2024 Report
of
The Provost's Assessment Committee
for
General Education Learning Outcomes

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I. Introduction

The Provost's Assessment Committee for General Education Learning Outcomes (PAC-GELO) assesses the extent to which UAS undergraduate students have acquired broadly expected academic skills through the completion of UAS prescribed General Education Requirements (GER) coursework. The committee develops and modifies assessment tools and processes, they host regular assessment workshops, and they write an annual report to communicate their findings.

The GELOs are as follows:

1. **Effective Communication**: Communicate thoughts and ideas effectively, orally and in writing.
2. **Critical Thinking**: Demonstrate the ability to understand a problem/issue/task at hand, identify relevant facts and/or assumptions, synthesize and conceptualize available information, develop an effective strategy to tackle the problem/issue/task, and arrive at a valid conclusion.
3. **Creative Thinking**: Present creative works of expression, innovative approaches to tasks, or solutions to problems.
4. **Empirical Reasoning**: Articulate the scientific method and pose well-reasoned questions in the search for answers through data.
5. **Environmental and Community Engagement**: Explore Indigenous and global social perspectives with respect for diversity of people, different perspectives of resource sustainability, and human impact on the environment.

In the sections that follow, you will find details about the 2023-2024 workshops, results from this year's assessment activities, and suggestions for next steps.

II. Method of Assessment COLLEEN (roughly finished) with Math's assistance

This year's fall workshop focused on the *Creative Thinking* and *Effective Communication* GELOs, and the spring workshop focused on the *Environmental and Community Engagement* GELO. In both semesters, the *Critical Thinking* and *Empirical Reasoning* GELOs were assessed through an online assessment tool, which was administered to students in 200-level classes. Work samples, excluding the Critical Thinking and Empirical Reasoning assessment work samples, used for the assessment are randomly selected by assigning each student work sample a sequential number, and then running a random number-generating application to determine which samples to assess.

Artifacts, Workshops, and Assessment Tools

Fall 2023 - Effective Communication* and *Creative Thinking

To assess *Effective Communication* and *Creative Thinking*, for the first time, the committee used a single artifact to assess against both rubrics at once. The workshop group assessed five student work samples, which consisted of poems and stories from a 200-level Creative Writing course (ENGL 261). The typical student taking this course is enrolled in either an associate or bachelor's degree program, and they are often in their sophomore year. It is a GER course with a prerequisite of WRTG 111. The committee gathered insights from the workshop group, particularly in the strengths and weaknesses of each rubric individually, and in the context of the dual-assessment process. These notes will be reviewed to determine the structure of next year's workshop.

The workshop group consisted of five PAC GELO members and two other faculty volunteers.

Spring 2024 - Environmental and Community Engagement

To assess *Environmental and Community Engagement*, the committee assessed the newly developed artifact from a 100-level Alaska Native Studies course that fulfills the Alaska Native Knowledge Graduation Requirement (ANKGR). The workshop group assessed seven research presentations, which consisted of PowerPoint slides with voice-overs. Due to the complexity of sharing large audio-intensive files, the committee watched each presentation together and discussed their scores as they went along. The committee collected feedback from participants to help further refine the rubric and to improve the workshop process overall. These notes will be reviewed and considered as part of our work next academic year.

The workshop group consisted of five PAC-GELO members and five other faculty volunteers.

To assess *Empirical Reasoning* and *Critical Thinking*, the online asynchronous assessment instrument was administered to students in a 200-level Statistics course, a 200-level Mathematics for Elementary School Teachers course, and a 200-level Spreadsheets course. The online asynchronous assessment instrument was implemented as a pre-test and a post test will be administered to assess the students later in the semester.

III. Results

As with the previous round of assessments, raw scores assigned by assessment teams were summarized using pivot tables. There were two aims: the first, to determine the consistency of the scores; and the second, to assess student learning, the actual purpose of the assessment process.

Results from assessments for each of Effective Communication, Creative Thinking, Environmental and Community Engagement, Critical Thinking, and Empirical Reasoning follow.

Results for Effective Communication

Scores assigned to students for this learning outcome are summarized below.

Table 3.1: Summary of scores obtained from the Effective Communication sample works includes mean scores (x), standard deviations (s), and percentages of scores greater than or equal to each benchmark.

