General Education Artifact Evaluation 2020-2021 Artifacts

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On 10 June 2021, 12 faculty members evaluated student work submitted as artifacts for Communication, Humanities, Social Sciences, Sciences, and Mathematics. General Education outcomes for each discipline had been approved in 2019 by the full-time faculty. This is the first comprehensive review of all the artifacts by outside evaluators. Ten of the faculty members were readers and two were floaters. The floaters were to read and evaluate artifacts if the assigned readers differed by more than two points on an outcome. There were only two instances where this happened. The scores of the two floaters were averaged in with the original scores.

Full-time faculty were assigned to content area outside of their expertise. As much as possible, adjuncts were also assigned outside their area. Two of the adjunct faculty did evaluate within their area.

Student artifacts were submitted in Spring 2021, except for Science which had Fall 2020 and Spring 2021 submissions. Science has been collecting artifacts since Fall 2019 but they have not been evaluated by outside readers.

Collection of artifacts is through Canvas. Artifacts submitted or obtained from courses were pooled into discipline specific folders. A random sampling (every second, third, fifth, as appropriate) of the files was completed until the sample set of 50 were selected. For Communications, the artifacts were separated by course and approximately 15 each from CM 101, CM 102, and CM 115 with the remaining 5 from CM 240 (smallest set of artifacts as the course is was only taught face-to-face at GCC and Concordia). For all other disciplines, all student work was pooled into one folder. In none of the sample sets were artifacts separated by modality. The rationale: the distribution of artifacts collected skewed toward full-time faculty (face-to-face and online). The Director of AIEP did obtain some of the work directly from course shells from assignments deemed to meet the outcome to ensure a large enough pool of student work. Once the 50 (45 for Math) artifacts were pulled and placed in Artifact folders for each discipline, they were renamed using the convention of discipline moniker and number. THe monikers used include CM for Communication, HU for Humanities, MA for Math, SC for Science and SS for Social Science. All identifying information (student name/course/instructor) was removed by Director of AIEP in all possible cases. In the instances involving videos, identifying information cannot be removed. All written student work was copied for readers. All images (photos) and videos were available via shared folders with the readers.

Artifact Collection process:

Submission of Artifacts

Not all faculty submitted student work in the department shells as instructed. In some cases, Director of AIEP went into individual course shells to find assignments. In some cases, these were labeled or connected to general education outcomes via rubrics. In other cases, an assignment that seemed to closely match the discipline outcomes were selected. [NOTE: Permission to go into course shells given by VPAA].

Style of Artifacts

• *Textboxes*: Use of textboxes for student response caused some problems for Director of AIEP. The student work had to be copied into a blank word document to remove identifying information. Use of word document would remove this issue.

- *PowerPoints*: In printing off the student work, dark backgrounds in PowerPoint are more difficult to print and then read. If artifacts are to be digital, this will not pose a problem.
- Google Docs: Director of AIEP was not able to open a few shared google docs due to permission errors. Instructors will need to consider how to get student work submitted.
- *PDF:* Some student work was submitted to instructor as PDF, this is more difficult to remove the student information. Two instructors downloaded all student work in one PDF for submission. This will not work as random student samples are pulled. A zipped file is requested.
- Video: Links to video submissions worked in some cases, not in others. Large size of files can be
 problematic, especially for submitting in department shells. If evaluations are all digital, videos will
 be fine (other than very large size). The use of video precludes removing student/course identifying
 information. Some were submitted to Director of AIEP downloaded to CD. This can be fine but
 ideally should be in Canvas.
- Quizzes in Canvas. One instructor downloaded student work from quizzes and submitted as artifacts. The submissions were 30 and 32 pages in length and were multiple-choice exam questions. This type of student work could not be collected by Director of AIEP.

Communications

335 artifacts provided. 50 evaluated. 30 of the artifacts were evaluated Kristina Frost and Cheryl Skupa and the remaining 20 by Theresa Hier and Michael Bomberger. Artifacts collected from CM 101, CM 102, CM 115, CM 210. The reason for two sets of readers: 1) many of the artifacts were long and took a great deal of time to read, and 2) there are six (6) outcomes to evaluate per artifact.

