



University of Maine

General Education Assessment Report 2018

*General Education Committee of the Faculty Senate & Office of Institutional Research
and Assessment*

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Executive Summary

At the University of Maine (UMaine), the general education curriculum makes up one third of a student's academic experience. The purpose of general education assessment is to evaluate how well our students are meeting the general education learning objectives and to better understand areas needing improvement. There are nine general education areas:

1. Western cultural tradition
2. Social context and institutions
3. Cultural diversity and international perspectives
4. Population and the environment
5. Artistic and creative expression
6. Ethics
7. Quantitative literacy
8. Writing
9. Science foundations

In spring 2018, the Western Cultural Tradition block was assessed. Faculty used modified AAC&U VALUE rubrics to score student artifacts using Watermark's Aqua platform. A group of 53 faculty scored 174 artifacts. The information from this report will be used to inform the general education curriculum and future assessment activities.

Key Findings:

- Students in 100 and 200 level courses tend to score lower in the assessed categories than those in 300 and 400 level courses, especially in the areas of "Influence of Context and Assumptions" and "Perspective Taking."
- In all three groups (all, lower division, and upper division courses), Category 4: Influence of Context and Assumptions is the overall lowest scoring category.
- The majority of students scored at a level 2 or above.
- The upper level courses tended to have higher average scores than lower level courses.

Recommendations:

- Provide more descriptive guidelines on the length of student artifacts submitted.
- Analyze results by aggregated student level data in addition to course level data.
- Consider maximizing time in the scoring session by calibrating scorers before attending the session or by extending the length of the session beyond half a day.

Overview

Introduction

The general education curriculum intends to help develop "broadly educated persons who can appreciate the achievements of civilization, understand the tensions within it, and contribute to resolving them" (UMaine Catalog, 2019). There are many ways for a student to fulfill the requirements of the general education curriculum, and it makes up one third of a student's academic experience. There are five broad general education categories:

1. Human Values and Social Contexts
 - a. Western cultural tradition
 - b. Social context and institutions
 - c. Cultural diversity and international perspectives
 - d. Population and the environment
 - e. Artistic and creative expression
2. Ethics
3. Quantitative Literacy
4. Writing
5. Science

Additionally, a capstone experience specific to the student's major is required. More details can be found at <https://umaine.edu/facultysenate/committees/general-education-committee/>.

In spring 2018, the Western Cultural Tradition block of the general education curriculum was assessed. "The Western Cultural Tradition" block involves the historical and/or philosophical examination of the basis of Western culture. Subject areas may include, but are not limited to, artistic, economic, educational, historical, legal, linguistic, literary, permeative, philosophical, political, rhetorical, scientific, and social dimensions of Western cultural tradition and its impact."¹ Students completing this area should be able to:

1. Examine the sources, transmission, development and outcomes among ideas, institutions, artifacts, and values within the traditions of the West.
2. Recognize and explore the complexity and variety among ideas, traditions, institutions, archeological and historic texts and artifacts and values that inform the cultural traditions of the West.
3. Analyze and think critically about how societies are or have been defined by such cultural traditions.

Organization and Reporting

The general education assessment scoring session was organized by the General Educational Committee of the Faculty Senate with input from the Director of Assessment. The rubrics used to assess student artifacts were adapted from the AAC&U VALUE rubrics. Faculty were organized into teams based on which general education classes they taught. They designed rubrics aligned to the nine general education areas using criteria from the VALUE rubrics. While only one general education area has been assessed so far, the rubrics to assess each of the areas have been developed and will be used in future scoring sessions.

A statistically representative sample of artifacts from lower division courses and upper division courses was randomly selected by the Office of Assessment to be evaluated by faculty reviewers. Individual faculty members whose courses were randomly selected were contacted via email to submit student artifacts that aligned to the general education area being assessed. Ten students were then randomly selected from each group of artifact submissions. Any identifying information of the student or the course was redacted by the Office of Assessment. All artifacts were then uploaded into the Aqua platform.

