

GE Critical Thinking SLO
Fall 2018 Assessment Narrative
By the Riverside Assessment Committee

Introduction

According to the Riverside City College catalog, the awarding of an associate degree is intended to represent more than just an accumulation of units. The associate degree says that recipients have taken coursework in broad areas of study including the sciences, mathematics, and humanities which have allowed them to develop certain capabilities including the ability to communicate clearly and to think critically. Moreover, recipients of the associate degree will be able to demonstrate those capabilities in courses that allow for the introduction, development, and, in some cases, mastery of said skills.

To this end, the College has four general education student learning outcomes (GE SLOs) that are assessed to measure to what extent (1) the courses identified as GE courses encourage the development of these capabilities, and (2) the students passing these courses have, indeed, developed the capabilities.

Critical thinking is a primary skill that those earning an associate degree from RCC should possess. The GE critical thinking outcome is as follows:

Students will be able to demonstrate higher order thinking skills about issues, problems, and explanations for which multiple solutions are possible. Students will be able to explore problems and, where possible, solve them. Students will be able to develop, test, and evaluate rival hypotheses. Students will be able to construct sound arguments and evaluate the arguments of others.

Assessment Project and Instrument

In Fall 2018, the Riverside Assessment Committee (RAC) did a direct assessment of student work in four content areas using the attached rubric, which divided the GE SLO into four parts. The courses were chosen to include student work from different divisions across the college.

The four content areas and assignments were as follows:

1. An essay comparing two pieces of literature completed in an English 1B (Critical Thinking) course.
2. A peer review of an essay about an episode of *The Walking Dead* completed in a Philosophy 12 (Applied Ethics) course.
3. A series of welds completed in a Welding 55A (Introduction to Gas Tungsten Arc Welding) course
4. A performance by the jazz band for a Music 44 (Jazz Ensemble) course.

Those who participated in the assessment and rubric scoring—including members of RAC, other full- and part-time faculty, administrators, and college support staff—were provided with the assignment for

reference only but were instructed not to grade the student work. The members were told instead to evaluate the student work for the assignments' ability to allow the students to demonstrate critical thinking in conjunction with the assignment. In other words, the participants were advised to look at the assignment and see what the students were being asked to do and then to determine to what degree the student demonstrated critical thinking as described in the GE SLO.

As part of the important conversation about expectations and the purpose of assessment, the groups also spent time norming the critical thinking rubric before beginning the analysis of the student artifacts. Each group developed common vocabulary of words and phrases to help members talk about critical thinking and what critical thinking might look like in an English essay, a philosophy peer review, a weld, and a music performance.

We were hoping to learn primarily to what degree our students were able to demonstrate critical thinking upon completion of courses mapped to the GE critical thinking SLO. Secondly, we knew that we would also be evaluating the assignments, and whether the assignment in courses mapped to the GE critical thinking SLO were allowing students to be introduced to, to develop, or to master the GE critical thinking SLO.

Results

Results of each group's assessment of the artifacts are shown below:

English 1B					
	Mastered	Developing	Emerging	Not met	N/A or unable to determine
GE 1.1 Students will be able to demonstrate higher-order thinking skills about issues, problems, and explanations for which multiple solutions are possible.		X			
GE 1.2 Students will be able to explore problems and, where possible, solve them.					X
GE 1.3 Students will be able to develop, test, and evaluate rival hypotheses.				X	
GE 1.4 Students will be able to construct sound arguments and evaluate the arguments of others.			X		

Philosophy 12					
	Mastered	Developing	Emerging	Not met	N/A or unable to determine
GE 1.1 Students will be able to demonstrate higher-order thinking skills about issues, problems, and explanations for which multiple solutions are possible.		X			
GE 1.2 Students will be able to explore problems and, where possible, solve them.		X			
GE 1.3 Students will be able to develop, test, and evaluate rival hypotheses.	X				
GE 1.4 Students will be able to construct sound arguments and evaluate the arguments of others.		X			

Wel 55A					
	Mastered	Developing	Emerging	Not met	N/A or unable to determine
GE 1.1 Students will be able to demonstrate higher-order thinking skills about issues, problems, and explanations for which multiple solutions are possible.	X				
GE 1.2 Students will be able to explore problems and, where possible, solve them.					X
GE 1.3 Students will be able to develop, test, and evaluate rival hypotheses.					X
GE 1.4 Students will be able to construct sound arguments and evaluate the arguments of others.					X

Mus 44					
GE 1.1 Students will be able to demonstrate higher-order thinking skills about issues, problems, and explanations for which multiple solutions are possible.	Mastered	Developing	Emerging	Not met	N/A or unable to determine X
GE 1.2 Students will be able to explore problems and, where possible, solve them.					X
GE 1.3 Students will be able to develop, test, and evaluate rival hypotheses.					X
GE 1.4 Students will be able to construct sound arguments and evaluate the arguments of others.					X

Analysis

More so than the groups' conclusions about students' ability to demonstrate critical thinking, which seem to be inconclusive, the most important result really seemed to be the conversations we had in our individual groups and as one large group about three main topics:

1. The quality of assignments in courses mapped to the GE critical thinking SLO
2. The ability of non-subject-matter experts to evaluate critical thinking in an artifact
3. Whether a student earning an associate degree would ever master a skill or capability

Below is a brief extension of from each finding listed above that emerged from the group's discussion after all the artifacts were reviewed and coded.

