



Cardinal Core Assessment of Arts & Humanities (Fall 2018 Sample)

Cardinal Core Program (Effective Summer 2018)

The Cardinal Core program at the University of Louisville prepares students to do the advanced work needed for their baccalaureate degrees and prepares them to contribute to society throughout their lives through their professional work and civic engagement. The program emphasizes the development of key intellectual skills relevant to any career path: critical thinking, quantitative reasoning, effective communication, and the understanding of historical, social, and cultural diversity. Students will develop these intellectual skills in the following content areas of Arts and Humanities, Historical Perspectives, Oral Communication, Quantitative Reasoning, Social and Behavioral Sciences, Natural Sciences, Written Communication, and the competency area of Diversity in the United States and Globally. Upon completion of the program, students will be prepared to analyze complex problems and evaluate possible courses of action in an environment characterized by diversity and the need for sustainable solutions.

Assessment Administration

The assessment of student learning outcomes is a national expectation in higher education. Section 8.2.b of the Southern Association of Colleges and Schools' (SACS) accreditation standards requires that the institution identify student learning outcomes for collegiate-level general education competencies in its undergraduate degree programs, assess the extent to which it achieves these outcomes, and provide evidence of seeking improvement based on analysis of the results. Further, the Kentucky Council on Postsecondary Education (CPE) states that "All Kentucky public universities and KCTCS colleges are expected to assess, in accordance with SACS-COC Principles of Accreditation and based upon nationally accepted standards, the student learning outcomes associated with their general education programs, indicate a relationship to the faculty-generated Statewide General Education Student Learning Outcomes, and provide evidence of ongoing assessment that ensures comparability for transfer purposes on a three-year cycle."

The Cardinal Core Curriculum Committee (CCCC) is charged with continued oversight of the assessment of student learning outcomes across the Cardinal Core curriculum to support the continuous improvement of the Cardinal Core program in alignment with SACS and CPE requirements. The assessment operates on a three-year cycle, in which samples of student work are collected from one content area each semester and assessed by a panel of trained faculty. The CCCC began a pilot of the Association of American Colleges and Universities (AAC&U) VALUE (Valid Assessment of Learning in Undergraduate Education) Rubrics in the first cycle of the Cardinal Core Assessment. Specifically, the Critical Thinking, Intercultural Knowledge and Competence, Oral Communication, Quantitative Literacy, and Written Communication VALUE Rubrics will be used to measure the Cardinal Core program's overarching intellectual skills of critical thinking, effective communication, quantitative reasoning, and social, historical, and cultural diversity.

The Fall 2018 assessment was focused on courses in the Arts & Humanities content area. Courses in the Arts & Humanities were assessed using the Critical Thinking, Written Communication, and Intercultural Knowledge and Competence VALUE Rubrics. The University of Louisville Outcomes, Kentucky Statewide Outcomes, and the AAC&U VALUE Rubric Measures used to assess courses in the Arts & Humanities content area are provided below.

University of Louisville Arts & Humanities Learning Outcomes

Arts and Humanities are concerned with the understanding of art, music, theatre, literature, philosophy, and religious thought. Students who satisfy this requirement will demonstrate that they are able to do all of the following:

1. Critically evaluate and synthesize texts and other forms of expression in the arts and humanities using primary and/or secondary materials.
2. Demonstrate an understanding of the reciprocal relationship between (1) social and cultural factors in their historical context and (2) intellectual inquiry and creative expression within the arts and/or the humanities.
3. Represent and critically respond to multiple points of view on cultural issues in different historical, social, and/or cultural contexts.
4. Communicate effectively in speech and writing, paying particular attention to the use of evidence in interpretive arguments, through citation appropriate to the discipline.

Statewide Arts & Humanities Student Learning Outcomes

1. Utilize basic formal elements, techniques, concepts and vocabulary of specific disciplines within the Arts and Humanities.
2. Distinguish between various kinds of evidence by identifying reliable sources and valid arguments.
3. Demonstrate how social, cultural, and historical contexts influence creative expression in the arts and humanities.
4. Evaluate the significance of human expression and experience in shaping larger social, cultural, and historical contexts.
5. Evaluate enduring and contemporary issues of human experience.