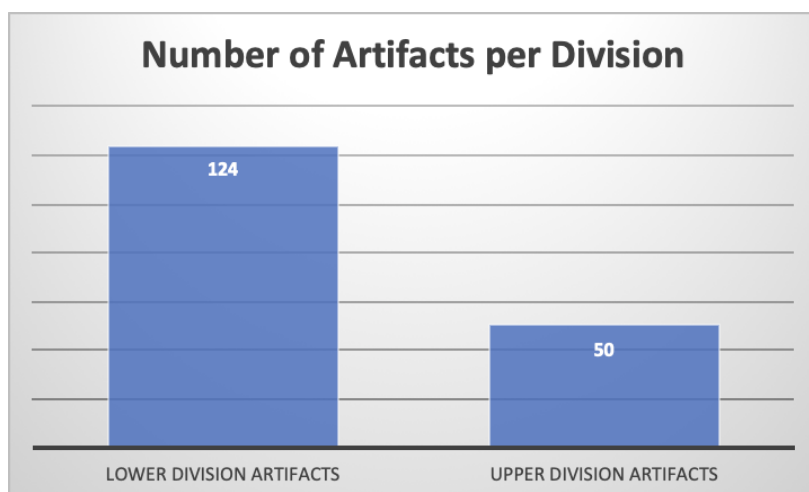
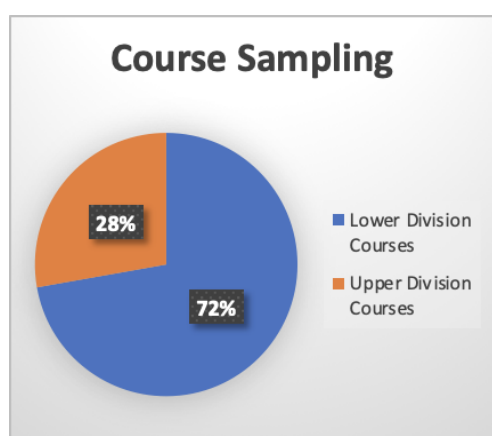
After completing the scoring sessions, the results were collected and analyzed by the Office of Assessment and reported back to the General Education Committee of the Faculty Senate.

¹ Preamble of the Human Values and Social Contexts: Western Cultural Tradition general education area.

Artifact Collection

Student artifacts were collected from 18 course sections from a stratified random sample from the Registrar's list of course sections. Representative of lower division and upper division proportions of general education courses, 13 lower division courses (28%) and five upper division courses (72%) were randomly sampled. Ten students were randomly selected from each course; however, due to small class size and tardy submissions, less than ten artifacts were collected from five of the courses. In total, 174 artifacts were collected for the scoring session. There were 124 artifacts from the lower division courses and 50 from the upper division courses.

The artifacts were embedded course assignments collected from courses that met the general education designation as determined by the Undergraduate Program Curriculum Committee (UPCC). Once uploaded to the Aqua platform, all artifacts were redacted so the student and course would be unidentifiable.



AAC&U VALUE Rubric Design

For the Western Cultural Tradition general education block, six AAC&U VALUE rubric categories were assessed. The categories (represented in the rubric below) are as follows:

1. Global Self-Awareness
2. Knowledge: Cultural Self-Awareness
3. Knowledge of cultural worldview frameworks
4. Influence of Context and Assumptions
5. Perspective Taking
6. Interpretation: Making sense with sources as blueprints for meaning

Human Values and Social Contexts: Western Cultural Tradition

Preamble

The Western Cultural Tradition involves the historical and/or philosophical examination of the basis of Western culture. Subject areas may include, but are not limited to, artistic, economic, educational, historical, legal, linguistic, literary, permeative, philosophical, political, rhetorical, scientific, and social dimensions of Western cultural tradition and its impact.

