**Summary of assessment from ENVN 206, Ecology and Environmental Issues, Salton Sea, Spring 2009**

The class and trip function as one of the primary ways the EI meets goals 1 (Help student members identify rewarding environmental careers that utilize their skills and satisfy their ambitions) and 2b. (Help students develop an interdisciplinary perspective on the environment).  It also supports goals 2a (Help students obtain a depth of knowledge appropriate for career of choice) through supporting course work with specific case studies and 2c (An opportunity to develop leadership and group skills) by virtue of traveling and camping together and communal meal preparation.

**Goal 2b interdisciplinary perspective**

In the spring of 2009, we travelled to the Salton Sea and the Deserts of southern California and western Arizona.  The two themes of the trip were renewable energy and water management in an arid region.  Students were asked to keep journals in which they recorded daily observations and, at the end of the trip, wrote summative essays. One essay was to pick one aspect of the trip, and discuss it from as many perspectives as possible (What is the environmental issue or problem, what people are working to address it, what issues do they face?).  Our objective is for students to see problems caused by human interaction with the environment, practices that would ameliorate these problems, policies that would encourage these practices, the politics involved in implementing these policies, and the fact that peoples’ political views will be based on varying values.  In sum, these supporting institute goal 2b (interdisciplinary perspective).

All essays were scored on the ability of the students to articulate these relationships. In the matrix below each item is scored on a scale of 0-4 as follows:

0 – no mention of this aspect of the problem

1 – general or vague mention; showed no evidence of learning from the trip

2 – a clear statement; understood and can articulate

3 – clear statement, with one or more examples from trip

4- clear statement, with added insights not parroted from faculty or host professional

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| --- | --- | --- | --- | --- | --- | --- |
| **EI Assessment Salton Sea Trip Goal 2b.  Students develop an interdisciplinary perspective** | | | | | | |
|  | Problem | practices | policy | politics | values | average |
| Student 1 | 3 | 4 | 4 | 3 | 2 | 3.2 |
| Student 2 | 4 | 3 | 3 | 3 | 2 | 3 |
| Student 3 | 3 | 3 | 3 | 4 | 2 | 3 |
| Student 4 | 3 | 4 | 3 | 3 | 3 | 3.2 |
| Student 5 | 3 | 3 | 4 | 3 | 2 | 3 |
| Student 6 | 3 | 3 | 4 | 4 | 2 | 3.2 |
| Student 7 | 3 | 4 | 3 | 3 | 3 | 3.2 |
| Student 8 | 3 | 2 | 2 | 1 | 1 | 1.8 |
| Student 9 | 3 | 2 | 2 | 1 | 1 | 1.8 |
| Student 10 | 3 | 3 | 3 | 2 | 1 | 2.4 |
| Student 11 | 2 | 2 | 2 | 1 | 1 | 1.6 |
| Student 12 | 3 | 3 | 3 | 2 | 1 | 2.4 |
| Student 13 | 3 | 3 | 2 | 2 | 1 | 2.2 |
| Student 14 | 3 | 3 | 4 | 3 | 1 | 2.8 |
| Student 15 | 3 | 3 | 3 | 3 | 2 | 2.8 |
| Student 16 | 3 | 2 | 2 | 3 | 3 | 2.6 |
|  |  |  |  |  |  |  |
| Average | 3.0 | 2.9 | 2.9 | 2.6 | 1.8 | 2.6 |

At a minimum, we expect students to score 2, and we hope for 3 on each item.

Results show that for the first three items, students all achieved our objectives.  Students were less able (or willing) to talk about the politics behind policy, and nearly half did not get into a discussion of how values underpin people’s perspectives on the issues we worked with.  There were opportunities for students to do this.  For example at the Salton Sea, our host discussed the politics of restoration resulting from the fact that the northern half of the sea more difficult to restore but close to Palm Springs, the southern half easier to restore , but closest to the less prosperous Centralia.  Both the political clout and the values of the two populations played into the politics of the restoration plans.

