



SPRING 2018 GENERAL EDUCATION ASSESSMENT: PILOT STUDY RESULTS

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I. INTRODUCTION

Central Washington University's general education program was deemed by the NWCCU in its 2009 comprehensive evaluation committee report to "conform to accreditation standards and was noted as being thoughtfully designed." Although the scope of the CWU program was thought "attractive in the framework of liberal arts training," general education assessment processes were believed to be "unsatisfactory." Specifically, CWU general education assessment procedures were believed to have not "produced comprehensive results that could lead to meaningful improvements in the program." In response to the NWCCU findings, the University Assessment Committee developed a general education assessment framework, initiated in 2010. As a part of the implementation of that framework, an assessment calendar was developed to assure general education goal assessment over a seven-year time frame (Division of Academic Affairs, 2010). The Office of the Associate Provost conducted three annual studies in fulfillment of this assessment plan (Pellett, Henderson, & Smith, 2012; Pellett, Smith, & Henderson, 2013; Smith, Henderson, & Pellett, 2014).

Beginning in the academic year 2012, the CWU Faculty Senate began a process of revision of the general education program with a primary goal of creating measurable student learning outcomes common to the basic skills and breadth areas of the framework. These learner outcomes were approved by the Senate in May of 2013, and committees began the task of reviewing and approving re-aligned courses that reflected the outcomes. Ultimately, the revised general education program did not win Senate approval, leading to a renewed redesign process with the target of a new program in Fall of 2019. Given the transitional nature of this activity, no campus-wide general education assessment activity was planned during the 2014-15 and 2015-16 academic years.

Parallel with this general education review process, CWU engaged in two important advances in the potential for electronic assessment processes. During the 2012-2014 academic years, the university maintained a contract to use the Waypoint Outcomes platform, which was an enhancement to the Blackboard learning management system then in use. We began building program outcomes into this system, and made initial steps to pilot their use in courses. With the campus-wide shift to the Canvas learning management system, we began again and populated the system at the account level with all available program student learning outcomes, including the 2013 general education outcomes, degree program outcomes, and outcomes mandated by the state of Washington for teacher licensure.

Anticipating future successful use of the Canvas LMS for a variety of assessment purposes across campus, we embarked on our first large-scale attempt to use course-based outcomes assessment for three basic skills areas of the extant general education program in the Fall of 2016 (Smith, Henderson, & Jungblut, 2017). Based on this experience, we decided to expand the pilot to include all Winter 2018 courses in all basic skills and breadth areas (Smith, Henderson, & Jungblut, 2018). This report describes the results of the second large-scale assessment of general education outcomes conducted in Spring of 2018.

II. METHODOLOGY

The General Education program in Spring of 2018 included six basic skills areas: Academic Advising Seminar (AAS, eight outcomes), Academic Writing (AW, five outcomes), Academic Writing and the Research Paper (AWRP, six outcomes), Basic Quantitative Skills (BQS, five outcomes), Computer Fundamentals (CF, four outcomes), and Foreign Language (FL,

three outcomes). There are nine breadth areas: The Aesthetic Experience (AE, four outcomes), Application to Natural Sciences (ANS, four outcomes), Fundamental Disciplines of Physical and Biological Sciences (FDPBS, two outcomes), Foundations of Human Adaptation and Behavior (FHAB, four outcomes), Literature and the Humanities (LH, four outcomes), Patterns and Connections in the Natural World (PCNW, two outcomes), Perspectives on the Culture and Experiences of the United States (PCEUS, four outcomes), Perspectives on World Cultures (PWC, four outcomes), and Religions and Philosophies of the World (RPW, five outcomes). In addition, there is a set of outcomes that apply to all courses in the category of Natural Sciences (NS, five outcomes). Appendix A contains the full text of the outcomes.

Instruments

Using the institutional account level, we created a library of General Education outcomes within Canvas, consisting of a short title, the full text, and a rating scale. For this purpose, we selected the “highest score” scoring option, as each student would only be assessed once within a class section.

We assembled the relevant outcomes for each area into 16 analytic rubrics in Canvas, and paired the outcomes with a five-point scale with common anchors (see Appendix A for outcomes). This scale is similar to those used in other applications (for example, the VALUE rubrics developed by the American Association of Colleges and Universities) and bears comparison with the traditional A-F grading system and common GPA requirements in which a C grade represents mastery. Figure 1 presents the rubric scale as seen by the instructor.