				% of work with a score ≥		
		mean	sd	1	2	3
Outcomes	1. Audience, context, and purpose...	1.29	0.46	100.0	21.0	0.0
	2. Content material ...	1.51	0.56	100.0	45.7	2.9
	3. Arrangement of material...	1.60	0.55	100.0	53.3	2.9
	4. Supporting materials ...	1.21	0.81	78.1	23.8	5.7
	5. Use of language...	1.23	0.84	76.2	29.5	3.8
	Overall Summaries	**1.37**	**0.67**	91.6	34.9	3.1

Standard deviations are reasonably low suggesting fairly consistent student scores within each rubric criterion. Average overall score for all assessed criteria for the sample ranged over 1.21—1.60 with standard deviations ranging over 0.46—0.84. These suggest weak performances for this learning outcome. While the majority of the students assessed achieved the beginning level (1 or higher), considerably fewer achieved the proficient and advanced levels (2 - 3).

Results for Creative Thinking

Scores assigned to students for this learning outcome are summarized below.

Table 3.2: Summary of scores obtained from the Creative Thinking sample works includes mean scores (x), standard deviations (s), and percentages of scores greater than or equal to each benchmark.

				% of work with a score ≥		
		mean	sd	1	2	3
Outcomes	1. Vision and framework...	1.23	0.73	94.3	41.9	0.0
	2. Details in ideas...	1.23	0.43	100.0	23.8	0.0
	3. Approach to the task...	1.06	0.54	97.1	11.4	1.9
	4. Use of existing info...	0.82	0.39	81.9	0.0	0.0
	5. Outcome...	1.06	0.42	92.4	8.6	0.0
	Overall Summaries	1.08	0.53	93.9	17.3	0.4

Standard deviations are again reasonably low suggesting fairly consistent student scores within each rubric criterion. Average overall score for all assessed criteria for the sample ranged over 0.82—1.23 with standard deviations ranging over 0.39—0.73, again suggesting weak performances for this learning outcome Here too the majority of the students assessed achieved the beginning level (1 or higher), with considerably fewer achieving the proficient level (2 or higher) and only 1.9% achieving the advanced level (3) in only the "Approach to task" criterion.

Results for Environmental and Community Engagement

Scores assigned to students for this learning outcome are summarized below.

Table 3.3: Summary of scores obtained from the Environmental and Community Engagement sample works includes mean scores (x), standard deviations (s), and percentages of scores greater than or equal to each benchmark.

				% of work with a score ≥		
		mean	sd	1	2	3
Outcomes	1. Influence of Cultural Norms	1.80	0.96	91.4	60.0	28.6
	2. LIK and Perspectives	1.76	0.82	95.7	60.0	20.0
	3. Diverse Global Perspectives	1.33	0.61	94.3	37.1	1.4
	4. Human/Social Impact of Environment	2.09	0.81	98.6	74.3	35.7
	Overall Summaries	1.74	0.85	95.0	57.9	21.4

The slightly higher standard deviations (over 0.5 and close to 1) suggest widely varying student scores within each rubric criterion. Average scores for all assessed criteria for the sample were generally low, ranging over 1.33—2.09, with standard deviations ranging over 0.61—0.96. While almost all of the students assessed achieved at least the beginning level (scores of 1 or higher) in all four criteria, a reasonably respectable percentage achieved the proficient level range-, 37.1—74.3%. The percentage who achieved the advanced level dropped down further to a range of 1.4—35.7%.

Results for Critical Thinking

Scores assigned to students for this learning outcome are summarized below. The instrument used continues to work well since scores for the past few implementations have been comparable.

Table 3.4: Summary of scores obtained from the Critical Thinking sample includes mean scores (x), standard deviations (s), and percentages of items with scores greater than or equal to each benchmark.

				% of work with a score >=		
		mean	sd	1	2	3
Outcomes	1. Understanding	2.44	0.23	100.0	100.0	0.0
	2. Facts/Assumptions	2.45	0.30	100.0	100.0	0.0
	3. Synthesis	2.51	0.24	100.0	100.0	0.0
	4. Strategy	2.45	0.29	100.0	100.0	3.7
	5. Conclusions	2.45	0.30	100.0	100.0	3.7
	Overall Summaries	2.46	0.23	100.0	100.0	0.0

Standard deviations are well below 0.5 suggesting fairly consistent student scores within each rubric criterion. Average overall score for all assessed criteria for the sample ranged over 2.44—2.51 with standard deviations ranging over 0.23—0.30. All of the students assessed achieved the proficient level (2 or higher), with only 3.7% achieving the advanced level (3) in the "Strategy" and "Conclusions" criteria. These are fairly acceptable scores at the level being assessed.

