

Assessment of General Education Learning Outcomes

Highlights and Success Stories from Cycle III (2016-2021)

Revision of Learning Outcomes

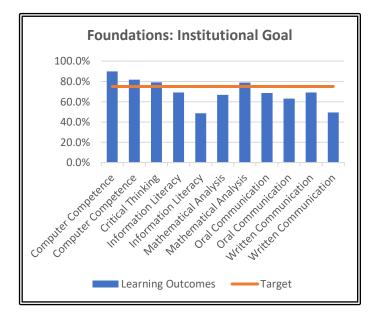
Through faculty-led endeavors, learning outcomes were revised in four areas:

- Aesthetic Perspective
- Ethical Perspective

- Computer Competence
- Global Cultures Perspective

In each of these areas, the revised learning outcomes were more appropriate and meaningful to the discipline. These changes brought about noticeable improvements in assessment results.

Our **institutional goal** for each learning outcome is for 75% of the evidence scored to be rated "adequate" = 3 (on a 4-point rubric) or better by at least one scorer.



There are six areas assessed in the Foundations: Computer Competence, Critical Thinking, Information Literacy, Mathematical Analysis, Oral Communication, and Written Communication. The institutional goal was reached for four out of the ten learning outcomes in these areas.

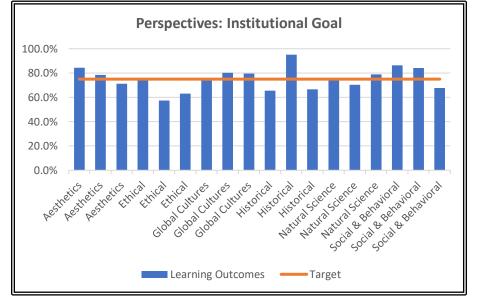
Both learning outcomes in Computer Competence reached the goal – and it was the first time assessing these newly revised LOs.

The learning outcome for Critical Thinking and one of the two LOs in Mathematical Analysis also reached the institutional goal.

The six areas in the Perspectives are: Aesthetic, Ethical, Global Cultures, Historical, Natural Science, Social & Behavioral Science. The institutional goal was reached for ten out of the eighteen learning outcomes in these areas.

In each of the following areas, two out of three learning outcomes reached the institutional goal:

- Aesthetic
- Global Cultures
- Natural Science
- Social & Behavioral Science



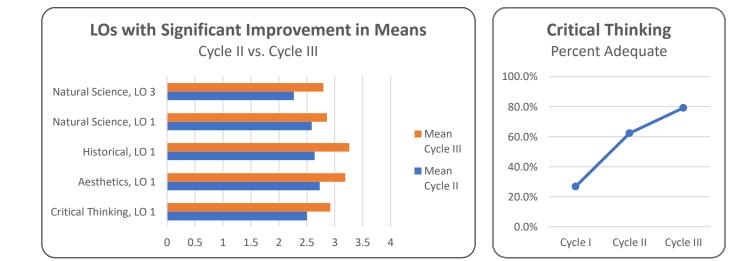
Improvements from Previous Cycles

The mean score (on a 4-point rubric) for each learning outcome is calculated. For an entire cycle, the mean of all the means provides a measure of quality for all the Gen Ed learning outcomes over that cycle. The mean of percent adequate over all learning outcomes in a cycle provides a similar measure of quality. Over the three cycles, there has been steady improvement in these two measures.

Gen Ed Assessment Cycle	Mean of the Means	Mean of Percent Adequate
Cycle I	2.43	57%
Cycle II	2.60	64%
Cycle III	2.73	70%

When comparing means for each learning outcome across cycles¹, there was statistically significant improvement in five learning outcomes from Cycle II to Cycle III. The results from Critical Thinking indicate improvement over all three cycles.

¹ Comparisons are made only when there are no issues with inter-rater reliability across cycles.



Learning Outcome	Mean Cycle II	Mean Cycle III	% Adequate Cycle II	% Adequate Cycle III
Critical Thinking, LO 1	2.50	2.92	62%	79%
Aesthetics Perspective, LO 1	2.73	3.19	71%	84%
Historical Perspective, LO 1	2.64	3.26	66%	95%
Natural Science Perspective, LO 1	2.59	2.86	59%	70%
Natural Science Perspective, LO 3	2.27	2.80	54%	79%

Other Highlights and Success Stories

Computer Competence

Newly revised learning outcomes allowed faculty to design assignments using software and technology in discipline-specific ways with a focus on problem-solving and critical analysis. A wide variety of software was used including Excel, SPSS, Mathematica, MATLAB, and Python.

Computer Competence					
	Mean	Percent adequate			
LO 1: Create digital artifacts	3.15	90%			
LO 2: Apply computing tools	2.96	82%			

Global Cultures				
	Mean	Percent adequate		
LO 1: Define essential terms	2.98	74%		
LO 2: Explain significance	2.90	80%		
LO 3: Explain values, attitudes, beliefs	2.78	80%		

Oral Communication

In previous cycles, assessment of oral communication was based on scoring sheets and instructor feedback. In Cycle III, about half of the submissions consisted of recorded videos of student presentations, allowing for assessment through direct evidence.

Global Cultures

The institutional goal of at least 75% of the student evidence rated adequate or better was exceeded for two of the three learning outcomes and was nearly reached for the remaining learning outcome in that area. This represents a tremendous success for the Global Cultures program. These results seem to support the grass root efforts of the Cultures faculty to revise the learning outcomes and related rubrics to better reflect the important student learning that actually occurs in these courses.

Covid-19 didn't stop Gen Ed assessment!

97% of the faculty that were asked to submit evidence participated in the process





Teams of faculty participated in the assessment process by scoring evidence electronically.

Team discussions were held on Zoom to review the results and collaborate on writing the annual Gen Ed Assessment Report.