AAC&U VALUE Rubric Measures

Critical Thinking VALUE Rubric

- (CT1) Explanation of issues
- (CT2) Evidence – Selecting and using information to investigate a point of view or conclusion
- (CT3) Influence of context and assumptions
- (CT4) Student’s position (perspective, thesis/hypothesis)
- (CT5) Conclusions and related outcomes (implications and consequences)

Written Communication VALUE Rubric

- (WC1) Context of and Purpose for Writing
- (WC2) Content Development
- (WC3) Genre and Disciplinary Conventions
- (WC4) Sources and Evidence
- (WC5) Control of Syntax and Mechanics

Intercultural Knowledge and Competence VALUE Rubric

- (IKC1) Knowledge: Cultural self-awareness
- (IKC2) Knowledge: Knowledge of cultural worldview frameworks
- (IKC3) Skills: Empathy
- (IKC4) Skills: Verbal and nonverbal communication
- (IKC5) Attitudes: Curiosity
- (IKC6) Attitudes: Openness

The AAC&U VALUE Rubrics use a four-point scale, with 4 indicating performance of the measure as “capstone” level, 3 indicating performance at “milestone,” 2 indicating “milestone,” and 1 indicating performance at “benchmark.” In addition, a score of zero can be assigned to any work that does not meet the benchmark level performance and “not requested” could be assigned for assignments that did not provide an opportunity for the student to demonstrate the criterion within the rubric measure.

Assessment Process

For the Fall 2018 assessment of student work from the Arts & Humanities (AH) content area, the Cardinal Core Office collaborated with department chairs regarding the details of the upcoming assessment to ensure faculty participation and appropriate sampling. A formal memo outlining the project and process was also provided to each of the department chairs and to all faculty teaching Cardinal Core courses within the Arts & Humanities (AH) content area prior to the start of the semester to ensure a mutual understanding of project expectations. The initial communication provided a timeline for collection of assignment prompts and student work.

After the semester withdrawal deadline passed, the Cardinal Core Office retrieved the class rosters for all AH Cardinal Core courses from the Office of the Registrar and selected a stratified random sampling, to ensure that the sample included students from all courses, with only one course from each instructor if they were teaching multiple sections of the same course. Instructors of all AH courses were sent a list of students selected for the assessment along with detailed instructions requesting that instructors provide a copy of one assignment along with the ungraded responses for the selected students to be sent via email to the Cardinal Core Office service account.

Student artifacts were collected and stored in an electronic repository and uploaded into the LiveText© assessment management system. A panel of faculty (tenured and tenure-track faculty, term faculty, and adjunct faculty) and graduate teaching assistants assessed student artifacts. The

AAC&U Critical Thinking, Written Communication, and Intercultural Knowledge and Competence VALUE Rubrics were applied to all student artifacts.

Prior to the assessment reading, assessors were brought together for a four-hour training session coordinated by the Cardinal Core Office. In the training session, the assessment process and context for Cardinal Core Assessment at the University of Louisville were presented. Faculty engaged in dissection and discussion of rubric criteria, and faculty assessors individually reviewed and scored benchmark sample assignments. Benchmarks were assignments selected to represent a wide range of content and skill development in order to give the assessors a baseline for measuring expectations of learning and evaluating student performance (Herman, Osmundson, & Dietel, 2010). Assessors then engaged in discussion about the benchmark assessment scores to share their rationales for why particular scores were selected. To highlight the reliability of the training scoring, the results from scoring benchmark samples for the Critical Thinking, Written Communication, and Intercultural Knowledge and Competence VALUE Rubrics is provided in Appendix A.

At the start of the assessment reading day, each faculty assessor was assigned a username and password for one of three LiveText© accounts and a list of courses and sections to assess. Three readers assessed each artifact so that scores could be compared across assessors for reliability purposes.

Data Collection Overview

The enrollment for Arts & Humanities Cardinal Core courses in Fall 2018 was approximately 4219 students after the withdraw deadline. The Cardinal Core Office requested a sample of 781 from courses in the College of Arts and Sciences, College of Education and Human Development, and School of Music. The final sample received and determined eligible (legibility, grading removed, etc.) for assessment was 363 student work samples. Of the 363 work samples, 116 came from AH courses (courses that only fulfill an AH requirement), 150 came from AHD1 courses that also fulfill a U.S. Diversity (D1) requirement, and 97 came from AHD2 courses that also fulfill a Global Diversity (D2) requirement.