The quality of assignments in courses mapped to the GE critical thinking SLO

When the groups evaluated each artifact, the discussion that ensued surrounded the type of artifacts selected. While groups that looked at unique artifacts appreciated the out-of-the-norm artifact (e.g., the welds and the music performance), this uniqueness also impacted the group's ability to assess the artifact presented. The groups did not struggle with the norming process. The struggle came instead when then it came time to apply that norm to the selected artifact. This led to discussion for some groups *if* the artifact evaluated the outcome at all. Further analysis of this finding is discussed below. What was discovered here was assignments that had clearly defined objectives for the students were easier to delineate first that the students could exhibit critical thinking and secondly, that for many they did. This was clear in both the English and Philosophy assignments and student work.

The ability of non-subject-matter experts to evaluate critical thinking in an artifact

Within each of the groups evaluating the various artifacts, the subject-matter-expert was present. This was strategically done so the individual could explain the assignment, artifacts, and field any questions that may have come up. Whether the group was the music group or the English group, one of the biggest challenges for some non-subject-matter-experts was to wrap their minds around evaluating the artifact for the presence of evidence of critical thinking rather than evaluating the artifact according to the guidelines presented by the assignment. Others struggled with the fact they were not subject-matter experts and felt inadequate to determine whether an artifact achieved the objective or not. For instance, the members of the group evaluating the musical performance labeled all four portions of the GE standard as “not applicable” because they said they lacked “understanding of basic elements of music” and felt they “needed more details of the assignment to evaluate.” This led to a discussion of whether the course was, indeed, a GE course.

Before this exercise in assessing the critical thinking GE outcome, the assessment committee discussed non-subject-matter experts evaluating artifacts and outcomes. The committee ultimately opted to assess the outcomes this way because after a student leaves RCC with an associate’s degree, in any subject matter, they should have acquired skills in critical thinking as part of their program. Then when this former student is interacting with the world around them, they would be able to apply these skills regardless of the context or subject matter

The discussion that occurred did yield some suggestions to help the ability of non-subject matter experts evaluate various GE outcomes when looking at an artifact, along with students’ ability to better understand, learn from, and acquire the multiple skills embedded within each of the objectives. These findings are discussed below in the future implications section.

Whether students earning an associate degree would ever master a skill or capability

The final discovery from the large group discussion surrounded if a student could have the opportunity to master a skill given the objectives in any associate degree general education program at the college. This came from various individuals pointing out often community college students are introduced to a topic or skill and then begin to develop an understanding in that area. The student may then in other courses within their program or across the college to continue to build on that skill, but seldom does a student have the opportunity during their two years at the college to master the skill. This mastery of this sequence of learning generally tends to occur at the student’s transferring institution or in the workforce. Many were in agreement of this and moving forward the assessment committee may look to review the scoring rubric to reflect the outcome of this discussion to exclude a category for mastery of an objective.

Another nugget of knowledge that emerged from the group’s discussion came from the support staff present and was further supported by the faculty in attendance. This had to do with consistent and inescapable support for our students from both faculty and the service areas, while also reinforcing the GE outcomes. One example that was provided is when a student goes to tutorial services regarding difficulty in a course to encourage them to also seek help from the faculty member. Another example

presented was when a student is meeting with a counselor on their education plan, and it becomes apparent a course needs to be repeated getting the student to apply critical thinking and asking them to explain why they believe they failed a course. Ultimately, this embedded support requires relationships. Relationships with students and relationships between faculty and various service areas to see how we can best aid students in achieving all their educational goals. This demonstrates how critical thinking, like the other general education outcomes, can be taught nearly everywhere on campus, not just in the classroom, but also by staff, faculty, and administrators all working together.

Future Implications and Recommendations

Moving forward the group ended the GE SLO assessment day by discussing how we as an institution are giving our students the opportunity to learn critical thinking and demonstrate what they have learned. One implication as to how to ensure we are providing students with opportunities to learn any GE outcome and express what they have learned is to articulate to them openly and regularly what objective they are working on in any given day. For example, listing the learning outcome (both SLO and GE) on an assignment and incorporating this into the review of the assignment. Another example was to at the start of a class session include the learning objectives in some way so the students are acutely aware of what they should be learning during that time in the classroom. In doing so, the group asserted this would create explicit metacognition surrounding the outcomes, so the students then know what they are learning from a given assignment, lesson, course, or program. Similarly, at the end of class, instructors might do a five-minute check-in, an activity in which instructors check in with the students by asking pointed questions about the day's activity and their understanding of the material. For example, questions like "what was the most interesting thing you heard about today?" or "what additional questions do you still have at the end of class today?" could help the instructor close the loop by informally assessing student learning in a low-stakes way. For classes in which this activity might be logistically challenging, posting such questions on an online discussion board could be done.

Closely related to the first suggestion from the group's debrief is the suggestion to faculty to embed GE learning objective language into the prompt for an assignment. This then not only aids the student and faculty members when working with a given assignment, but this also will assist the assessment committee if that assignment and artifact is selected for review. Finally, in incorporating this suggestion, it could help to circumvent the second topic discussed in the analysis regarding subject-matter-experts because the language within the prompt would then most likely become reflected within the students work.

One recommendation to help facilitate the above two suggestions is for the RAC to partner with the Faculty Development Committee to host flex training sessions that would help faculty better construct assignments to make them clearer and to more explicitly connect said assignment to course SLOs and GE SLOs.

One unique idea that came out of this assessment activity was the possibility of assessing a focus group of students, who would be brought in during their final semester at RCC and given a critical thinking task or assignment to complete. This task or assignment would be scored to reveal the level of critical thinking the students were able to demonstrate in their final weeks as students here at the College.

While the CCSSE asks students to evaluate their own abilities in critical thinking, a focus group with a tangible assignment would help correct the potential for bias that is always present in self-evaluations.

Conclusion

In closing, a lot of valuable insight was gleaned from this GE SLO assessment process for critical thinking. Not only will this aid the college moving forward in teaching and assessing this outcome, but it will also aid the college and RAC with the college's other GE SLOs.