Student Learning Outcomes

Students completing the General education area of the Western Cultural Tradition will be able to:

- 1) Examine the sources, transmission, development and outcomes among ideas, institutions, artifacts, and values within the traditions of the West.
- 2) Recognize and explore the complexity and variety among ideas, traditions, institutions, archeological and historic texts and artifacts and values that inform the cultural traditions of the West.
- 3) Analyze and think critically about how societies are or have been defined by such cultural traditions.

Description	Capstone (4)	Milestone (3)	Milestone (2)	Benchmark (1)
Global Self-Awareness	Effectively addresses significant issues in the natural and human world based on articulating one's identity in a global context.	Evaluates the global impact of one's own and others' specific local actions on the natural and human world.	Analyzes ways that human actions influence the natural and human world.	Identifies some connections between an individual's personal decision-making and certain local and global issues.
Knowledge Cultural self-awareness	Articulates insights into own cultural rules and biases (e.g. seeking complexity; aware of how her/his experiences have shaped these rules, and how to recognize and respond to cultural biases, resulting in a shift in self-description.)	Recognizes new perspectives about own cultural rules and biases (e.g. not looking for sameness; comfortable with the complexities that new perspectives offer.)	Identifies own cultural rules and biases (e.g. with a strong preference for those rules shared with own cultural group and seeks the same in others.)	Shows minimal awareness of own cultural rules and biases (even those shared with own cultural group(s)) (e.g. uncomfortable with identifying possible cultural differences with others.)
Knowledge of cultural worldview frameworks	Demonstrates sophisticated understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices.	Demonstrates adequate understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices.	Demonstrates partial understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices.	Demonstrates surface understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices.
Influence of context and assumptions	Thoroughly (systematically and methodically) analyzes own and others' assumptions and carefully evaluates the relevance of contexts when presenting a position.	Identifies own and others' assumptions and several relevant contexts when presenting a position.	Questions some assumptions. Identifies several relevant contexts when presenting a position. May be more aware of others' assumptions than one's own (or vice versa).	Shows an emerging awareness of present assumptions (sometimes labels assertions as assumptions). Begins to identify some contexts when presenting a position.

Perspective Taking	Evaluates and applies diverse perspectives to complex subjects within natural and human systems in the face of multiple and even conflicting positions (i.e. cultural, disciplinary, and ethical.)	Synthesizes other perspectives (such as cultural, disciplinary, and ethical) when investigating subjects within natural and human systems.	Identifies and explains multiple perspectives (such as cultural, disciplinary, and ethical) when exploring subjects within natural and human systems.	Identifies multiple perspectives while maintaining a value preference for own positioning (such as cultural, disciplinary, and ethical).
Interpretation: Making sense with sources as blueprints for meaning	Provides evidence that s/he can use an appropriate epistemological lens and that s/he can also engage with sources as part of a continuing dialogue within and beyond a discipline or community.	Articulates an understanding of the multiple ways of engaging with sources and the range of interpretive strategies particular to one's discipline(s) or community	Demonstrates that s/he can engage sources purposefully, choosing among interpretive strategies depending on the context	Can identify purpose(s) for using sources, relying on an external authority such as an instructor for clarification of the task.

Scoring Session

The scoring session took place on the Friday morning after finals week in May 2018. Fifty-four faculty and staff from across campus gathered for the half day scoring event. After a few introductory remarks, the day began with a calibration and training session. All participants scored one artifact, interrater reliability was calculated, and follow up training was offered. Participants then scored a second artifact to improve interrater reliability before beginning the official scoring session.

Once the group was appropriately calibrated, participants began scoring student artifacts one at a time using the Aqua platform. Aqua allows scorers to evaluate one artifact at a time and then return it to the “pool” for another scorer to assess. In this manner, a single student artifact should be scored 2-3 times. Scorers used the developed rubric to assess the artifacts and entered all of the scores into Aqua. This allowed for quick visualization of initial results.