Results for Empirical Reasoning

Scores assigned to students for this learning outcome are summarized below. This instrument continues to work well, with past scores being fairly comparable.

Table 3.5: Summary of scores obtained for the Empirical Reasoning sample includes mean scores (x), standard deviations (s), and percentages of items with scores greater than or equal to each benchmark.

				% of work with a score >=		
		mean	sd	1	2	3
Outcomes	1. Description	2.15	0.69	100.0	85.2	18.5
	2. Factors	1.60	0.63	100.0	59.3	0.0
	3. Design	2.06	0.60	96.3	85.2	3.7
	4. Data Collection	1.93	0.61	96.3	77.8	3.7
	5. Results	1.83	0.58	96.3	85.2	0.0
	Overall Summaries	1.91	0.54	96.3	77.8	0.0

The scores earned are a little more spread out than for Critical Thinking, standard deviations ranged over 0.58—0.69, and the average scores for all criteria assessed were lower too. This being said, most of the students achieved the beginning level (scores of 1 or higher) and the majority of the students achieved the proficient level (scores of 2 or higher). However, not many achieved the advanced level with none for the "Factors" and "Results" criteria. These too are fairly respectable scores at the level being assessed.

IV. Lessons Learned and Next Steps

The PAC GELO members have continued to assess GERs and modify GELO rubrics as needed. Our assessment workshops provide an opportunity to assess how well our students are meeting the general education learning outcomes and allow the PAC GELO team to refine our rubrics and tailor them more specifically to meet our needs. All GELOs have been assessed at least four times. Overall, we are satisfied with the content of the rubrics; however, we have continued to make improvements to the rubrics for clarity.

This section includes a breakdown of observations by PAC GELO members and assessment workshop participants, as well as an outline of the committee's proposed next steps.

Assessment Observations

As reported previously, the group feels comfortable with the process and structure of the assessment of sample artifacts according to the GELO rubrics. We are also very grateful for the faculty volunteers who participate in the workshops. We have several repeat volunteers that make the process run very smoothly. This year, we experimented with some new assessment approaches, and we are overall very satisfied with the results.

December 2023 Workshop

In the December 2023 workshop, we assessed an artifact from Writing 111 using the GELO: (Effective Communication) & GELO #3 (Creative Thinking) rubrics. Continuing with this work, we assessed a new artifact from Writing 111. We combined both into a single session. Each committee member recruited one or two participants to assess two rubrics at once, using the same artifact set. Some insights from assessing the artifacts using the Creative Thinking and Effective Communication in one session:

It may be helpful to prepare an artifact specifically to address both effective comm and creative thinking that all students submit as a "pre" test as freshmen, and then again after they complete their GERs

Considerations : decide on how best to administer (within a freshman class? As part of their orientation?), decide what would be a suitable length to convey an idea, yet not be overwhelming for students or reviewers.

Instructions would need to clearly define the goal (communicate effectively and think creatively) without prescribing a particular topic and be specific to the rubric outcomes.

It may help to edit the rubrics so they don't refer to the "assigned task"?

Should we consider going back to having separate artifacts for Effective Comm and Creative Thinking? We could return to having two separate workshops at the same time, or assessing fewer GELOs per year.

Multiple comments were made that having details about what the professor assigned would be helpful.

The artifact we used for the workshop was a better fit for the communication rubric; however, it was not a good match for the creative thinking rubric. It was harder to assess the artifact based on the creative thinking rubric. Moving forward, we would like to use an artifact from a creative writing course, as it would likely be a better fit for both rubrics. When these two rubrics were paired together, workshop participants were able to separate their assessment to focus entirely on the communication and then entirely on creativity; however, participants reported much greater confidence in more accurately assessing communication. While we understand that not all combinations of rubrics may work together smoothly, we plan to continue experimenting with combining different rubrics in the future. Our ideal long-term goal is to combine all five rubrics to a limited number of artifacts. Exams, or tests to demonstrate the potential for faculty to generate assignments that reinforce a more rounded student development, regardless of a course's discipline.

