CALS Outcomes Assessment: Environmental Awareness *Ad hoc* committee members: Jan Thompson, Ted Huiatt, & David Vleck

Committee Charge

The committee was asked to develop a process whereby CALS departments could determine whether CALS environmental awareness outcomes are being met. We propose that departments follow a process similar to that recommended for previous assessments (e.g. communications, problem solving/critical thinking) using a direct summative approach (Figure 1).

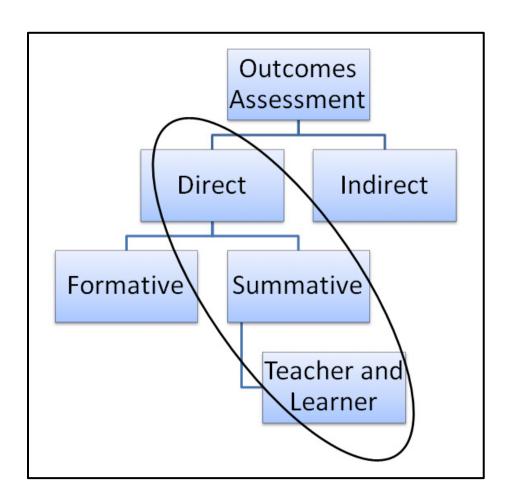


Figure 1. Relationship of direct and indirect outcomes assessment as well as the relationship of formative and summative assessment approaches. The circled pathway is the recommended approach for assessment of environmental awareness.

Recommendations:

- For indirect assessment of each outcome, CALS (at the college level) should initiate a first-employer survey for feedback on the abilities of CALS graduates.
- 2. Direct assessment of each outcome should be done at the departmental level.
- 3. Each department (program) will be required to provide to the CALS SOA by June 1, 2014:
 - a summative assessment of how students in their department have attained the environmental awareness outcomes
 - a plan for continuous improvement
 - information on implementation of the improvement plan will be expected to be included in the following year's report to the CALS SOA.

Departments should:

- Determine their departmental outcomes relative to the CALS environmental awareness outcomes. Please note: this set of outcomes has several elements, some of which will be challenging for some curricula to measure. We encourage collaboration with other programs, if necessary, and/or customization of the rubric to be congruent with departmental programs.
- Develop a curriculum map (Figure 2, below) for the environmental awareness outcomes, in order to determine when and how communication outcomes are addressed. For each assignment/experience the level of emphasis on communications should be determined.

Figure 2. Example curriculum map for the environmental awareness outcomes.

Graduates of the College of Agriculture and Life Sciences should be able to:

- Explain the physical and biological interactions within ecosystems, and
- Explain how human activities impact the environment and how societies are affected by environmental change,

as measured by a standard rubric (either one supplied with this document or a similar one developed within the department).

Level of Emphasis:

1=low; 2=medium; 3=high, major focus

Course	Intended	Emphasis	Assignment/Experience	Description of	Measurements used to
	Outcome	Level		the assignment	assess the outcome

Process for summative assessment:

- Select artifacts (assignments/experiences) that represent a "high" level of emphasis. Because this is a summative assessment, most likely the student will have submitted the artifact as a senior or upper level student in an upper level/capstone class.
- Assess the environmental awareness of the students using a rubric. An examples rubric is attached. The Department is not required to use this rubric, but must submit a copy of the rubrics that were used.
- Each department (or program) will be required to provide a report to the CALS SOA Committee by June 1, 2014 that will include:
 - Information about the artifact(s) that was/were assessed: the class, semester, number of artifacts, student year (i.e. senior, junior, etc)
 - A description of the assignment that produced the artifacts
 - A copy of the rubric(s) that was/were used
 - Results: percent of students who met the environmental awareness outcomes for each performance level and category
 - An action plan for continuous improvement.

We also encourage departments (programs) to conduct formative assessment in the following manner:

- Select an assignment/experience that represents a "high" level of environemental awareness emphasis for classes at each curriculum level (i.e. 100, 200, 300, 400).
- Assess the environmental awareness of the students using the attached or a similar rubric.
- Develop a plan for addressing critical educational needs at each level to lead to acceptable competency before graduation.