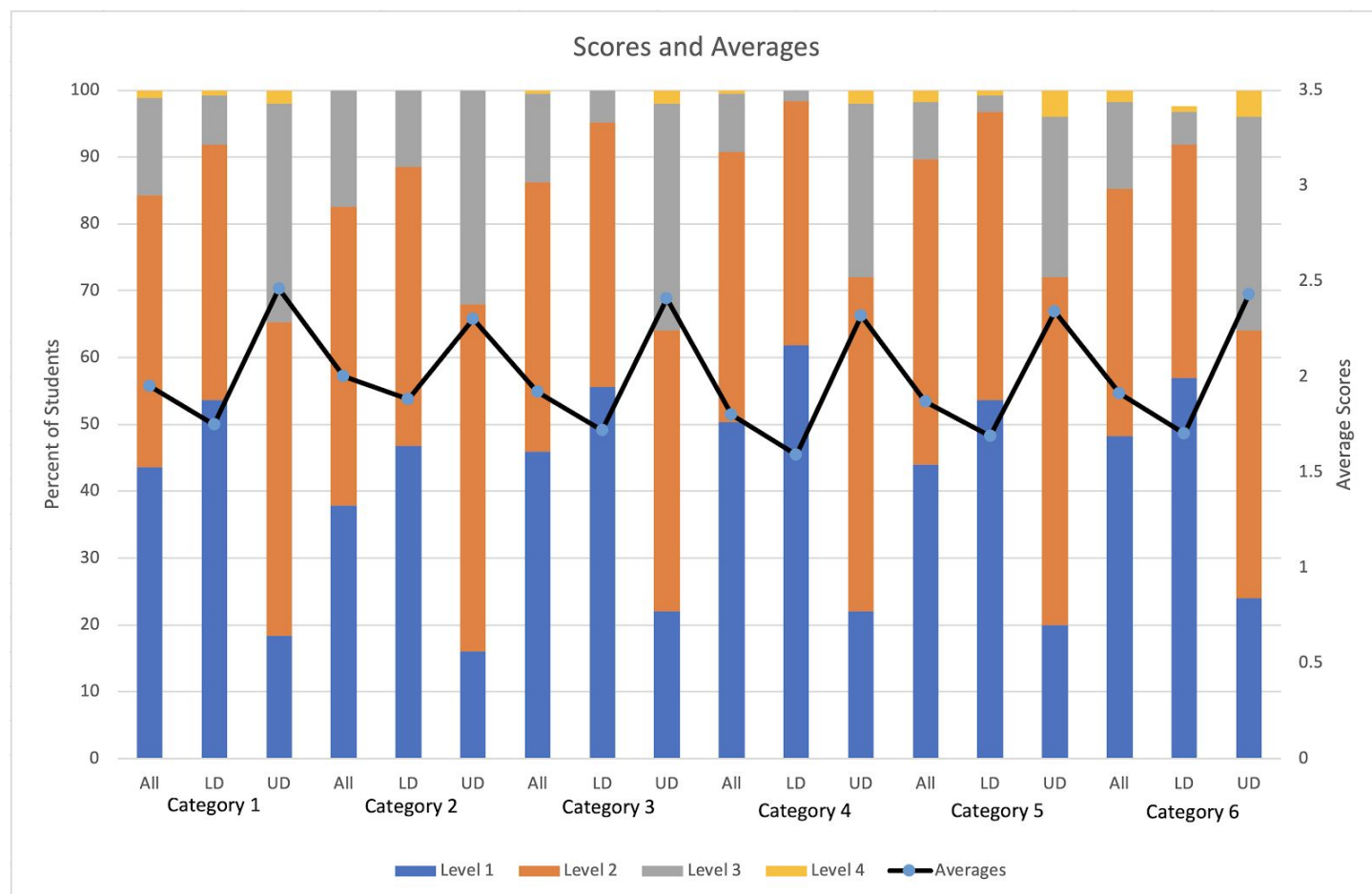
After several rounds of scoring sessions, the initial results were discussed within the group. The session was then dismissed and conversations were carried forward over lunch.

