

GE Critical Thinking SLO  
Fall 2022 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**

Building off what we learned during the GE assessment cycle of 2018-2020, we refined the process for gathering, norming, and scoring and implemented changes for improvement during this cycle. In Fall 2022, 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 exam on cell function and structure from BIO-1.
2. A reflection essay from COM-9.
3. A video of a performance by the Marching Tigers from MUS-48
4. Student-produced troubleshooting guides from CIS-25.

This semester, the RAC made two changes to its GE SLO scoring process. The first change we made stemmed from our monthly discussions about equity in assessment. For approximately the last year and a half, the RAC has added an equity discussion item to our monthly agenda. The monthly discussions

begin with a reading, a video, or a podcast and culminate in a discussion. For example, one month we viewed a video entitled “Designing for Justice” which spurred a discussion about the ways inequities might be embedded in our courses, our classroom spaces, and our assessments. Another month, we read about ungrading and discusses how such a practice might work in our own classes. These discussions have been fruitful and led us to include two equity questions as a part of this assessment project:

- Using the matrix below, circle your perception of the assignment's utility value and content inclusivity. Use the criteria shared in the PowerPoint to make this determination.

	HIGH UTILITY VALUE	LOW UTILITY VALUE
HIGH INCLUSIVE CONTENT	Reflective writing  <i>No gap</i>	Inclusive projects  <i>No gap</i>
LOW INCLUSIVE CONTENT	Writing in disciplines  <i>No gap</i>	Multiple-choice tests  <i>Gaps</i>  Open-ended tests  <i>Marginal evidence</i>

- Does this GE SLO align with RCC's mission statement? Explain your response

The matrix above comes directly from one of the articles we read as a committee, Singer-Freeman et al.'s (2019) “Theoretical Matrix of Culturally Relevant Assessment.” Thus, the first change we made in our scoring process was to center equity.

The second change we made also stems from our work in equity. Several of the works we read and viewed advised that equitable assessment projects need the voices of and input from all impacted parties. In other words, an assessment needs the voices of students. To this end, we invited students from our Associated Students governing body to participate in the scoring project and were fortunate to

have had 8 students participate. The second change, then, was also related to equity and broadened the scope of feedback we were able to gather.

Those who participated in the assessment and rubric scoring were provided with the assignment for reference only but were instructed not to grade the student work. Participants 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 exam, an essay, a musical performance, and a troubleshooting guide.

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:

BIO-1 (Group 1/Group 2)					
	Exceeds	Meets	Approaches	Does not meet	N/A
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		X	
GE 1.2 Students will be able to explore problems and, where possible, solve them.				X	X
GE 1.3 Students will be able to develop, test, and evaluate rival hypotheses.			X	X	
GE 1.4 Students will be able to construct sound arguments and evaluate the arguments of others.				X	X

COM-9 (Group 1/Group 2)					
	Exceeds	Meets	Approaches	Does not meet	N/A
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	X			
GE 1.2 Students will be able to explore problems and, where possible, solve them.	X			X	
GE 1.3 Students will be able to develop, test, and evaluate rival hypotheses.				X	X
GE 1.4 Students will be able to construct sound arguments and evaluate the arguments of others.			X X		

MUS-48 (only one group)					
	Exceeds	Meets	Approaches	Does not meet	N/A
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			

CIS-25 (Group 1/Group 2)					
	Exceeds	Meets	Approaches	Does not meet	N/A
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	X			
GE 1.2 Students will be able to explore problems and, where possible, solve them.	X X				
GE 1.3 Students will be able to develop, test, and evaluate rival hypotheses.	X	X			

GE 1.4 Students will be able to construct sound arguments and evaluate the arguments of others.	X		X		
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### Analysis

As is clear from the tables above, the results of this assessment were inconclusive. In addition, several comments from the groups noted that this particular SLO is too long and wordy to properly evaluate in a two-hour session. These groups recommended that this SLO should be considered for revision.

Next, when reviewing how the norming process was applied to the assessment of the artifact, there appeared to be some confusion. Groups seemed to be looking for the assignments to repeat verbatim the words and phrases that were normed. For example, the group that viewed the music performance put only the following words in their rationale for GE SLO 1.2: step by step process and clarification. These were the same words written on the board during the norming process. Similarly, other groups in their rationales only used the words from the norming process to support their scoring rather than looking more holistically at the meaning behind the normed words and then checking for evidence of that holistic meaning in the artifacts. In other words, the groups were looking for a literal matching of terms rather than looking at overarching and integrative interpretation of the artifacts.

Finally, we received feedback that the language in the rubric was unclear and caused some groups to not fully understand what they were supposed to be scoring. For example, all groups but one did not provide a rationale for why they scored an artifact the way they did but merely repeated the words used to norm the standard. While there were good discussions during the norming and scoring of the artifacts, what participants wrote on the rubric did not capture the essence of the conversations that were being had. These factors contributed to the inconclusive results and a clear need to review and revise the GE SLO scoring process.

### Future Implications and Recommendations

Based on these results, we solicited feedback for improving the process at our March meeting and revised the instructions/rubric at our April meeting. In addition, we met with the assessment coordinators at Norco and Moreno Valley Colleges and discussed with them the prospect of revising the language of this GE SLO; they were receptive and agreed to take the changes we recommended back to their respective committees for review. We will be meeting again before the end of spring, and if all goes well, we will begin the process of revising the language of this GE SLO for the whole district. At this point, the assessment of this GE SLO is on hold pending a possible revision.

### Conclusion

In closing, this attempt at scoring the critical thinking GE SLO taught us several things that will make the overall assessment process stronger. First, we learned that our scoring rubric needs revision and will benefit from feedback from all members of RAC. Second, we learned that the process of norming can take place outside of the scoring and might offer more time to understand how the integration of the

student work and the assignment inform whether the SLO has been met. In addition, we learned that having more people involved in the process, including students, was valuable. However, we need to have the groups that scored the same artifact come together in discussion before the larger group discussion. By implementing these recommendations and changes, the GE SLO assessment process will become stronger and more useful for informing future curriculum discussions and classroom practices.