

AY18 Program Learning Outcome (PLO) Assessment: CIVIC ENGAGEMENT

BIOLOGY

Assessment Type: Academic Program

Year/Term: AY19

Level: BIOL 320

Learning Outcome: Program Learning Outcomes (PLOs)

Assessment Method/Tool: Program Civic Engagement Rubric

Measurement Scale: 3-1

Sample Size: 9

	Proficient (# of students)		Adequate (# of students)		Developing (# of students)	
Engages in conservation activities involving the wider regional community.	7	78%	2	22%	0	0%
Applies scientific inquiry to conservation activities.	2	22%	7	78%	0	0%
Effectively evaluates research & field experience to explore and analyze field experiences.	7	78%	1	11%	1	11%
Evaluates critically research & field experience to suggest sound approaches to conservation.	7	78%	1	11%	1	11%
Means		64%		31%		5%
% scoring 2 or 3						95%
Benchmark:	100%	Institutional benchmark median percentage of students meeting "Proficient" or "Adequate" levels				
Median % Achieving Benchmark:	95%	percentage of students meeting "Adequate" or "Proficient" levels				

Closing the Loop Statement

My Civic Engagement assessment was based on the activities the students performed at the Ladd Marsh Bird Festival at Ladd Marsh Wildlife Area. My Ornithology students provided 5 11-year-old kids activities for earning their Junior Birder Badges. The activities included how to use binoculars, how to use a field guide, what do birds eat based on their beaks, what habitat do birds live in, parts of a birds, and bird songs.

We are quite happy with our assessment results. Students scored 64% in the Proficient category and 31% in the Adequate category. Only a small percentage (5%) was in the Developing category.

1) Summarize the results. For Academic Program assessments (upper division level) the Target is 100% scoring a 2 or 3. We are quite happy with our assessment results. Students scored 64% in the Proficient category and 31% in the Adequate category. Only a small percentage (5%) was in the Developing category. 95% of the class scored 2 or 3. Though it is not 100%, I am happy with 95% and the sample size is small only 9 students in the class.

2) Account for Results

A) Strengths: Account for why students did well. Assignment Design? Sequencing of assignments, building toward end-of-term assessment of each Criteria? Program focus on Civic Engagement? Instructor Feedback? Etc.? Students did well on questions that allowed them to apply their working knowledge. They did poorly on questions that were more reflective in nature. I think next year, I will work on more class discussions that are reflective in nature. Several students answered the questionnaire with answers such as, "I've never thought of that before so I don't know how to answer the question."

B) Challenges: Account for any dips in performance, even if meeting the Target: Was there a dip in any given criterion? Why? The few students that scored low did not address the questions or gave very poor one-word responses. The Biology Program has discussed making the assessment assignment worth some points to their final grade. This may encourage the few students that did not take it seriously, to take the assessment activity seriously.

Action Plan

All Biology students take BIOL 211 lab and CHEM 206 lab, which have a Civic Engagement component. Students first visit Ladd Marsh during their first Fall term and return Spring term to perform water chemistry analysis on the ponds they sampled macroinvertebrates in BIOL 211 lab. Ecological concentration students take BIOL 320 (Ornithology) and BIOL 415 (Forest Ecology), each having a Civic Engagement component. In Ornithology, the students work at the Ladd Marsh Bird Festival assisting children in receiving their Junior Birder Badge. In Forest Ecology, students assess Pileated Woodpecker use of snags at MERA. In this way, Civic Engagement is reinforced throughout the curriculum at all levels in all concentrations.

**AY20 Civic Engagement Improvement Plan Recommendation
(Office of the Vice Provost for Academic Quality)**

BIOL's approach to the Program's Civic Engagement outcome should be used as a model for all programs in terms of effective assignment design and sequencing of steps, with a clear, succinct, insightful analysis of results, indicating how the outcome aligns with the program's Civic Engagement commitment to Civic Engagement. Especially impressive is the way Civic Engagement is revisited throughout the curriculum.

The AY20 ENGL/WR's Civic Engagement Improvement Plan: The program should follow through on the suggestion above to include more reflective questions in class discussion in order to enhance student performance in the second criterion, "Applies scientific inquiry to conservation activities." In addition, the program should address the problem of cursory student performance in civic engagement assignments by adding point values to those assignments. The approach should be reviewed at the program level. The AY20 CE Improvement Plan should report on the results of these efforts and provide data on a course where the improvements have been operationalized.