Results

The results were analyzed by considering all courses (All) and two sub-groups: lower division courses (LD) and upper division courses (UD). The table below indicates the percentage of students who scored at each level per category.

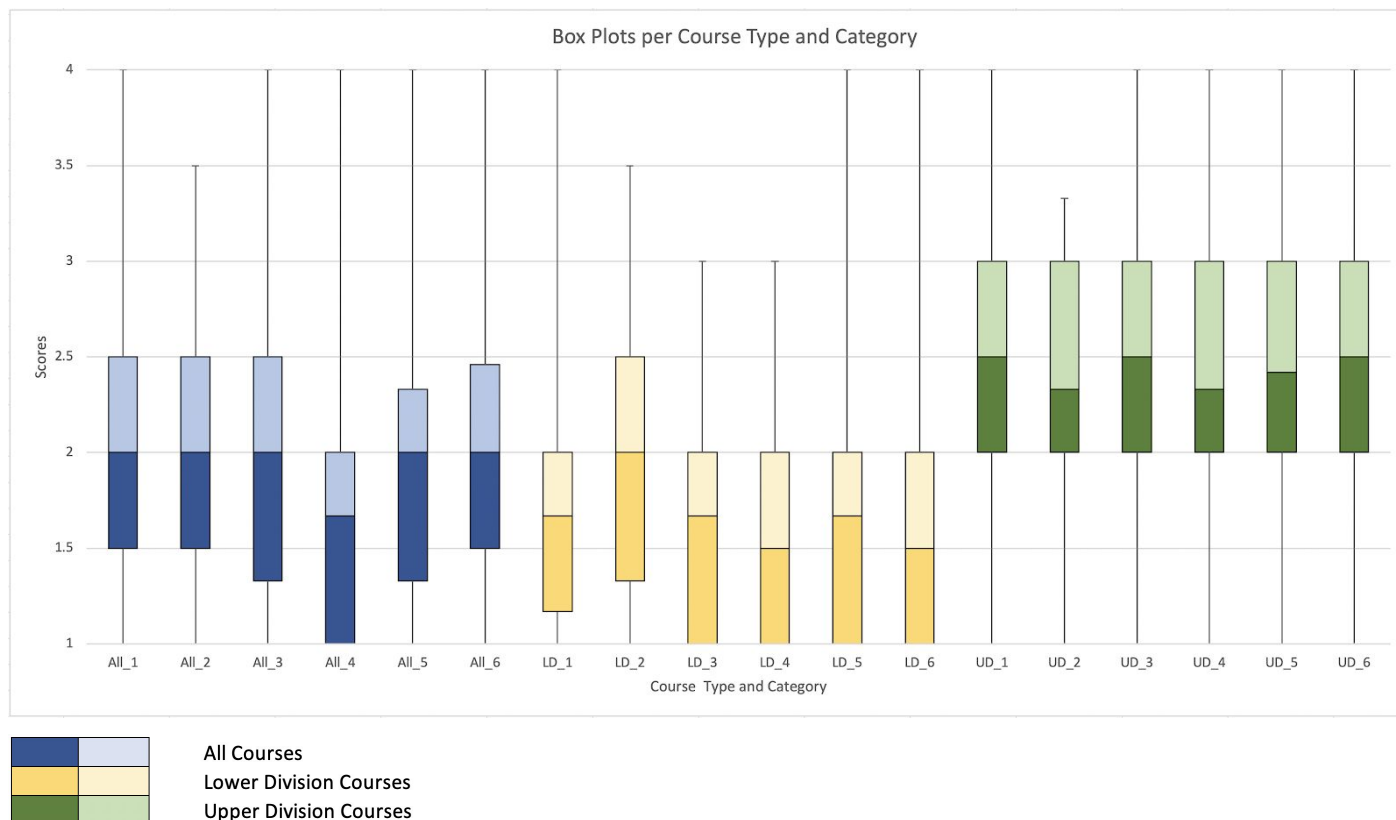
Additionally, the stacked bar graph below shows percentage of student scores in the six categories disaggregated by all courses (All), lower division (LD), and upper division (UD) along with the average score in each category. The six categories are 1.) Global Self-Awareness 2.) Knowledge: Cultural Self-Awareness 3.) Knowledge of cultural worldview frameworks 4.) Influence of Context and Assumptions 5.) Perspective Taking and 6.) Interpretation: Making sense with sources as blueprints for meaning. As expected, the average scores are lower in the 100 and 200 level courses and higher in the 300 and 400 level courses.