The committee reached out to CACANE to discuss the Environmental and Community Engagement Rubric and the possibility of getting an artifact from them to assess during the spring workshop. CACANE's long-term goal is to have an assignment that is offered in multiple ANKGR courses. For the May 2024 workshop, an artifact from a single course was requested; we were able to obtain an artifact for the spring 2024 workshop.

May 2024 Workshop

The May 2024 workshop focused on the Environmental and Community Engagement GELO. The first rubric column didn't make sense to the committee initially. We ended up redefining it as "internal" and the last column as "external". We came up with temporary headers for those two columns to use for the workshop, but we plan to wordsmith these before the next evaluation.. These were the temporary column headers that we used:

Column 1: Influence of internal Cultural Norms (of the culture being discussed)…

Column 4: External Human /Social Impact on an Environment….

The committee questioned whether the global perspectives column seemed not to fit at first, but a committee member pointed out that the "colonial perspective" is a global perspective, and many of the artifacts addressed this.

Participants commented on how enjoyable the artifacts were to review, and what a good fit they were (overall) to the rubric.

There are a few areas that we hope to improve moving forward. Artifact-rubric fit has continued to be a minor area of concern. Although this did not cause any major issues, it is a part of the process that we are always interested in improving. Every year, there seem to be improvements made in our ability to select appropriate artifacts, but it's possible that there are other changes that could be made to the process that would eliminate this concern.

During the 2024/2025 academic year members of the AA and AS assessment committees will join the GELO Committee to participate in the workshops and they continue to utilize the GELO annual assessment reports. Both degrees mainly consist of GERs and the GELO data contributes to their effort avoiding duplication

Rubric Design

The *Environmental and Community Engagement*, the least-assessed rubric, continues to be a work in progress. Although we made some minor changes to the rubric, the plan is to continue to modify this rubric based on feedback from the workshop and CACANE. During the spring semester, CACANE proposed draft edits to the rubric, which were reviewed and approved. The suggestions included: changing the row header "NOT YET" to "NO EVIDENCE", and "MASTERY" to "ADVANCED."

The Committee agreed that students taking 200 level courses should not be expected to have "mastered" anything! (For consistency, we edited the row headings in the other rubrics so they are aligned)**.** At a time when UAS is thinking critically about decolonizing and Indigenizing higher education, it seems appropriate to interrogate our GELOs to better understand how they may address this goal.

Next Steps

In an effort to respond to some of our past challenges, we have been exploring the effectiveness of standardization through asynchronous online assessments. In Summer 2024, two GELO members revised the two online instruments that we've been using to separately assess Empirical Reasoning and Critical Thinking. They combined the two assessments into one and rewrote many of the questions to improve upon them and to make them more relevant to Alaskan students. They also mapped each question to the rubric categories. We plan to test this consolidated assessment in AY25, and to potentially use it as both a pre- and post-assessment tool.

Our assessment cycle continues as we plan to assess as many GELOs as possible. In the future, as we continue to refine our automated assessment for some GELOs, we hope to assess some GELOs twice within the same year. We currently plan to follow the assessment schedule we followed this year, perhaps adding more if the opportunity arises. The committee will therefore work according to the following tentative assessment schedule:

- <u>Fall 2024</u>:
- <u>Spring 2025</u>:

Throughout the last few years of assessment, the PAC GELO team has discussed the potential benefits of designing an artifact for a course in advance of the workshop to address some of the artifact-rubric design concerns mentioned previously. In other words, we welcomed the opportunity to work with a faculty volunteer to design an assignment prior to the beginning of the semester with the goal of using the assignment for the workshop. After much discussion, it appears that we have a faculty volunteer willing

to attempt this. Although it is not required or expected for one course to fully meet all criteria of a GELO, designing an assignment to meet the rubric could improve the assessment process and may even aid in the overall goal of closing the loop and better understanding our students' specific strengths and areas in need of improvement.