Summary of Assessment Data

For the assessment of Arts & Humanities outcomes, 363 student artifacts were assessed by faculty and graduate teaching assistants from the College of Arts & Sciences, College of Education and Human Development, Kent School of Social Work, and the School of Music, using the AAC&U Critical Thinking, Written Communication, and Intercultural Knowledge and Competence VALUE Rubrics.

Table 1 and Table 2 provide the percentage of work samples scored at each rubric level for both Critical Thinking and Written Communication. A calculation of the percentage of students who scored at a 3 or 4 is also provided as a baseline target for future assessments.

Table 1

Percentage of Artifacts Scored at Each Rubric Level for Critical Thinking

	CT1	CT2	CT3	CT4	CT5
Capstone (4)	19.2%	12.9%	10.9%	12.3%	13.3%
Milestone (3)	39.9%	35.8%	30.2%	32.3%	30.1%
Milestone (2)	31.3%	36.9%	38.4%	31.8%	38.9%
Benchmark (1)	8.9%	13.2%	18.4%	22.0%	14.4%
(0)	0.7%	1.1%	2.1%	1.6%	3.2%
% Scored at 4 & 3	59.0%	48.7%	41.1%	44.6%	43.4%

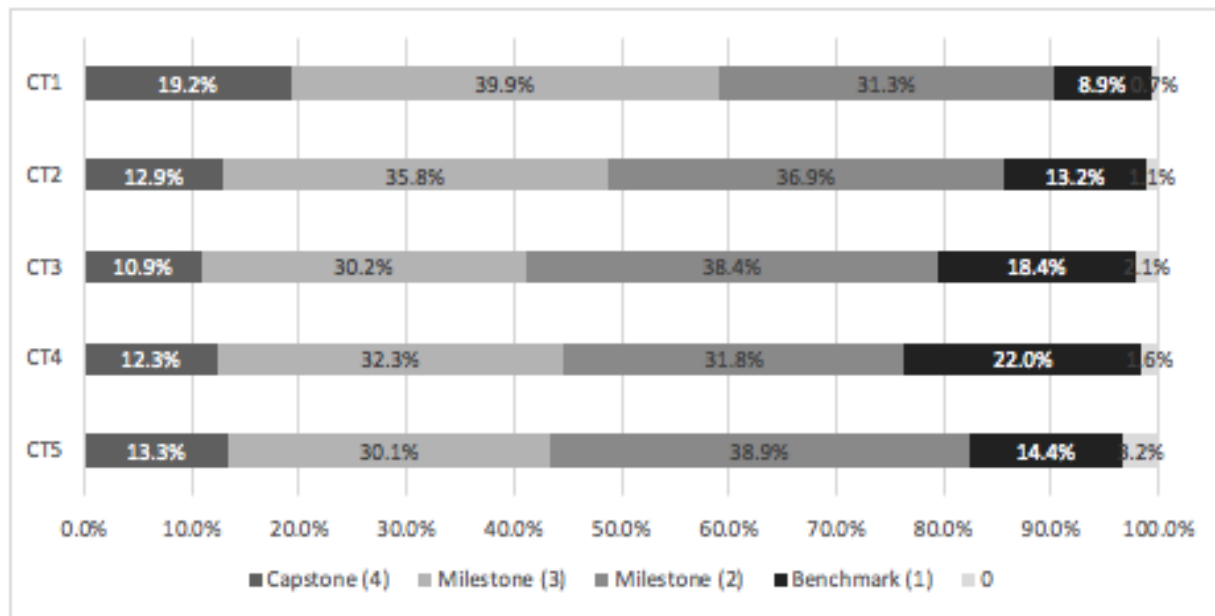


Figure 1. Percentage of Artifacts Scored at Each Rubric Level for Critical Thinking