***Action item* In presenting this class in the future, we will have explicit classroom discussions of both political dimensions and especially the values that underpin people’s political perspective.**

**Goal 1 Identify Career**

This year, we also attempted to assess the impact the trip had on the students’ awareness of and choice of careers.  We did with the simple expedient of asking them to write a short post trip paragraph on the influence the trip had on their career choice. Scoring was as follows:

0 – no effect.  Students who either had no current plan before or after the trip or who had a plan that was un-affected by the trip.

1 – general impact.  Students who said their commitments were strengthened or who said they were considering a career in a general area         (renewable energy) due to the trip

2- increased awareness.  Students who mentioned a specific career or organization as a possibility under consideration

3- influenced choice.  Students who said the trip played an important role in showing a specific career that they did (or did not) want to             pursue.

4- light bulb.  Students who said that “things feel into place” on the trip, and they now have a specific goal because of the trip.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Effect of trip on Students Career Plans** | | | | |
| 1 no effect | 2 general | 3 awareness | 4 changed mind | 5 light bulb |
| 4 | 4 | 5 | 2 | 1 |

This impact is, we believe, reasonable; these data suggest that the trip is play some role, but not a central role, in students evolving career plans, and that is what we would expect.

***Action Items: None, we will continue to make every attempt to have students meet with professionals on the trips.***

**Goal 2c Develop group and leadership skills**

Finally, we hope that the trip helps students develop an ability to function well in groups.  This was formally assessed by faculty observation as part of the course grading process.  It turns out that students also made helpful suggestions on the College’s teaching evaluation form regarding this aspect of the trip.

At the end of the trip, faculty evaluated all students on the quality of their questions, engagement in the trip, helpfulness as a group member, and punctuality.  The scores for helpfulness, which we take as ability to contribute in a group for three of the faculty are were graded on the following scale and are tabulated below:

    0- Unhelpful and caused problems

    1- Unhelpful

    2- Did what asked, but never pitched in to help

    3- Volunteered on occasion

    4- Always there to help others, provided true leadership

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Faculty Assessment of Students Group Abilities** | | | | |
|  | faculty 1 | faculty 2 | faculty 3 | Average |
| Student 1 | 4 | 2 | 4 | 3.3 |
| student 2 | 3 | 3 | 3 | 3.0 |
| student 3 | 3 | 4 | 4 | 3.7 |
| Student 4 | 3 | 2 | 3 | 2.7 |
| Student 5 | 3 | 2 | 3 | 2.7 |
| Student 6 | 3 | 4 | 4 | 3.7 |
| Student 7 | 4 | 4 | 4 | 4.0 |
| Student 8 | 3 | 0 | 1 | 1.3 |
| Student 9 | 4 | 4 | 4 | 4.0 |
| Student 10 | 3 | 4 | 3 | 3.3 |
| Student 11 | 4 | 4 | 4 | 4.0 |
| Student 12 | 2 | 2 | 3 | 2.3 |
| Student 13 | 3 | 2 | 2 | 2.3 |
| Student 14 | 3 | 4 | 3 | 3.3 |
| Student 15 | 3 | 4 | 4 | 3.7 |
| Student 16 | 3 | 4 | 4 | 3.7 |
| Student 17 | 2 | 2 | 2 | 2.0 |

Our hope would be to have most (90%) of our students score 3 and 30% at least score at 4.  We are close on the high end, but by this standard, have too few who are just doing what is asked and no more.

It is relevant that, on the open-ended questions in the College course evaluation forms that the students also completed, several suggested that turning more responsibilities for trip mechanics (compiling menus, purchasing groceries, getting group ready in mornings and packing vans) over to students would both relieve stress on faculty and students a chance to assume responsibility and facilitate development of group and leadership skills.

***Action item: Through discussions with faculty and students, develop an effective way of turning more responsibility for trip mechanics over to students as a means of developing their group and leadership skills****.*