The artifacts included long research papers, short essays, papers indicating conversations occurring and

Results
Student mastery level per outcome from all evaluators

| | Recognize communication conventions unique to multiple discourses and make appropriate communication s choices according to those conventions. | 2. Apply fundamental communication theories to rhetorical choices in both written and spoken formats. | 3. Engage through listening and reading and respond thoughtfully with evidence to conflicting viewpoints using both written and spoken forms. | 4. Ethically synthesize sources and communicate that synthesis coherently in written and spoken forms. | 5. Identify the core elements of both written and spoken arguments and evaluate the quality of those arguments. | 6. Compose a logical, evidence-based argument. |
|------|--|---|---|--|---|---|
| Eval | 2.99 | 3.15 | 2.80 | 2.88 | 2.85 | 2.81 |
| FA20 | 3.30 | 3.33 | 3.30 | 3.30 | 3.35 | 3.35 |
| SP21 | 3.33 | 3.36 | 3.32 | 3.27 | 3.29 | 3.35 |
| SU21 | 3.08 | 3.08 | 3.08 | 2.94 | 3.18 | 3.35 |

66% (33 out of 50) of the artifacts had student mastery level of Met Expectations or higher.

Overall scores per artifact: 2% (one paper) scored a 5.0, 20% (10 out of 50) scored 4.00-4.99, 20% scored 3.00-3.99, 44% (22 out of 50) scored 2.00-2.99 and 14% (7 out of 50) scored 1.00-1.99.

Evaluator comments

Strengths

- Well developed rubric, creative assignments
- Most of the artifacts were persuasive speeches/essays.

Types/formats that worked well

- Artifacts that were argumentative, required research and citations, required consideration for counter-arguments, and were long enough to develop thoughts but not so long that the student or evaluator gets lost in minutiae.
- Research style writing and speeches supported by sources.

Areas for improvement

- One form of citation throughout the department would be useful.
- A common assignment could also be a future consideration.

Types/formats that did not work well.

- Artifacts that were too brief, that did not require research or citation, that were opinion based only or required examination of non-verbal communication without requiring evidence for assumptions.
- Writing and speeches which did not reference supporting research were hard to evaluate.

Suggestions for modifications to outcomes

• the rubric is very impressive. I only know that we struggled with it a little in the beginning and I was working with a communications instructor. The language between certain criteria was very

similar and only differed by words such as "seamlessly." Perhaps define seamless or evaluate the language such that any instructor in the field would be able to use with as little subjectivity as possible.

Not sure.

Suggestions for modifications to assignments submitted for artifacts.

- See suggestions listed above #4 (types/formats that worked well)
- And limit length on some and extend length on some.
- It's much easier to evaluate assignments which have a clear thesis with support from outside sources. Summaries and reaction sheets don't seem to fit the criterion of the outcomes.

Humanities

98 artifacts provided. 50 evaluated by Bryan Bombardier and Brian Stark. Four outcomes evaluated per artifact. The student ranged from written reports that reflected the outcomes to images of artwork with no explanation.

Artifacts collected from AR 100, HI 108, HI 120, HI 121, HI 122, HI 123, HI 124, CM 106, CM 121, CM 127, CM 140, CM 148, MU 100, MU 103,

Work not collected from FL 111 (in Spanish), PH 101 (could not find a suitable assignment—discussion boards not selected, other work is in publishers content area and no papers assigned). THe following classes are general education but not offered in SP 2021: CM 122, CM 123, CM 124, HU 201, HU 202, JN 100, PH 105, RE 104

Results
Student mastery level per outcome from all evaluators

| | Explain the interrelated nature of humanities: how humanities shapes the world and who the world shapes the humanities. | Demonstrate understanding of the humanities in a diverse, global context | Produce a work that engages with the creative and/or analytical process. | Demonstrate how the humanities can allow for introspection, self-discovery, and growth. |
|------|---|--|--|---|
| EVAL | 2.20 | 2.15 | 3.43 | 2.35 |
| FA20 | not scheduled to be assessed | | | |
| SP21 | 3.46 | 3.51 | 3.64 | 3.56 |
| SU21 | 3.82 | 3.27 | 3.73 | 3.82 |

24% (12 out of 50) of the artifacts had student mastery level of Met Expectations or higher. Overall scores per artifact: No artifacts scored above 3.75. 24% (12 out of 50) scored 3.00-3.75, 66% 922 out of 50) scored 2.00-2.99, and 10% (5 out of 50) scored 1.00-1.99.