Number of Students Per Level (LD and UD) and Average/Median Scores																		
	Global Self-Awareness			Knowledge of Cultural Self-Awareness			Knowledge of Cultural Worldview Frameworks			Influence of Context and Assumptions			Perspective Taking			Interpretation: Making Sense with Sources as Blueprints for Meaning		
	All	LD	UD	All	LD	UD	All	LD	UD	All	LD	UD	All	LD	UD	All	LD	UD
Level 1	44%	54%	18%	38%	47%	16%	46%	56%	22%	50%	62%	22%	44%	54%	20%	48%	57%	24%
Level 2	41%	38%	47%	45%	42%	52%	40%	40%	42%	41%	37%	50%	46%	43%	52%	37%	35%	40%
Level 3	15%	7%	33%	17%	12%	32%	13%	5%	34%	9%	2%	26%	9%	2%	24%	13%	5%	32%
Level 4	1%	1%	2%	0%	0%	0%	1%	0%	2%	1%	0%	2%	2%	1%	4%	2%	1%	4%
Total Submissions	172	123	49	172	122	50	174	124	50	173	123	50	173	123	50	170	123	50
Averages	1.95	1.75	2.46	2	1.88	2.3	1.92	1.72	2.41	1.8	1.59	2.32	1.87	1.69	2.34	1.91	1.7	2.43
Medians	2	1.67	2.5	2	2	2.33	2	1.67	2.5	1.67	1.5	2.33	2	1.67	2.42	2	1.5	2.5