Figure 1. Rubric Rating Scale as Seen in Canvas

Exemplary: Excellent understanding and application of concepts 5 Points	Proficient: Skillful understanding and application of concepts 4 Points	Satisfactory: Acceptable understanding and application of concepts 3 Points	Basic: Emerging understanding and application of concepts 2 Points	Unsatisfactory: Weak understanding and application of concepts 1 Points	Total Points 5 Points
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Mastery: 3 Points

Procedures

Using a dummy course, we created Canvas assignments with several parameters for use in courses. The assignments were designated as bearing zero points toward the final grade, and were muted in order to render the assessment results invisible to students. These restrictions were developed in consultation with department chairs and program directors, to minimize the intrusive impact of this assessment pilot on regular course grading and feedback systems. These assignments were exported to Canvas Commons and not made available for use beyond the needs of the pilot. CWU's Canvas Administrator made instructor-level access available to the Assessment Coordinator for one day, and the assignments were bulk uploaded to all Spring 2018

general education classes, excluding those sections that were part of Running Start or College in the High School programs. The Associate Provost met with department and program leads, and provided an instruction sheet which also appeared in the Canvas assignment text (see Appendix B). While students could see that the muted assignment existed, they would not see the rating unless the instructor ‘unmuted’ the assignment. Students could see the following message:

Hello, CWU Student: As part of CWU’s commitment to improving your undergraduate experience, the Office of the Associate Provost is asking that instructors provide us with information about how well students are achieving the learning goals of the General Education program. This Canvas assignment is not part of your course grade, and all information will remain confidential. Results will be examined at the group, not the individual level, and will not be reported for particular sections or instructors.

Unlike our initial pilot of Winter 2018, we loaded the assessments at the beginning of the quarter and asked instructors to use the SpeedGrader to assess each student on their achievement of the program outcomes at an appropriate time in the quarter. This assessment is holistic in nature, in that it is not necessarily tied to specific course activities (papers, exams, presentations, etc.) although instructors were free to consult their own gradebooks and notes as they chose. At the close of the grading period, we generated a Canvas outcome report that allowed for the use of Excel to sort the results by outcome and calculate basic descriptive statistics.

III. RESULTS

We uploaded the assessments into 280 course sections across the basic skills and breadth areas, and received instructor ratings from 73, or 26% of General Education courses taught in Spring 2018. This yielded a total of 11,442 data points across the outcome areas, each representing an individual instructor’s rating of an individual student on a single outcome. We received data representing instructor ratings of 2,034 unique students.

Tables 1-13 present overall mean, median, mode, and standard deviation for each outcome, as well as the percentage of students scoring a 3 or higher rating on each outcome and for the total rubric score. We received no data for the FDPBS breadth area.

Table 1

Spring 2018 Basic Skills Area Results: Academic Advising Seminar (AAS)

	Total Rubric (8-40 pts)	AAS1 Rights/responsibilities, expectations, ownership	AAS2 Reflection and needs	AAS3 Academic resources	AAS4 Requirements, process, purpose	AAS5 Library resources	AAS6 Web resources	AAS7 Extra-curricular opportunities	AAS8 Awareness of diversity
Mean	28.00	3.33	3.67	3.33	3.33	3.67	3.33	3.33	4.00
Median	31.00	3.00	4.00	4.00	4.00	4.00	3.00	3.00	4.00
Mode	31.00	3.00	4.00	4.00	4.00	4.00	3.00	3.00	NA
SD	5.20	0.58	0.58	1.15	1.15	0.58	0.58	0.58	1.00
n \geq 3	2 ^a	3	3	2	2	3	3	3	23
% \geq 3	66.67% ^a	100.00%	100.00%	66.67%	66.67%	100.00%	100.00%	100.00%	100.00%
n	3	3	3	3	3	3	3	3	3

^aAn average rating of 3 on all outcomes would result in a total rubric score of 24.