Table 2

Percentage of Artifacts Scored at Each Rubric Level for Written Communication

	WC1	WC2	WC3	WC4	WC5
Capstone (4)	19.9%	15.5%	12.6%	11.1%	12.1%
Milestone (3)	41.3%	36.0%	37.7%	32.5%	51.8%
Milestone (2)	30.1%	34.2%	36.5%	36.3%	27.7%
Benchmark (1)	8.2%	13.1%	12.2%	17.3%	7.5%
(0)	0.6%	1.2%	0.9%	2.9%	0.8%
% Scored at 4 & 3	61.1%	51.5%	50.3%	43.6%	63.9%

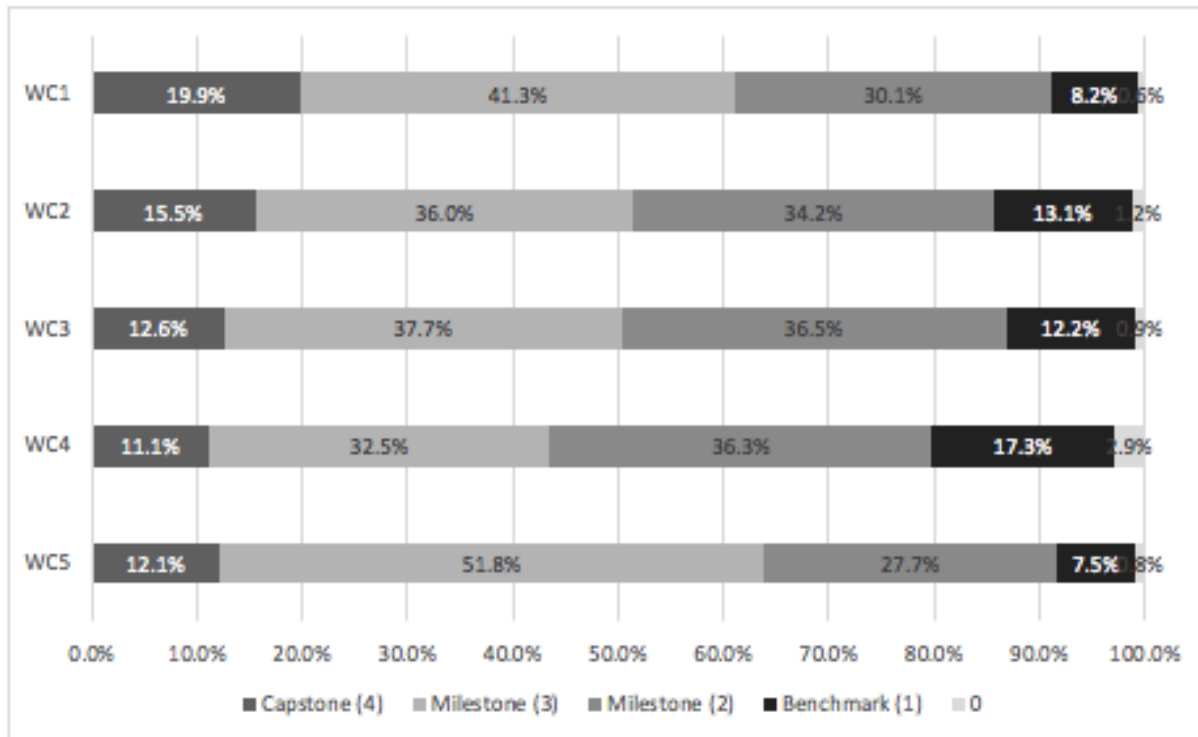


Figure 2. Percentage of Artifacts Scored at Each Rubric Level for Written Communication

Since the Assessment of Arts & Humanities, included courses that also fulfilled U.S. Diversity (D1) and Global Diversity (D2) requirements, the findings for the Intercultural Knowledge and Competence VALUE Rubric are provided based on the Cardinal Core classification (AH, AHD1, or AHD2). The percentage of artifacts scored at a 4 or 3 for the Intercultural Knowledge and Competence VALUE Rubric, by course classification is provided in Table 3 and Figure 3.

