

CBE AOL Closing the Loop Form

Program: MS Economics Date: 9/03/20

Learning Goal: 2. Students who graduate will be experienced in analyzing strategic situations.

Learning Objective: 2A. Students who graduate will construct equilibria in models of strategic behavior.

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Closing-the-Loop

1. Review Learning Objective (LO) assessment data in the current Assessment Report.
2. Review previous LO assessment data and improvement actions taken since then in the AOL Summary Report.
3. Document below the effectiveness of past improvement actions in improving student learning or the AOL process (this is what is known as "closing-the-loop").

Winter 2017 results document that 52 percent of students met expectations for this Learning Objective. In Spring 2019, 84 percent met expectations. This indicates that changes made to the program beginning fall 2018, when the program was redesigned as the University converted from quarters to semesters, have been successful. An important change was a redesigned ECON 600: Foundations of Economic Theory class that places a larger and more general focus on mathematical and computational optimization techniques. This class is a pre-requisite for ECON 601 where assessment of LO 2A occurs.

Two additional changes were made for Spring 2019 that likely helped improve assessment results. First, supplementary materials were added to the textbook, e.g. extra textbook recommendation, slides, and problem sets. Second, students were required to do group presentations that applied their learning to economic modelling and optimization

4. Document below your evaluation of current LO assessment data compared to the benchmark and the need for new improvement actions. Consider not just the overall average LO score but also score on individual traits shown in the Assessment Report and derived from the LO rubric.

A more detailed analysis of the data reveals that between 14 and 36 percent of students were below expectations for three of the four underlying traits (Clear Statement of Economic Issues, Application of Economic Theory to Issues, and Use of Results). Though these results are encouraging, there is room for improvement.

We implemented further changes to ECON 600 in Fall 2020. The class has been retitled "Advanced Quantitative Methods for Economists," and its learning objectives have been revised to focus more heavily on quantitative skills in both mathematics and statistics. The previous title was more narrowly focused on optimization. The new title allows for a greater emphasis on statistics. We plan to modify the content of this course over time to strengthen all aspects of the program, including performance in ECON 601 where LO 2A is assessed.

Given the strong assessment results coupled with the recent changes to ECON 600, we believe that modest improvement actions would be appropriate. These are outlined below.

*While the overall score met the performance target, traits 1,2, and 4 did not meet the secondary performance target of having less than 10% of students below expectations.

5. Record below a list of recommended course-level or programmatic actions to improve student learning or the AOL process.
 - a. Sort the list from most recommended to least.
 - b. Given our mature AOL system, ideas should not be limited to just AOL system improvements.

- c. For each improvement action proposal, list the project leader, timeline to completion, required resources, expected ease of implementation (hard, medium, easy), and expected impact on student learning (low, medium, high).
- d. You may use ease of implementation and impact on student learning to rank improvements.
- e. There is no guarantee that improvement ideas will be approved. They need to be reviewed by the program director, curriculum committee and dean.

Assessing student comprehension of course topics with weekly quiz to complement the midterms and final exam.

Changing the assessment artifact from an exam question to one of the group presentations.

Requiring that each student write an independent report on the topic that his or her group presents.

Presentation and writing both require identifying the strategic interaction among economic agents, modeling the dynamics, and applying analytical tools which students have acquired.

*Because these assessment results do not reflect the latest curriculum enhancements, other improvement actions will not be proposed until the next closing the loop.