The committee also continues to work toward their long-term goal of helping UAS scale up the assessment processes. Within the past year, the charge of the committee has been clarified and, though it is not exclusively our responsibility to find ways to improve student scores in some of the weaker areas, we are still a part of the overall UAS mission to turn the results of assessment into useful information related to the instructional programs at UAS. The PAC GELO committee continues to engage with the larger UAS learning community to determine whether undergraduate students are meeting the GELO outcomes.

RUBRICS

1. **EFFECTIVE COMMUNICATION:** Communicate thoughts and ideas effectively, orally and/or in writing.

	AUDIENCE, CONTEXT, AND PURPOSE…	CONTENT MATERIAL (CENTRAL MESSAGE OR ARGUMENT)…	ARRANGEMENT OF MATERIAL…	SUPPORTING MATERIALS (DETAILS, INFORMATION, RESOURCES)…
NOT APPLICABLE	❑ N/A	❑ N/A	❑ N/A	❑ N/A
NO EVIDENCE (0)	❑ …are not considered.	❑ …is not appropriate for the assigned task.	❑ …is not organized.	❑ …are not present or are not appropriate.
BEGINNING (1)	❑ …are somewhat considered.	❑ …is presented in a somewhat general manner that is relevant to the assigned task.	❑ …incorporates basic transitions through shifts in topic.	❑ …are clearly referenced within the work.
PROFICIENT (2)	❑ …are clearly aligned with the assigned task.	❑ …is developed or presented in a specific and detailed manner.	❑ …follows consistent patterns throughout the entire work.	❑ …are relevant to the assigned task and are integrated effectively.
ADVANCED (3)	❑ …are addressed according to the assigned task, with full nuance and complexity, demonstrating deep understanding.	❑ …effectively, clearly and creatively conveys the central message or argument in a compelling manner.	❑ …skillfully maintains the work's cohesiveness.	❑ …are used to thoroughly develop ideas appropriate for the discipline and genre of the assigned task.

2. **CRITICAL THINKING (CURRENT):** Demonstrate comprehensive exploration of issues, ideas and/or theories, artifacts, and events before accepting or formulating an opinion, conclusion, or solution
   CRITICAL THINKING (PROPOSED): Demonstrate the ability to understand a problem/issue/task at hand, identify relevant facts and/or assumptions, synthesize and conceptualize available information, develop an effective strategy to tackle the problem/issue/task, and arrive at a valid conclusion.

Current Critical Thinking Rubric:

	ISSUE OR PROBLEM TO BE CONSIDERED CRITICALLY…	PERSPECTIVE, THESIS, OR HYPOTHESIS…	ASSUMPTIONS…	INFORMATION TAKEN FROM SOURCES…	CONCLUSION OR RELATED OUTCOMES…
NOT APPLICABLE	❑ N/A	❑ N/A	❑ N/A	❑ N/A	❑ N/A
NO EVIDENCE (0)	❑…is not stated.	❑…is not stated.	❑…are not acknowledged.	❑…is not present.	❑…is not present.
BEGINNING (1)	❑…is implied.	❑…is implied.	❑…are identified.	❑…is included.	❑…is tied to some of the information discussed.
PROFICIENT (2)	❑…is presented in a clear and logical manner.	❑…is explicitly stated.	❑… are discussed.	❑…is used to develop a coherent analysis or synthesis.	❑…clearly identifies some related outcomes (consequences or implications).
ADVANCED (3)	❑…is framed in such a manner that delivers information necessary for clear and complete understanding.	❑…takes into account the complexities of the issue.	❑… are used to question the context and/or others' assumptions.	❑…is used to develop an effective and comprehensive analysis or synthesis.	❑…incorporates opposing viewpoints and/or limitations.

Proposed Critical Thinking Rubric:

	A - Understanding	B - Facts/Assumptions	C - Synthesize/Conceptualize	D - Strategy	E - Conclusion
Not Applicable					
No Evidence (0)					
Beginning (1)					
Proficient (2)					
Advanced (3)					
Comments					

A: Demonstrate the ability to understand a problem/issue/task at hand.
B: Identify relevant facts and/or assumptions.
C: Synthesize/conceptualize available information.
D: Develop an effective strategy to tackle the problem/issue/task.
E: Arrive at valid conclusion.

3. **CREATIVE THINKING:** Present creative works of expression, innovative approaches to tasks, or solutions to problems.