Evaluator comments:

Strengths

- Most artifacts had plenty of material to assess all of the outcomes.
- History artifacts where very much put together well. You can tell the instructor reviewed and took time to review drafts of assignments.

Types/formats of artifacts that worked well for evaluations.

- Essays, while longer and more time consuming, provided the most benefit. The outcomes that say explain or evaluate are tough to assess in single projects or course evaluation forms.
- Written examples such as papers and short answers.

Areas for improvement

- It seemed that some of the projects hit very well on 2 outcomes but almost neglected others. This could be because the outcomes were vague, in general.
- Expectations for assignments do not match outcomes. The outcomes and assignment correlation were very unique and not correlated.

Types/formats of artifacts that did not work well for evaluations.

- Simple images or completed projects without any explanation were difficult to assess.
- Art without explanation.

Suggestions for modifications to outcomes

- More descriptive outcomes would be helpful to the "assessor". The more I assessed them, the more liberal I became in my evaluation of th vague first and second outcome.
- Review outcomes against assessments and vice versa.

Suggestions for modifications to assignments submitted for artifact.

- Simple art projects might benefit from an accessory short essay. This essay could explore the first and second outcomes. The essay assignments might benefit from a shared outline (i.e. write about the first outcome in the first quarter, the second in the second, etc.)
- Review outcomes before assigning assessments.

Math

45 artifacts available, 45 artifacts evaluated by Theresa Hier and Michael Bomberger. There were two types of artifacts—questions from multiple choice exam or application type problem and student work. For the multiple-choice exams, 30-32 pages per student were submitted, the Director of AIEP selected only the first six pages for evaluation purposes. Student names were removed from the exams, but the score applied by Canvas Quizzes for each question remained. Work was collected from MA 110, MA 111, MA 112, MA 114*, MA 115, MA 120. *No student work was available as in one set of courses, only homework sets were available to download and in other set of courses, the discussion board questions had potential but student work answering questions was not tied together.

Results

Student mastery level per outcome from all evaluators

| | 1. Recognize the | | 3. Accurately interpret, | |
|------|-------------------------------|----------------------------------|-------------------------------|--|
| | mathematical concepts that | 2. Apply technology in analysis. | validate, and communicate the | |
| | are applicable to a scenario. | | result. | |
| EVAL | 2.46 | 1.66 | 2.01 | |
| FA20 | | not scheduled to be assessed | | |
| SP21 | 3.98 | 3.98 | 3.80 | |
| SU21 | 3.36 | 2.43 | 2.93 | |

26.7% (14 out of 45) of the artifacts had student mastery level of Met Expectations or higher. Overall scores per artifact: No artifacts scored a 5.0, 11.1% (5 out of 45) scored 4.0-4.99, 15.6% (7 out of 45) scored 3.00-3.99, 6.7% (3 out of 45) scored 2.00-2.99, and 66.7% (5 out of 45) scored 1.00-1.99.

Evaluator comments:

Strengths

Evaluating math was definitely out of my area (Comp. 101/102), but it did give me an insight on
how other departments are conducting final artifacts for their classes. For math, artifacts could
really showcase what the students have learned. Having them work through a math problem,
showing their work, and having them demonstrate this knowledge in how they present the
information.

Types/formats of artifacts that worked well for evaluations.

The types that really showed how how much students retained during their math classes was
the ones where they were given a math question or story problem and they had to show how
they solved the question by breaking up the steps and displaying the charts and equations they
used. This allowed us to understand their process and see how they achieved their work and
answers.

Areas for improvement

• I believe the major area for improvement would be the design of the artifact. Certain artifacts were only quizzes, where students were asked to solve an equations (multiple choice answers). This does not show how the students got their answers or have them explain the process. This type of artifact goes not respond to the outcomes we used to guide our ratings.