Table 2

Spring 2018 Basic Skills Area Results: Academic Writing (AW)

	Total Rubric (5-25 pts)	AW1 Read critically	AW2 Respond appropriately	AW3 Synthesize responses	AW4 Express clearly	AW5 Conventions of Academic English
Mean	17.63	3.70	3.59	3.57	3.50	3.55
Median	20.00	4.00	4.00	4.00	4.00	4.00
Mode	20.00	4.00	4.00	4.00	4.00	4.00
SD	5.86	1.19	1.20	1.22	1.26	1.51
n \geq 3	35 ^a	40	38	37	36	35
% \geq 3	76.09% ^a	86.96%	82.61%	80.43%	78.26%	76.09%
n	46	46	46	46	46	46

^aAn average rating of 3 on all outcomes would result in a total rubric score of 15.

Table 3

Spring 2018 Basic Skills Area Results: Academic Writing and the Research Paper (AWRP)

	Total Rubric (6-30 pts)	AWRP1 Identify assumptions and criteria	AWRP2 Take a position on an issue	AWRP3 Prepare and implement a research plan	AWRP4 Cite and document sources	AWRP5 Describe the interrelationship between style and meaning	AWRP6 Craft prose
Mean	21.91	3.78	3.81	3.56	3.46	3.70	3.64
Median	22	4.00	4.00	4.00	3.00	4.00	4.00
Mode	18	4.00	4.00	3.00	3.00	3.00	3.00
SD	5.29	0.95	0.87	1.10	0.99	0.97	0.97
n \geq 3	187 ^a	215	270	197	194	211	209
% \geq 3	79.24% ^a	91.10%	93.64%	83.47%	82.20%	89.41%	88.56%
n	236	236	236	236	236	236	236

^aAn average rating of 3 on all outcomes would result in a total rubric score of 18.

Table 4

Spring 2018 Basic Skills Area Results: Basic Quantitative Skills (BQS)

	Total Rubric (5-25 pts)	BQS1 Use proportional reasoning	BQS2 Problems related to personal finance	BQS3 Interpret ratios as probabilities	BQS4 Use probability to analyze risk	BQS5 Statistical summaries	BQS6 Growth models
Mean	*	4.27	3.94	4.18	3.19	4.65	3.04
Median	*	5.00	4.00	4.00	3.00	5.00	3.00
Mode	*	5.00	5.00	5.00	4.00	5.00	2.00
SD	*	0.96	0.99	0.93	1.33	0.65	1.40
n \geq 3	*	162	109	108	74	115	66
% \geq 3	*	93.64%	93.97%	93.91%	63.79%	99.14%	60.55%
n	*	173	116	115	116	116	109

*Insufficient or missing data

Table 5

Spring 2018 Basic Skills Area Results: Computer Fundamentals (CF)

	Total Rubric (4- 20 pts)	CF1 Create documents	CF2 Create spreadsheets	CF3 Create presentation	CF4 Extract information from database
Mean	14.55	4.16	3.53	3.43	3.44
Median	16.00	5.00	4.00	4.00	4.00
Mode	20.00	5.00	5.00	5.00	5.00
SD	5.23	1.34	1.69	1.70	1.68
n \geq 3	239 ^a	286	231	232	233
% \geq 3	72.21% ^a	86.40%	69.79%	70.09%	70.39%
n	331	331	331	331	331

^aAn average rating of 3 on all outcomes would result in a total rubric score of 12.

Table 6

Spring 2018 Basic Skills Area Results: Foreign Language (FL)

	Total Rubric (3-9 pts)	FL1 Demonstrate comprehension	FL2 Demonstrate production	FL3 Knowledge of cultural features
Mean	12.31	4.08	4.11	4.11
Median	12.00	4.00	4.00	4.00
Mode	15.00	5.00	5.00	5.00
SD	2.78	0.98	0.92	0.92
n \geq 3	33 ^a	33	34	34
% \geq 3	89.19% ^a	89.19%	91.89%	91.89%
n	37	37	37	37

^aAn average rating of 3 on all outcomes would result in a total rubric score of 9.

Table 7

Spring 2018 Breadth Area Results: The Aesthetic Experience (AE)

	Total Rubric (4- 20 pts)	AE1 Acquire vocabulary	AE2 Understand activities within traditions	AE3 Understand genres and relations	AE4 Apply aesthetic judgment and thinking
Mean	15.83	3.96	3.92	3.91	4.03
Median	16.00	4.00	4.00	4.00	4.00
Mode	20.00	4.00	4.00	4.00	5.00
SD	3.58	0.95	0.98	0.96	0.99
n \geq 3	214 ^a	219	214	220	220
% \geq 3	91.06% ^a	93.19%	91.06%	93.62%	93.62%
n	235	235	235	235	235

^aAn average rating of 3 on all outcomes would result in a total rubric score of 12.

