally one out of four students were positively impacted about environmental issues and said so explicitly. The comments of students from the six courses are attached.

There were three key questions in the special course evaluation form that are directly relevant to learning outcomes and will be addressed here: “What do you think should be the goals for such a general education course?” “In what way do you believe this course met those goals?” And, “Please comment on ways, if any, that you have been changed by taking this course.”

This class had 19 students. The complete set of student comments to all three questions are attached.

On the goals question, the thrust of the student comments had an applied bent. Most were interested in learning how to better “take care of the environment” rather than just acquire knowledge or increase awareness.

Example, “To get an understanding how we need to work with the environment to keep it safe and healthy.”

On the ways students believed the course met these goals, the comments mostly focused on the aspects of the course that involved active learning, such as the projects, trips, and presentations. Example, “The course met the goals by making the students do the presentations [of their projects]. I believe that through the presentations people became aware of what was happening, and what could be done to change things.”

On the question concerning how they were changed, about one-half either left it blank or misunderstood the question and made comments about changing certain aspects of the course. The other half reported increased awareness and understanding, and/or an inclination to act.

It looks like the specialized form has some promise in capturing self-reported learning but needs some work.

2. Senior Exit Survey

About half the traditional and 40% of nontraditional age seniors reported that learning about principles for conserving and improving the global environment were of great or very great importance. However, only one-third indicated that they made much or very

much progress in this direction at ULV, with the exception of the CAPA students, of whom 65% said they made such progress.

Also, about half the seniors in all categories indicated that required courses outside their major helped increase their knowledge of the earth and its physical and biological resources except CAPA, again 65% of whom agreed or strongly agreed with the statement. The normative sample of national privates was similar to the ULV responses.

Only about one out of four of traditional age students and one out of seven nontraditional age students indicated that their commitment increased much or very much towards protecting the environment as a result of classes at ULV.

3. Alumni Survey

Concerning the preparation they received at ULV in terms of sensitivity to environmental issues, about 30% of undergraduate alumni said it was excellent and 40% said it was good. About 25% said they were better prepared and 60% about equally prepared in this area compared to their peers and co-workers from other universities. Compared to other areas alumni were relatively more critical of their preparation in sensitivity to environmental issues although over 70% appeared to be pleased with it. Among graduate alumni about 10% felt they received excellent preparation, and 50% felt they received good preparation.

4. Attitude and Behavior Survey

So far the survey has been administered to 26 students who have taken the G.E. Core 340 class and 32 who have not. About half of each group said that it is of great or very great importance to them to learn principles for conserving and improving the global environment.

Of those who have taken the class nearly 80% say that they have made average to very much progress towards learning principles for conserving and protecting the global environment, while about 50% of those who have not taken the class said so.

Only about 20% of each group thinks that the ULV campus is much or very much involved in protecting the environment.

It looks like whatever learning may have taken place it does not seem to have translated to action very well in this small sample. Only about 10% said they have contacted a community agency to find out what they can do about pollution, about 40% of those who have taken the class and 56% of those who have not said they have switched products for ecological reasons.

However, about 60% of those who have taken the class and 80% of those who have not said that they will be willing to stop buying products from companies guilty of polluting the environment, even though it would be inconvenient.

5. Sustainability Campus Scan

Students in the Ethics and Sustainability class scanned the campus in five areas. The objective of the assignment was to identify environmental problem areas and make recommendations. Copies of the projects are attached.

1. One project examined the air conditioning system in one of the student residence halls (The Oaks). Students demonstrated inefficiencies and made recommendations to reduce use of power, save money, and improve the satisfaction of the residents of the dorm .
2. A second project examined the outside lighting system of the above residence halls (The Oaks). Students recommended replacing the incandescent light bulbs with fluorescent bulbs. This would reduce the labor of frequently replacing burned out bulbs, the amount and cost of power use, and at the same time maintain lighting needed for security.
3. A third project looked at the company that provides the meat for the dining hall. The conclusion was that the company that provides this service, SYSCO, is environmentally sensitive in its policies and practices.
4. A fourth project looked at the water utilization for washing dishes at the dining hall. Students recommended that small glasses be replaced with larger glasses to save water and power.
5. A fifth project examined the recycling efforts at the University. The findings showed that the green waste was being appropriately recycled. However, there was no systematic implementation of the recycling plan for paper waste, and aluminum cans. Students made recommendations about ways of implementing the recycling plans.

Although this effort was not an attempt to be thorough, taken together these scans show that the University can improve its efforts in some areas to be more environmentally sensitive by taking concrete and reasonable actions. By doing so, and publicizing its efforts, it will promote increased environmental awareness on the part of the University community.

Inspection of the course evaluations showed strong satisfaction with the course in generally as well as with increase in knowledge and awareness about environmental issues.

Dissemination and Dialogue

Some of the early results from the senior exit survey were shared with the faculty of Natural Sciences Division. No other deliberate efforts have yet been made to promote dialogue. In the next phase of the assessment effort, as more complete data becomes

available, the findings would be shared with the G.E. Committee, the faculty who teach the core course, and students.

Conclusions and Recommendation

The overall thrust of the preliminary efforts to assess the environmental awareness and activism on the campus suggest that there is room for improvement. However, to get a better idea about the extent to which the outcome of promoting a sustainable planet is being met, a more thorough and longitudinal effort is necessary. The approaches used so far appear to be promising.

The discussion among the Natural Sciences faculty led to some suggestions about ways of assessing the sustainable planet outcome, as well as ways of publicizing the activities that take place. Suggestions were made about the curriculum in terms of combining a core course section with a service learning section. The importance of making systemic changes were also raised, which led to the formation of a committee of faculty and students to pursue the matter with the Executive Vice President.

Actions for Program Improvement

The committee that was formed to pursue systemic issues met with the Executive Vice President several times who was quite open about addressing the issues, and recognized the need for gathering information about the status quo. The campus scans by students provide some concrete recommendations for action that this committee would take to the Executive Vice President for possible action in the Fall of 1999.

Table 1

Percentage of ULV Seniors (97-98) reporting a **sustainable planet** 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. Learning principles for conserving and improving the global environment (II-A23)						
Importance of such learning (Very Great/Great)	48	51	47	39	39	55
Progress made at ULV (Very Much/Much)	32	36	30	65	22	31
2. Required courses outside my major helped increase my knowledge of the earth and its physical and biological resources (Strong Agree/Agree) (II-B5)						
	49	45	54	65	54	52
3. To what extent was commitment to protecting the environment increased as result of class at ULV (Very Much/Much) (ULV-5)						
	26	27	26	16	14	-