The committee will explore revisions to this rubric based on feedback from the Fall 2022 workshop.

	STUDENT'S VISION AND FRAMEWORK OF EXPLORING IDEAS…	DETAILS IN STUDENT'S IDEAS, QUESTIONS, FORMATS, OR PRODUCTS…	STUDENT'S APPROACH TO THE TASK…	STUDENT'S USE OF EXISTING MODELS…	STUDENT'S OUTCOME (OBJECT, SOLUTION, OR IDEA)…
NOT APPLICABLE	❑ N/A	❑ N/A	❑ N/A	❑ N/A	❑ N/A
NO EVIDENCE (0)	❑…relates strictly to the assigned task.	❑…relate strictly to the assigned task.	❑…relates strictly to the assigned task.	❑…copies or restates what is already available.	❑…does not serve its intended purpose.
BEGINNING (1)	❑…considers alternative perspectives.	❑…show signs of original thought.	❑…considers alternative processes.	❑…shows signs of deviation from expectations and common assumptions.	❑…serves its intended purpose (for example, solving a problem or addressing an issue).
PROFICIENT (2)	❑…actively explores alternative perspectives.	❑…demonstrate uniqueness and novelty.	❑…experiments with alternative processes.	❑…actively explores ideas in alternative contexts.	❑…makes an original contribution in its intended purpose.
ADVANCED (3)	❑…engages in untested and potentially risky approaches to the assigned task(s).	❑…challenge traditional limitations.	❑…applies alternative processes with consideration to consequences.	❑…synthesizes what is already available to apply ideas in a new context.	❑…provides a meaningful answer to the task in an original and surprising context.

4. **EMPIRICAL REASONING:** Apply the scientific method to well-reasoned questions in the search for answers through data.

	A DESCRIPTION OF THE PROBLEM…	FACTORS APPLICABLE TO THE PROBLEM…	DESIGN OF THE STUDY…	DATA COLLECTION METHOD…	RESULTS…
NOT APPLICABLE	❑ N/A	❑ N/A	❑ N/A	❑ N/A	❑ N/A
NO EVIDENCE (0)	❑…is not present.	❑…are not identified.	❑…is not present.	❑…is not identified.	❑…are not present.
BEGINNING (1)	❑…is outlined.	❑…are identified.	❑…is described in terms of its purpose and objective.	❑…is identified.	❑…are summarized as appropriate to the discipline.
PROFICIENT (2)	❑…is clear and complete.	❑…are classified clearly.	❑…identifies appropriate methodology.	❑…is implemented correctly.	❑…are interpreted as appropriate to the discipline.
ADVANCED (3)	❑…is formulated to include a proper and precise research question.	❑…are formulated into an appropriate testable hypothesis.	❑…identifies limitations of the proposed study.	❑…is used to produce (or leads toward) consistent and accurate data.	❑ …are used to provide clear and concise scientific explanations of analysis.

5. **ENVIRONMENTAL AND COMMUNITY ENGAGEMENT:** Explore Indigenous and global social perspectives with respect for diversity of people, different perspectives of resource sustainability, and human impact on the environment.

Modified in Spring 2023 based on input from the Chancellor's Advisory Committee on Alaska Native Education (CACANE).

	INFLUENCE OF CULTURAL NORMS…	LOCAL INDIGENOUS KNOWLEDGE (LIK) AND PERSPECTIVES…	DIVERSE GLOBAL PERSPECTIVES…	HUMAN/SOCIAL IMPACT ON AN ENVIRONMENT…
NOT APPLICABLE	❑ N/A	❑ N/A	❑ N/A	❑ N/A
NO EVIDENCE (0)	❑…is not acknowledged.	❑…are not acknowledged.	❑…are not acknowledged.	❑…is not acknowledged.
BEGINNING (1)	❑…is acknowledged.	❑…are acknowledged.	❑…are acknowledged.	❑…is acknowledged.
PROFICIENT (2)	❑…is supported with examples.	❑…are developed through examples.	❑…are developed through examples.	❑…is developed through examples.
ADVANCED (3)	❑…is analyzed and/or interrogated.	❑…are analyzed to thoroughly develop ideas.	❑…are analyzed to thoroughly develop ideas.	❑…is analyzed in a way that expresses the need for respectful engagement.