Table 8

Spring 2018 Breadth Area Results: Fundamental Disciplines of Physical and Biological Sciences (FDPBS)

	Total Rubric (2-10 pts)	FDPBS1 Inquiry-driven observations	FDPBS2 Components of natural systems
Mean	No data		
Median			
Mode			
SD			
n \geq 3			
% \geq 3			
n			

^aAn average rating of 3 on all outcomes would result in a total rubric score of 6.

Table 9

Spring 2018 Breadth Area Results: Foundations of Human Adaptation and Behavior (FHAB)

	Total Rubric (4-20 pts)	FHAB1 Identify basic principles	FHAB2 Understand activities within traditions	FHAB3 Understand genres and relations	FHAB4 Apply aesthetic judgment and thinking
Mean	16.77	4.23	4.21	4.22	4.15
Median	19.00	5.00	5.00	5.00	5.00
Mode	20.00	5.00	5.00	5.00	5.00
SD	4.35	1.10	1.10	1.13	1.14
n \geq 3	511 ^a	518	515	513	511
% \geq 3	90.44% ^a	91.68%	91.15%	90.80%	90.44%
n	565	565	565	565	565

^aAn average rating of 3 on all outcomes would result in a total rubric score of 12.

Table 10

Spring 2018 Breadth Area Results: Literature and the Humanities (LH)

	Total Rubric (4-20 pts)	LH1 Read and respond: Cultures	LH2 Examine artifacts in context	LH3 Read and respond: Genres	L4 Synthesize understanding
Mean	15.27	3.77	3.89	3.77	3.85
Median	16.00	4.00	4.00	4.00	4.00
Mode	16.00	4.00	4.00	4.00	4.00
SD	3.71	0.98	0.94	0.99	0.94
n \geq 3	264 ^a	268	278	269	281
% \geq 3	87.42% ^a	88.74%	92.05%	95.92%	93.05%
n	302	302	302	302	302

^aAn average rating of 3 on all outcomes would result in a total rubric score of 12.

Table 11

Spring 2018 Breadth Area Results: Natural Sciences (NS)

	Total Rubric (5-25 pts)	NS1 Contribution of discovery to our lives	NS2 Science as a system that verifies theories	NS3 Distinguish between data and analysis	NS4 Apply quantitative skills to problems	NS5 Systematic critical thinking
Mean	*	3.71	3.45	3.45	3.13	3.45
Median	*	4.00	3.00	3.00	3.00	3.00
Mode	*	4.00	3.00	3.00	3.00	3.00
SD	*	1.22	1.07	1.11	1.17	1.10
n \geq 3	*	135	147	145	150	145
% \geq 3	*	80.36%	87.50%	86.31%	65.79%	86.31%
n	*	168	168	168	228	168

*Insufficient or missing data

Table 12

Spring 2018 Breadth Area Results: Perspectives on the Culture and Experiences of the United States (PCEUS)

	Total Rubric (4-20 pts)	PCEUS1 Influence of institutions, cultures, traditions	PCEUS2 Analyze effects of past	PCEUS3 Articulate requirement of informed citizenship	PCEUS4 Apply critical thinking, ethical reasoning
Mean	14.77	3.62	3.75	3.71	3.69
Median	16.00	4.00	4.00	4.00	4.00
Mode	20.00	3.00	5.00	5.00	5.00
SD	4.37	1.09	1.10	1.14	1.17
n \geq 3	63 ^a	65	66	65	63
% \geq 3	84.00% ^a	86.67%	88.00%	86.67%	84.00%
n	75	75	75	75	75

^aAn average rating of 3 on all outcomes would result in a total rubric score of 12.