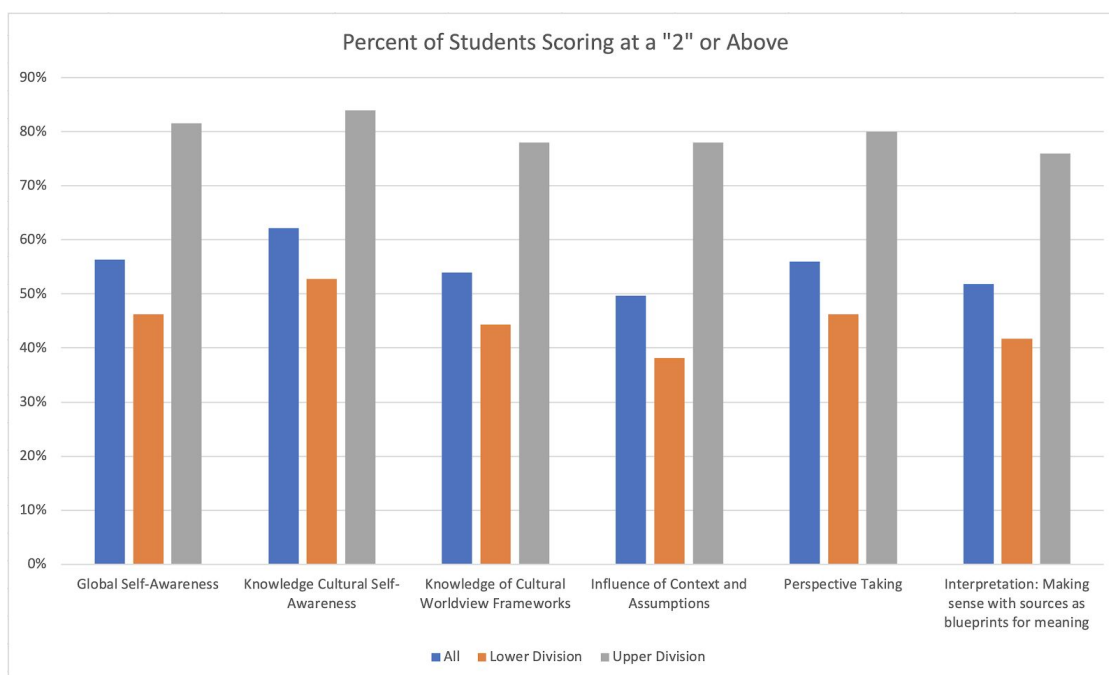


The box plots below consider the frequency distribution of scores across all categories by course type. The vertical axis represents student scores, ranging from 1 to 4, as determined by the modified AAC&U VALUE rubric. The horizontal axis presents each rubric category by course type (All, LD, and UD).

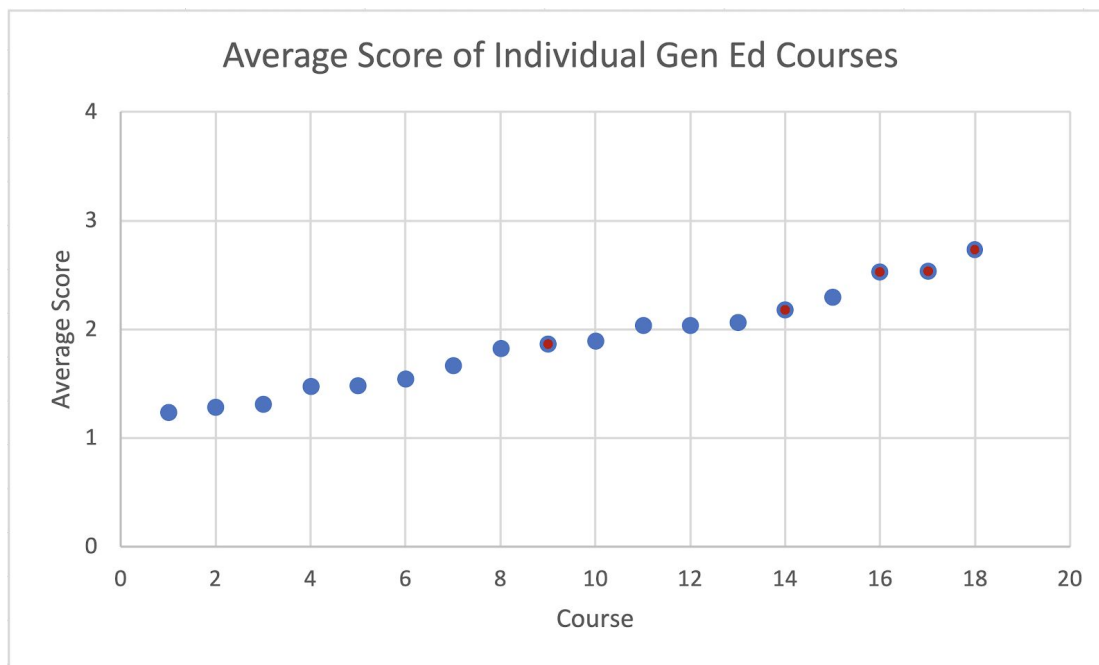
Although the distribution of scores for upper division courses are substantially higher than the lower division courses, there is a large spread across all categories. When considering all courses, 50 percent of scores tend to fall between 1.5 and 2.5, except in the category of “Influence of Context and Assumptions.” Additionally, the median score in categories in lower division course, ranges from 1.5 to 2. In upper division courses, scores in each category range from 2 to 2.5. The evidence shows that students tended to score around a 2.



Another way to consider the data is to identify the percentage of students scoring at or above a critical value. Given that our sample represents a range of students across various levels, we will consider level 2 a reasonable score for most students to achieve. The results indicate that the majority of students sampled were at a level 2 or above.



Finally, the figure below identifies the average student scores across each individual course. When organized from highest average score to lowest, we find that the upper division courses (signified by a red dot) tend to be higher than lower division courses.