Table 3

Percentage of Artifacts Scored at a 4 or 3 for Intercultural Knowledge and Competence VALUE Rubric

	All AH Cardinal Core Courses	AH (Only) Cardinal Core Courses	AHD1 Cardinal Core Courses	AHD2 Cardinal Core Courses
IKC1	47.2%	41.2%	50.4%	49.7%
IKC2	44.6%	38.0%	45.6%	50.7%
IKC3	51.1%	44.6%	53.9%	54.7%
IKC4	41.8%	38.0%	42.8%	44.8%
IKC5	38.7%	36.4%	41.1%	37.6%
IKC6	52.1%	46.5%	52.8%	57.9%

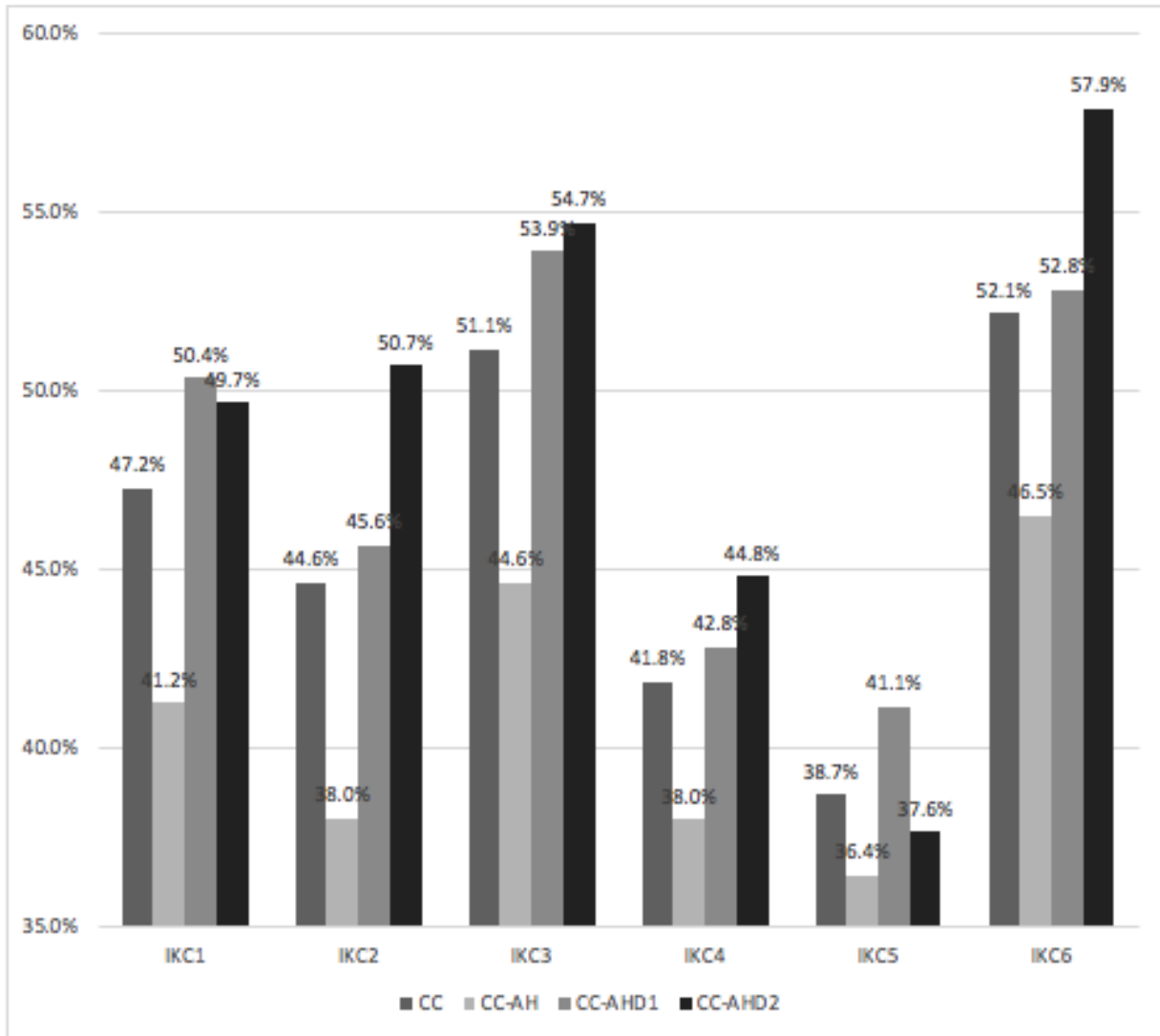


Figure 3. Percentage of Artifacts Scored at 3 or 4 by Cardinal Core Classification for each Measure of the Intercultural Knowledge and Competence Rubric