Table 13

Spring 2018 Breadth Area Results: Perspectives on World Cultures (PWC)

	Total Rubric (4-20 pts)	PWC1 Identify principles and institutions	PWC2 Analyze diversity and similarity	PWC3 Articulate issues, processes across boundaries	PWC4 Apply critical thinking, ethical reasoning
Mean	16.61	4.26	4.17	4.18	3.99
Median	16.50	4.00	4.00	4.00	4.00
Mode	16.00	5.00	4.00	4.00	4.00
SD	2.76	0.75	0.76	0.76	0.88
n \geq 3	93 ^a	97	95	97	92
% \geq 3	94.90% ^a	98.98%	96.94%	98.98%	93.88%
n	98	98	98	98	98

^aAn average rating of 3 on all outcomes would result in a total rubric score of 12.

Table 14

Spring 2018 Breadth Area Results: Religions and Philosophies of the World (RPW)

	Total Rubric (5-25 pts)	RPW1 Identify presuppositions	RPW2 Analyze ways of articulating human experience	RPW3 Reflect on social, political sphere	RPW4 Integrate vocabularies, principles, systems of thought	RPW5 Evaluate language, perception, values
Mean	19.14	3.82	3.87	3.86	3.83	3.82
Median	20.00	4.00	4.00	4.00	4.00	4.00
Mode	25.00	4.00	5.00	4.00	4.00	4.00
SD	5.34	1.07	1.11	1.11	1.09	1.11
n \geq 3	60 ^a	61	62	60	60	60
% \geq 3	84.51% ^a	85.92%	87.32%	84.51%	84.51%	84.51%
n	71	71	71	71	71	71

^aAn average rating of 3 on all outcomes would result in a total rubric score of 15.

IV. DISCUSSION

Method

The primary goal of this second pilot was to extend our work from 2016-18 by applying the same Canvas-based data collection procedures to a large number of course sections, faculty, and students for a second consecutive quarter. We feel that these studies have demonstrated that this method is feasible, provides accurate data in a timely way, and is minimally demanding on instructional faculty.

In Winter 2018, we encountered a modest (and expected) amount of confusion from instructors when they noticed the appearance of an assignment in their Canvas course which they did not create. We made every attempt to notify College Deans, Associate Deans, and department chairs about the assessment project at the outset of the quarter, but it was evident that these communications must extend to instructors as well in order to maximize the distribution of information. In Spring, we increased our efforts at communication directly to faculty through emails, announcements at the Faculty Senate's meetings, and in the Provost's newsletters. We observed a slight increase in the percentage of General Education courses assessed compared to the Winter pilot (26% in Spring, 23% in Winter), number of students assessed (2,034 in Spring, 2,024 in Winter), and number of data points (11,442 in Spring, 10,319 in Winter). We will continue to sustain our communication efforts in future quarters.

There are several distinct advantages of using the Learning Management System (LMS) in this way. First, the institution already 'owns' the platform, and it is familiar to faculty and students, bearing no additional costs or extra logins. Second, the path of data from instructor 'click' to outcomes report is direct—there is essentially no possibility of data transcription errors.

Third, by muting the assignment and rendering the ratings invisible to students, instructors may feel more confident in honestly identifying students that are still working toward, as well as exceeding, the standard of mastery independent of any consideration of providing student formative feedback or summative grade.

Data and interpretation

In our view, the most important question about the data generated by this method is in the familiar areas of validity and reliability. Regarding validity, many courses were developed prior to the articulation of the General Education outcomes in 2013, leading to a potential mismatch between program and course outcomes. This is particularly apparent in the BQS category, in which mathematics courses as taught may not address financial literacy, for example. The overall goal moving forward to CWU's revised General Education program (to be implemented in Fall 2019) is to seek to ensure, to the degree possible, that program-level outcomes are reflected in course-level outcomes. This was a major component of the long process of developing the new outcomes, program framework, and population of courses for the new program.

We are interested in exploring ways of determining the accuracy, or reliability of the data. Test-retest and inter-rater reliability may be difficult to determine; however, we may be able to identify courses in which a teaching assistant or team-teaching colleague could provide parallel ratings for comparison. Further threats to reliability reside with the evaluator—it is not difficult to imagine situations where time pressure, fatigue, irritation, or a general suspicion about the purpose and importance of program assessment would lead to casual or less-than-careful evaluation. We attempted to make it clear that results would not be disaggregated by instructor, course, section, etc. and only analyzed at the outcome level. However, faculty may remain apprehensive about the potential implications of ratings that are below mastery.