Types/formats of artifacts that did not work well for evaluations.

• I believe the major area for improvement would be the design of the artifact. Certain artifacts were only quizzes, where students were asked to solve an equations (multiple choice answers). This does not show how the students got their answers or have them explain the process. This type of artifact goes not respond to the objectives we used to guide our ratings.

Suggestions for modifications to outcomes

• I felt like the Math outcomes were pretty concise, but I felt that outcome dedicated to technology was not as clear as the other two. We struggled at times trying to see how technology was used beyond using basic technology (computers, Canvas, etc.). I feel this could be more guidance when incorporating this outcome into a final outcome.

Suggestions for modifications to assignments submitted for artifact.

• I think the only suggestion that I have is that assignments must be designed in order to show how students process the outcomes. It just can't be a multi-choice quiz.

Sciences

98 artifacts available, 50 artifacts evaluated by Brandon Galm and Kim Smith. The student seemed to fall into two categories: 1) a common assignment based on Plant-based meats or Climate Change and 2) a report on weather or natural disasters. Courses include SC 101, SC 103, SC 104, SC 107, SC 110, SC 120, SC 126, SC 130, SC 131, SC 137, SC 140, SC 151.

Results
Student mastery level per outcome from all evaluators

| | Apply the scientific process to evaluate current issues and circumstances. | Demonstrate scientific literacy and knowledge about the study of matter, life, and the universe. | Critically analyze events through a scientific lens. | Demonstrate quantitative reasoning and problem-solving. |
|------|--|--|--|---|
| EVAL | 2.66 | 2.63 | 2.53 | 2.46 |
| FA20 | 4.33 | 4.00 | 4.04 | 4.22 |
| SP21 | 3.93 | 3.96 | 4.00 | 4.00 |
| SU21 | not assessed | | | |

44% (22 out of 50) of the artifacts had student mastery level of Met Expectations or higher. Overall scores per artifact: No artifacts scored 5.0, 2% (1 out of 50) scored 4.00-4.99, 42% (21 out of 50) scored 3.00-3.99, 38% (19 out of 50) scored 2.00-2.99, 18% (9 out of 50) scored 1.00-1.99.

Evaluator comments:

Strengths

- Assignments encouraged critical thinking and problem solving which provides the student an opportunity to analyze and synthesize content which meets all the program outcomes.
- Overall, students seemed to be able to recognize and name scientific concepts/processes. There
 were a handful of students who were able to connect those concepts to the topic being
 discussed as well.

Types/formats of artifacts that worked well for evaluations.

- I thought the artifacts provided worked well.
- Both of the assignments that asked students to evaluate and respond to particular articles worked the best (the plant-based meat assignment and the global warming source evaluation assignment).

Areas for improvement

- No suggestions.
- Stronger emphasis on explaining connections between the concepts themselves and how the students are seeing them play out within the given assignment topic. An opportunity for students, or way to emphasize, application and/or explain their own "thoughts" (NOT opinions) of the science beyond just reiterating what the articles have told them.

Types/formats of artifacts that did not work well for evaluations.

- None
- (1) The "general" paper and/or presentation on a particular weather/disaster: mostly because the ones assessed today never really moved beyond a simple summary of the weather/disaster event/type, so the students didn't appear to be moving into the critical thinking/problemsolving areas of the outcomes. (2) The climate change video analysis assignment: most of the students provided too brief and/or simplistic answers which made it difficult to fully assess the outcomes.

Suggestions for modifications to outcomes

• I thought the outcomes were adequate.

• n/a

Suggestions for modifications to assignments submitted for artifact.

- No suggestion.
- Repeated from above: The climate change video analysis assignment: most of the students provided too brief and/or simplistic answers which made it difficult to fully assess the outcomes. The "general" paper and/or presentation on a particular weather/disaster could emphasize the problem-solving elements of the topic more, rather than just an overview.

Social Sciences

308 artifacts available, 50 artifacts evaluated by Rob Zima and Amy Kern. Assignments were generally papers or PowerPoints. Common assignment presented asked students to compare two cultural groups, other assignments had student report on concepts from the courses.