Key Findings

(Interpretations will be provided in the future by the General Education Committee of the Faculty Senate.)

1. Students in 100 and 200 level courses tend to score lower in the assessed categories than those in 300 and 400 level courses, especially in the areas of “Influence of Context and Assumptions” and “Perspective Taking.”

2. In all three groups (all, lower division, and upper division courses), Category 4: Influence of Context and Assumptions is the overall lowest scoring category.

(The difference is quite small and may not be significant. Results from other categories will help us determine if this is an area of concern or not.)

3. The majority of students scored at a level 2 or above.

4. The upper level courses tended to have higher average scores than lower level courses.

Recommendations

1. Provide more descriptive guidelines on the length of student artifacts submitted.

One area of concern raised by faculty in attendance at the scoring session was that the length of the student artifacts varied widely. Some submissions were a handwritten paragraph in length, while others were a typed seven pages. Providing guidelines on length of artifacts would help create more consistency in length and hopefully greater accuracy in the data.

2. Analyze results by aggregated student level data in addition to course level data.

For this report, the data was considered at the course level (all, LD, and UD). Going one step further and considering the data on the student level would provide a better picture of whether or not academic growth is occurring, as evidenced by the general education curriculum.

3. Consider maximizing time in the scoring session by calibrating scorers before attending the session or by extending the length of the session beyond half a day.

A decent portion of the morning session was used to calibrate the group of scorers. This left less time for discussion at the end of the session, which is arguably a crucial part of this process. There are two options to improve this. The session could be extended all day, providing more time for scoring and discussion. *Or* calibration could take place before the day of the session. Individuals planning to attend would score 2 -3 artifacts on their own time and interrater reliability would be assessed beforehand. If more training and calibration was needed, a brief portion of the scoring session could be dedicated to this.

Discussion of Results and Future Plans

Assessment data collected from the general education assessment session will be discussed within the General Education Committee of the Faculty Senate and then shared internally and publicly as appropriate to encourage discussion about programmatic changes.

In general, students in upper division courses scored better than those in lower division courses. The majority of students scored at the “benchmark” (1) and “milestone” (2 and 3) levels. Comparably few scored at the “capstone” level (4). These scores are around what we expected to see. We would like to see almost all classes average at or above 2.0. Students scoring higher in upper level classes may be reflective of class size and student experience. If these findings hold true across all nine categories, they will help show the need for improvement in our lower level general education curriculum. After we have run this assessment more times and have more data, we can ask other questions. For example, we would like to know if class size has an impact on scores. We also plan to investigate course approval date and its relationship to scores. We hypothesize that classes begun before Faculty Senate’s 2012 criteria may be less aligned. It is important to note that low scores do not indicate poor quality classes. These are simply classes where the content does not align with the general education description.

The General Education Committee agrees that one goal of this process is to encourage faculty to adopt an attitude of collective ownership over the general education curriculum. We believe this will help foster change. We are encouraged that so many faculty (approx. 40) volunteered to make the rubrics, score the artifacts (approx. 50) and turn

in student work (18 out of 20, 90%). We will also keep the Faculty Senate apprised. The Senate is highly supportive. Repeated cycles of this assessment will continue to build a collective sense of ownership over the curriculum.

Assessment of the general education curriculum is ongoing. The next general education assessment session will take place in spring 2019, and the general education area “Social Context and Institutions” will be assessed. The format will remain similar. Additionally, in June 2019 a team of five individuals will be attending the 2019 Institute on General Education and Assessment at the University of Vermont, hosted by the Association of American Colleges and Universities (AAC&U). This group represents individuals from Faculty Senate, the General Education Committee, and Institutional Research and Assessment. We plan to learn ways to use the results from our assessment process to foster dialogue on the general education curriculum at UMaine. Once several rounds of data have been collected on the general education curriculum, serious consideration will be given to targeted programmatic changes that will improve the curriculum and enhance the student’s overall learning experience at UMaine.