Descriptive statistics alone provide an overview, and other types of analysis may be desirable. For example, by assembling all outcome ratings by student, we might seek correlations between outcome scores that could indicate groupings or relationships between them. If students who are seen to struggle with academic writing in an English class also tends to struggle with synthesizing an argument in a philosophy class, this may help us consider the cognitive 'map' of our program and its array of skills and knowledge. Simply put, we could seek clusters of outcomes that tend to behave as a single factor. Such information could provide a rich stimulus for discussions of teaching, learning, and program improvement.

We hesitate to draw any firm conclusions from the data gathered in these studies, beyond noting that in general, the percentage of students at or above mastery appears to be robust (a common benchmark is 80% of students). It will be very useful to discuss expectations and aspirations with faculty. If we consistently note low achievement of certain outcomes, it would be possible to look further for possible causes and remedies. If students are consistently "acing" outcomes, we might question whether content and rigor are sufficient to challenge our students at a collegiate level.

We used a simple compensatory scoring model for the total rubrics—a student who scored a 2 on one outcome could compensate for that with a 4 on another and still achieve 'mastery' of the entire rubric. We would like to develop a method to identify students who scored at a 3 or above on all area outcomes.

V. RECOMMENDATIONS AND FUTURE ASSESSMENT

We feel optimistic that the LMS-based method described in this report provides CWU with a valuable tool, among others, to evaluate General Education program effectiveness on a consistent basis. As we have expanded our use of this method, other specialized programs (business, music, aviation, mental health counseling, and psychology) have worked with us to build outcomes and rubrics into the system in a manner that is tailored to their needs in terms of their unique characteristics on our campus as well as broader accreditation and reporting requirements.

We are currently working with Institutional Effectiveness to automate data analysis and to develop web-based dashboards that can display program assessment data on-demand and in real time. The ultimate goal is to seamlessly collect, analyze, and distribute data in the most efficient way. For perspective, the analysis in this report was created manually (using Excel) by one individual, and the process took a little over two weeks. A fully automated system will provide analysis much more quickly. We believe that this is a major and unprecedented achievement for CWU, and directly addresses one of the primary goals of academic assessment in higher education—to provide quality information to program stakeholders (closing the familiar ‘loop’) as quickly and meaningfully as possible. We intend to replicate this study for the next four academic quarters.

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APPENDIX A
LEARNER OUTCOMES FOR BASIC SKILLS AND BREADTH AREAS

Basic Skills Requirements

Academic Advising Seminar (AAS)

1. Describe CWU students' rights and responsibilities, classroom expectations, and the importance of taking ownership of one's education.
2. Reflect on their own experiences that influenced their decision to attend the university and identify their anticipated needs for success.
3. Demonstrate knowledge and use of academic resources at CWU.
4. Explain CWU's general education requirements, graduation requirements, the process of declaring a major/minor, and the purpose of a liberal arts education.
5. Illustrate basic understanding of CWU library information resources.
6. Show the ability to access and utilize CWU web resources.
7. Recognize the importance of extra-curricular opportunities to enhance your college experience.
8. Demonstrate awareness of how social background and characteristics influence diversity and respect for others.

Academic Writing (AW)

1. Read critically and rhetorically, distinguishing central ideas from evidence; identifying the author's purpose, assumptions, and attitudes; and using prior knowledge and experience to identify issues.
2. Respond appropriately to different kinds of rhetorical situations by considering the relevant context, focusing on a purpose, and addressing a specific audience.

3. Synthesize responses to common issues, various perspectives on a topic, or solutions to a problem and draw reasonable conclusions based on this synthesis.
4. Express ideas in clear, coherent, and balanced sentences and paragraphs.
5. Follow the conventions of standard Academic English, demonstrating control of grammar, usage, and punctuation rules.

Academic Writing and the Research Paper (AWRP)

1. Identify assumptions and criteria to use when analyzing the writing of others.
2. Take a position on an issue by developing a focused assertion based on a shared assumption, presenting evidence in support of a line of reasoning, addressing divergent stances on the issue, and using a variety of rhetorical appeals.
3. Prepare and implement a research plan that outlines the quantity and quality of sources needed and the use of a variety of research methods.
4. Cite and document sources precisely and effectively, noting the connection between the form of citation and/or documentation and rhetorical impact.
5. Describe the interrelationship between style and meaning in the writing of others and adjust style to enhance meaning in their own writing.
6. Craft prose that conforms to academic conventions and to expectations regarding clarity, coherence, and unity.

