

Critical Thinking Institutional Learning Outcomes Assessment Report Findings

A working group of three faculty (Yvette Ybarra, David Yamamoto, and Sarah McLemore), an administrator (Michael Ritterbrown), a representative of the Research and Planning Unit (Terrence Yu) and a ASCCC representative (Aerin Sadegh) met to discuss assessment reports for courses which have one or more PLOs linked to the college's Critical Thinking ILO.

Through their work, several observations were made that will benefit from action taken by various campus committees and individuals.

1. For LO Committee Chair and LO Database Coordinator

Revise assessment report form to coach form completers to more clearly articulate plans and needs including resources, ancillary instruction (SI/Learning Center), and curriculum revisions/development

In order to improve accuracy and reduce errors, collect data regarding all students' achievement of LOs

Revise assessment report form to better obtain data regarding LO attainment. The following are suggestions for the report form:

- Revise use of the word "artifact." This term has a very specific meaning in research and statistics related to errors
- Revise how course and program attainment of LO data is captured

Currently report authors select "met, developed, or obtained" to summarize a course's attainment of LO(s). This requires report authors to make a conclusion about class attainment without clarifying how such a conclusion was reached. There are two ways to address this.

- 1) If a sample size is used to collect attainment data, assignments used to measure achievement data should be graded using an numbered 1-100 scale *and* the LO Committee/Research Planning Unit should provide some sort of mutually agreed upon conversion chart (for non numerically graded assignments such as ones receiving a +, v+, v, etc.). Then, the LO committee/Research Planning Unit should work to develop a rubric shared widely with the college and viewable from the assessment report that indicates what percentage of students need to achieve a specific numeric score in order for different levels of course achievement to be selected. Example, we develop a rubric in which all college stakeholders agree that 85% or more of students sampled for LO achievement must score 70% or more to determine that a class has "met" the achievement of an LO.
- 2) If data is collected for all students as suggested above, the same procedures as above should be followed (assignments given a numbered score, institutionally set definitions for how "developed," "met" or "achieved" would be used).

Meet with division chairs to ensure that chairs share what the divisions' PLOs are

Better connections between SLOs to PLOs and PLOs to ILOs would be extremely helpful. To further that assessment model, the PLO assessment form should indicate which ILO are linked and provide a space to comment on the effectiveness of the PLO toward each linked ILO.

2. For LO Committee Chair

Set up a time to visit ASGCC to discuss basic facts about learning outcomes and how students' work is being assessed (Sarah will help with this)

Additionally, the group discussed some key takeaways from the reports which should lead to additional investigation by the college:

The reports lacked a shared understanding of what it means to think critically. Obviously, there's no "right" answer in terms of what critical thinking may be defined as and reports all demonstrated a general working understanding of what the term means. Nevertheless, the group found that based on the lack of demonstrated cohesion, the college may benefit from developing a way for college community members to articulate what critical thinking *may* look like in various academic disciplines and service areas. One idea that emerged was recommendation three below:

3. For IPCC, the LO Committee Chair, the LO Database Coordinator and the Curriculum Coordinator

Investigate ways to implement a campus focus on critical thinking. This may be achieved through a "one college/one theme" type of approach or other avenues.

Finally, group members compiled lists of effective practices and areas in which report authors suggested that additional support may be beneficial. The group recommends that these be presented to the Staff Development Committee and any other groups IPCC may benefit from this information. It is hoped that these trends in effective practices and support needs inform planning for staff development and other campus initiatives related to teaching and learning.

Effective Practices

From Accounting 230 and 235: utilizing a case-study approach evidenced greater student learning. The report authors plan to continue with this approach.

For science courses such as geography and geology, incorporating laboratory and field study components to lectures enhances critical thinking. Experiential learning opportunities that allow students to gain field knowledge also helps improve critical thinking.

For music courses, written critiques of live and recorded music performances improves musical critical thinking skills.

Potential Ways College Can Support Instruction

For Anthropology 104 and 105: several assessment reports (both sections of Anthropology 105 from 2015, Anthropology 104 in 2013) noted a need to change up readings to select reading that are more contemporary, relatable and which better engage student critical thinking.

For Anthropology 103: the assessment plan from 2013 talked about experimenting with a site-specific theme rather than looking at many different sites of investigation. If there are other areas that have experimented with the impact of narrowing rather than broadening an approach, it'd be good to share these.

For philosophy courses, many assessment reports (Philosophy 101 Fall 2012 ((both sections)), Spring 2012, and Philosophy 117 Spring 2013 ((both sections)) and 2015 focused on the need to support student writing. Interventions from WAC, support for developing more successful writing assignments

and support for writing instruction to encourage students to complete more reading assignments and assists with writing essays, which helps to develop critical thinking and writing skills.

In reviewing the findings Aerin, our ASGCC student representative made the following remarks:

Based on what I perceived on social science courses the highest evaluation grade and percentage is for those classes in which their professors use different methodologies, specifically, writing essay, group discussion, and the research paper. Another effective method is to let students read, summarize and analyze their reading assignment and later discuss in class or to write an essay. Some of those courses which the result shows they are in developing stage using short answer and essay that let the students to read and memorize the concept and then summarize it in the essay or exam. Although I know each course is different, in my point of view it's not an effective way to increase the performance only using in class exam (short answer and essay). Moreover it's critical that what type of questions a professor asked on exam.

Based on Aerin's findings and the information in the report it would suggest that several groups including:

- The LO Committee
- The Curriculum and Instruction Committee
- The WAC (Writing across the Curriculum) co-coordinators
- The Faculty Development Coordinator
- and the Social Sciences Division Chair
- the Social Sciences Library Liaison

be made aware of the results and that each group be asked to share these results with their appropriate constituencies. It is also requested that WAC coordinate with the Faculty Development Coordinator and the LO Committee to design at least one best practice/faculty development event focused on building on the observations to improve student learning and assessment practices.