The mean and mode for each Critical Thinking VALUE Rubric measure is provided in Table 4. The mode was at “Milestone (3)” for CT1 (Explanation of issues) and CT4 (Student’s position), but was at “Milestone (2)” for CT2 (Evidence), CT3 (Influence of context and assumptions), and CT5 (Conclusions and related outcomes).

Table 4

Mean and Mode for Critical Thinking VALUE Rubric

	CT1	CT2	CT3	CT4	CT5
Mean	2.68	2.46	2.29	2.32	2.36
Mode	3	2	2	3	2

The mean and mode for each Written Communication VALUE Rubric measure is provided in Table 5. The mode was at “*Milestone (3)*” for all rubric measures except for WC4 (Sources and Evidence).

Table 5

Mean and Mode for Written Communication VALUE Rubric

	WC1	WC2	WC3	WC4	WC5
Mean	2.72	2.52	2.49	2.32	2.67
Mode	3	3	3	2	3

A breakdown of the mode and mean by Cardinal Core classification (AH, AHD1, and AHD2) for each rubric measure is provided in Tables 6 and 7.

Table 6

Mode for Intercultural Knowledge and Competence VALUE Rubric

	All AH Cardinal Core Courses	AH (Only) Cardinal Core Courses	AHD1 Cardinal Core Courses	AHD2 Cardinal Core Courses
IKC1	3	2	3	3
IKC2	2	2	2	3
IKC3	3	3	3	3
IKC4	2	2	2	2
IKC5	2	2	2	2
IKC6	3	3	3	3

Table 7

Mean for Intercultural Knowledge and Competence VALUE Rubric

	All AH Cardinal Core Courses	AH (Only) Cardinal Core Courses	AHD1 Cardinal Core Courses	AHD2 Cardinal Core Courses
IKC1	2.37	2.26	2.44	2.41
IKC2	2.35	2.23	2.37	2.45
IKC3	2.46	2.32	2.52	2.52
IKC4	2.25	2.16	2.24	2.39
IKC5	2.25	2.19	2.32	2.23
IKC6	2.48	2.31	2.52	2.60