Computer Fundamentals (CF)

1. Create documents using word processing software.
2. Create spreadsheets using a spreadsheet application.
3. Create a computer-based presentation using presentation software.
4. Extract information from a database using database software.

Foreign Language Requirement (FLR)

1. Demonstrate comprehension of common structures and everyday vocabulary in spoken and written forms of the target language.

2. Demonstrate production of common structures and everyday vocabulary in spoken and written forms of the target language.
3. Demonstrate knowledge of the most common cultural features of the country or countries in which the target language is spoken.

Basic Quantitative Skills (BQS)

1. Use proportional reasoning to solve and analyze problems involving “per unit” quantities, indices and percentages.
2. Analyze, interpret and solve problems related to personal finance.
3. Interpret percentages, fractions and ratios as appropriate probabilities.
4. Use probability to analyze risks and their portrayal in the media.
5. Create and interpret basic statistical summaries.
6. Compare and contrast the behavior of various growth models.

Quantitative Literacy (QL)

1. Read, interpret and generate graphical representations of relevant data.
2. In context, describe the uses and limitations of statistical data.
3. Analyze and critique claims involving quantitative data.
4. Interpret and explain quantitative relationships expressed in symbols.

Breadth Areas

Social and Behavioral Sciences General Education

Perspectives on the Cultures and Experiences of the United States (PCEUS)

1. Identify the influence of the various institutions, cultures and traditions of the United States.
2. Critically analyze ways in which the past affects the present and future.

3. Articulate the requirements of informed citizenship based on analysis of social, economic and/or political processes issues and events.
4. Apply critical thinking and ethical reasoning to individual and collective decision making.

Perspectives on World Cultures (PWC)

1. Identify basic principles and institutions that underlie the cultures and traditions of nations, groups or societies of the world.
2. Critically analyze the dimensions of human diversity and similarity within and across different social groups throughout the world.
3. Articulate issues and processes that cross national boundaries, and inform perspectives on one's own relationships to other social groups.
4. Apply critical thinking and ethical reasoning to individual and collective decision making.

Foundations of Human Adaptations and Behavior (FHAB)

1. Identify basic principles that underlie human interaction.
2. Critically analyze the fundamental patterns of human interaction with natural and human-made environments.
3. Articulate ways to foster a better understanding of the human condition by analyzing the ways in which humans determine and respond to significant issues.
4. Explain and apply scientific methods to investigate and analyze individual, groups or institutional behavior.

Arts and Humanities Basic Education

Literature and the Humanities (LH)

1. Read and respond in oral and written forms to literary works from a variety of cultures.
2. Examine artifacts with an awareness of the cultural context in which they were produced.
3. Read and respond in oral and written forms to literary works of different genres.

4. Synthesize one's understanding of past humanistic knowledge with one's current knowledge, making connections between past and present.

The Aesthetic Experience (AE)

1. Acquire a vocabulary for the discussion of aesthetic genres.
2. Demonstrate an understanding of aesthetic activities within their historical, artistic, and cultural traditions.
3. Demonstrate an understanding of several artistic genres and how they relate to one another.
4. Apply aesthetic judgment and critical thinking by experiencing and evaluating works of art.

Religions and Philosophies of the World (RPW)

1. Identify their own linguistic, conceptual and normative presuppositions.
2. Analyze alternative ways of articulating and interpreting human experience.
3. Reflect on the implications of these frameworks in the wider social and political sphere.
4. Integrate unfamiliar vocabularies, principles, and systems of thought into their existing ideas.
5. Critically evaluate their use of language, perception of reality, and values.

Natural Sciences (NS: learner outcomes for all Natural Sciences general education courses)

1. Demonstrate how scientific discovery and research contribute to our lives.
2. Recognize the natural sciences as a system in which observations and measurement must ultimately verify theories that explain and predict natural phenomena.
3. Distinguish between data and analysis.
4. Apply mathematical and quantitative skills to solve problems in the natural sciences.
5. Engage in systematic critical thinking (analysis, inference, evaluation, induction, deduction).