Courses include EC 101, EC 102, GE 101, SS 101, SS 105, SS 106, SS 125, SS 130, SS 140, SS 142, SS 201. No work collected from SS 141 and SS 150 as they were not taught in Spring 2021

Results

Student mastery level per outcome from all evaluators

| | 1 Demonstrate critical thinking in understanding of psychological and social aspects of the human experience. |
|------|---|
| EVAL | 2.90 |
| FA20 | not scheduled to be assessed |
| SP21 | 3.72 |
| SU21 | 3.71 |

62% (31 out of 50) of the artifacts had student mastery level of Met Expectations of higher. Overall scores per artifact: 8% (4 out of 50) scored 5.0, 12% (6 out of 40) scored 4.00-4.99, 42% (21 out of 50) scored 3.00-3.99, 26% (13 out of 50) scored 2.00-2.99, and 12% (6 out of 50) scored 1.00-1.99.

Evaluator comments:

Strengths

- There were quite a few well-researched papers with solid citations. It was also enjoyable (from a personal perspective) that students were afforded flexibility in content and subject choice.
- Has students writing about current and multicultural issue, bias in the forms of race, sexual orientation, religious views, & income.

Types/formats of artifacts that worked well for evaluations.

- Papers and PowerPoints worked nicely. I think more guidance could be helpful for students to use word counts, better formatting options, and let opinion intertwined in analysis. If students insert opinions, it should specifically be separated and clearly identifiable.
- Written papers and printed PowerPoints worked fine.

Areas for improvement

• It seemed as though a recurring theme for many of these papers was a reversal of hypothesis > conclusion methodology. It seems as though students already had a conclusion in mind and utilized their own research to justify their positions, which frankly isn't what critical thinking is about.

Types/formats of artifacts that did not work well for evaluations.

- There wasn't anything we saw that didn't work well.
- NA

Suggestions for modifications to outcomes

- "Demonstrate critical thinking in understanding of psychological and social aspects of the human experience." My one suggestion would be to modify the "psychological AND social aspects" to "psychological OR social aspects."
- Suggestions for modifications to assignments submitted for artifact.
 - Nothing comes to mind.
 - It would be nice to see a project sheet that describes the original criteria for the assignment being evaluated.

Conclusions

Artifacts

All artifacts need to be submitted into the department shell or some other electronic location. Artifacts should be submitted as a zipped folder. Student work cannot be combined into one pdf document.

Problems occur when the evaluators do not know the assignment/directions given to the students. Some of the works represented good assignments but not good artifacts because the outcomes were not clearly addressed in the student work.

Artifacts could not be collected from FL 111 as the student work was all in Spanish.

Strenaths

The student work being available. The process of evaluating artifacts in teams all in one place.

Areas of Improvement

Common assignments have the following advantages: all outcomes addressed, transparency regarding the reason for the can be presented in the introduction of the assignment (letting the students know the outcomes, the expectation of content, the parameters of the assignment) and are authentic assessments. It is not appropriate to assess student learning of an outcome if that outcome has not been covered.

Process:

Suggestions from evaluators on the process:

- Having at least a brief assignment description for each of the possible assignments.
- It went pretty well. We need to tell instructors that their assignments need to stand alone, without the assignment.
- Everything was great.
- It could be helpful to have more duties for the "floaters." Could they be included with another floater/evaluator with half the amount of artifacts to judge? I do know that it can be difficult to predict how many times floaters may be needed.
- I enjoyed the experience and I was expecting that I would not enjoy this at all. I think it is valuable to evaluate disciplines outside of the field in which we teach. This was not my area and I was able to approach this with a beginner's mind.
- Actually, having a partner to evaluate the artifacts helped enormously.
- I felt it was a good process.
- I think some groups were overwhelmed with the amount given to evaluate, especially for communication since the artifacts were longer. Maybe more groups? Or giving groups more time?

Additional comments:

- I appreciate the opportunity to continue my understanding of the assessment process and be able to earn summer money in the process.
- Thank you for allowing me to assist in this process.
- It was an interesting experience!