



Evaluation of Field-based Learning in a New Online Sustainability Course

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Sustainability

Sustainability is a relatively new field simultaneously addressing:

- Economic health
- Environmental amenities
- Social issues

It originated out of concern for unsustainable effects of a single focus on any one area and the needs of future generations (WCED 1987).

Field-based learning

Field-based teaching is extended outside of the classroom, exposing students to direct interaction with a setting that reflects taught concepts. It can often foster higher-order thinking skills such as synthesizing, creating, analyzing, evaluating. (Krathwohl 2002).

Online education

Distance (online) education is not typically associated with field-based learning. However, field work in sustainability can be encouraged through activities such as:

- Monitoring energy/cost saving
- Measuring biological status
- Citizen social surveys

Sustainable Community Assessment and Planning (SUS 350)

This new course in the major, minor, and undergraduate certificate is designed to introduce students to:

- Varied methods of data collection
- Complex community planning issues
- Synthesizing economy, environment, and society

Field exercises

Due to varied student schedules, they were given the option to participate in varied field work:

- Economic – energy audit presentation, green fund discussion, or food waste audit
- Environmental – forest survey, food waste audit, energy audit presentation, Earth Day survey/outreach, community garden effort
- Social – citizen survey facilitation or focus group note taking

Students could not count the same event for more than one category, fostering a diverse experience.



Community Garden



Forest Survey



Assessment Methodology

Student online journal notes/discussions were assessed using a rubric for

- Evaluation of information
- Creative thinking
- Problem solving
- Communication of content

The rubric has a scale of 1-4 where 4 is highest.

Results

- Most all scores were 2 or 3 on a scale of 4, with an overall average of 2.3
- Higher scores (averaging 2.5 and 2.7) were found in field activities that most synthesized economy and environment on campus, such as a campus energy monitoring workshop, a campus food waste audit, and discussions around a future campus green fund.

Discussion

Scores were medium due to:

- Difficulty in scheduling field work to meet student schedules, rushing some work
- Difficulty in critically thinking in online feedback that links theory to experience

Despite moderate scores, students did show capability for higher-order thinking, especially in synthesizing economy and environment on campus.

Future course offerings will better link content related to off-campus community development with field-based learning, through use of a community development text and better linking of community and student schedules.

Citations

- Krathwohl, D.R. 2002. A Revision of Bloom's Taxonomy: An Overview. *Theory into Practice*, 41(4): 212-218.
- World Commission on Environment and Development (WCED). 1987. *Our Common Future*.