In addition, each of the following breadth areas also has specific learner outcomes:

Fundamental Disciplines of Physical and Biological Sciences (FDPBS)

1. Make inquiry-driven laboratory and/or field observations.
2. Rigorously describe and analyze fundamental processes and components of one or more natural systems.

Patterns and Connections in the Natural World (PCNW)

1. Demonstrate an understanding of conceptual models of complex natural systems.
2. Analyze the processes and cause-effect relationships in complex natural systems.

Application to Natural Sciences (ANS)

1. Articulate the scientific or technological basis of real-world issues.
2. Use scientific data and method to accurately describe or predict consequences of technology on natural systems.
3. Make informed decisions about real-world issues based on an understanding of the underlying science.
4. Apply scientific principles to real-world issues.

APPENDIX B

SAMPLE USER INSTRUCTIONS

General Education Assessment of Program Outcomes Spring 2018

We need your assistance with the following:

- determining the overall usefulness and practicality of Canvas for large-scale student outcomes assessment within a program
- providing baseline data on students' achievement of the learning outcomes of the current General Education program.

The challenge is that many programs assess students in multiple sections, with multiple instructors, in multiple modalities, and in multiple locations. By using common account-level outcomes and rubrics to evaluate student performance within the Canvas SpeedGrader, it is possible to aggregate the ratings of individual instructors to provide a larger-scale picture of student performance relative to particular General Education learning outcomes.

Assessment Scale

This scale is deliberately generic, as it is intended to provide a basis for consistent interpretation of the rating scale on a general level. If a student has demonstrated the level of skills and/or knowledge described by the program outcome, a score of three (3) is appropriate.

- 5: Exemplary. Excellent understanding and application of concepts.
- 4: Proficient. Skillful understanding and application of concepts.
- 3: Satisfactory. Acceptable understanding and application of concepts.
- 2: Basic. Emerging understanding and application of concepts.
- 1: Unsatisfactory: Weak understanding and application of concepts.

This holistic assessment relies on your judgment as instructor. At the end of the course, you are in the best position to evaluate a student's overall achievement based on all your observations and interactions with your students, as well as course activities, quizzes, projects, tests, etc. Please do not hesitate to be honest – if a student is still working to achieve course goals and associated learning outcomes, please say so. Conversely, if a student is doing excellent work, that should be noted. If you are uncertain or lack sufficient evidence to evaluate a student, you may leave a rubric row blank (just don't click anything).

These assessment data will be used to aggregate student ratings by outcome, not by individual student, section, or instructor.

The “Assignment”

The assessment will appear as a muted “assignment” in your Gradebook under the "Imported Assignments" group. The assignment template is selected as "do not count in final grade" and therefore will not affect your existing grading schema. It is also 'muted' so although students can see the

assignment exists and view the rubric containing the program outcomes, they will not see the evaluation unless the instructor 'unmutes' the assignment. We have included a message to students to explain the purpose of this ungraded "assignment."

Assessing Students' Learning Outcomes Achievement

Please view this [video recording](#) for a demonstration of the steps described below.

- 1) Navigate to the SpeedGrader by clicking the assignment title and clicking the SpeedGrader link on the right.
- 2) You will see a message, "This student does not have a submission for this assignment." This is normal.
- 3) At the upper right, click the box "View Rubric."
- 4) You will see the rubric consisting of all learning outcomes. You may wish to drag the border of this area to the left to make it bigger and easier to see.
- 5) Click on the appropriate cell for each outcome to reflect your assessment. When selected, the cell will remain green.
- 6) Click "Save" at the bottom of the rubric. You should see the total points appear above the rubric.
- 7) Use the rubric to assess and "Save" results for all students.
- 8) You should see total points appear for students on the "assignment" when you return to the Gradebook. These will not affect the students' grades nor be visible to students if the assignment remains muted.

Thank you for helping us use Canvas for program assessment purposes. We think this is a major improvement in our ability to have timely data on student achievement based on specific outcomes, and to help CWU plan for program improvements.

Questions? Please contact: Bret Smith, Assessment Coordinator, at Bret.Smith@cwu.edu or 509.963.1548 (music office) or 509.963.1367 (assessment office) or Bernadette Jungblut, Associate Provost, at Bernadette.Jungblut@cwu.edu or 509.963.2445 (direct) or 509.963.1413 (main office).