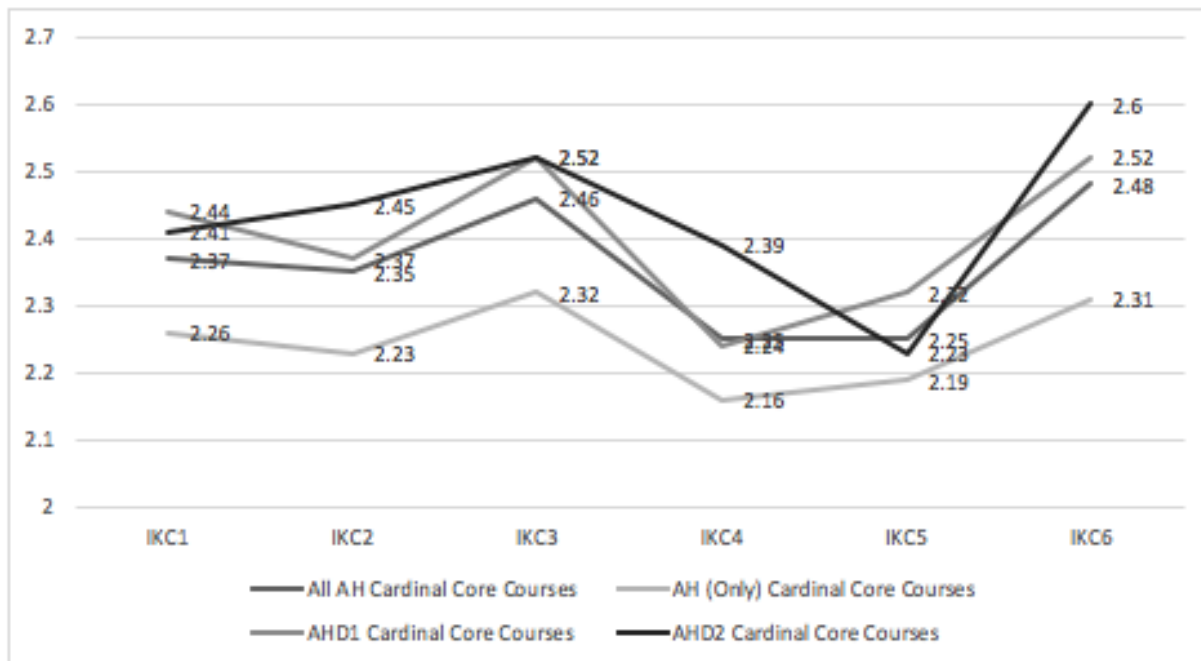


Figure 4. Mean Scores by Cardinal Core Classification for Intercultural Knowledge and Competence VALUE Rubric Measures

A one-way analysis of variance (ANOVA) revealed that there were significant differences in the means of AH, AHD1, and AHD2 work samples on the Intercultural Knowledge and Competence VALUE Rubric measures. For IKC1 there was a significant difference between groups [$F(2,1047) = 3.54, p < .05$], IKC2 there was a significant difference between groups [$F(2,1044) = 3.89, p < .05$]. IKC3 there was a significant difference between groups [$F(2,1045) = 4.85, p < .05$], IKC4 there was a significant difference between groups [$F(2,1032) = 4.05, p < .05$], and IKC6 there was a significant difference between groups [$F(2,1043) = 5.74, p < .05$]. There was no significant difference between groups for IKC5, $F(2,1044) = 2.07, p = .13$.

Post hoc comparisons using Tukey HSD test indicated that the mean score for AH samples was significantly different from AHD1 samples for IKC1, the mean score for AH samples was significantly different from AHD2 samples for IKC2, the mean score for AH samples was significantly different from AHD1 samples and AHD2 samples for IKC3, the mean score for AH samples was significantly different than AHD2 samples for IKC4, and the mean score for AH samples was significantly different than AHD1 and AHD2 samples for IKC6. These results indicate that students in AHD1 courses scored significantly higher than students enrolled in AH courses on IKC1, IKC3, and IKC6 and students in AHD2 courses scored significantly higher than students enrolled in AH courses on IKC2, IKC3, IKC4, and IKC6.

A one-way analysis of variance (ANOVA) revealed there were no significant differences in the means of AH, AHD1, and AHD2 work samples on the Critical Thinking VALUE Rubric measures of CT2 [$F(2, 1077) = 1.60, p > .05$], CT3 [$F(2, 1075) = 2.55, p > .05$], CT4 [$F(2, 1077) = 2.78, p > .05$], and CT5 [$F(2, 1077) = 1.74, p > .05$]. The means of AH, AHD1, and AHD2 were significantly different for CT1 [$F(2, 1081) = 4.05, p < .05$] and post hoc comparisons using Tukey

HSD test indicated that the mean score for AH samples was significantly different from AHD1 samples for CT1, with students in AHD1 courses scoring higher. There were no significant differences in the means of AH, AHD1, and AHD2 work samples on the Written Communication VALUE Rubric measures for WC1 [F(2, 1085) = 1.90, $p > .05$], WC2 [F(2, 1086) = 2.05, $p > .05$], WC3 [F(2, 1086) = 2.00, $p > .05$], WC4 [F(2, 1069) = 2.73, $p > .05$], and WC5 [F(2, 1086) = 1.95, $p > .05$].

Inter-rater Reliability

Three separate readers assessed each student artifact. Table 8 displays the mean score for the three separate readings of all artifacts.

Table 8

Inter-rater Summary for Critical Thinking, Written Communication, and Intercultural Knowledge and Competence VALUE Rubric Measure

	Assessor 1	Assessor 2	Assessor 3	Standard Deviation
CT1	2.59	2.63	2.77	.10
CT2	2.59	2.62	2.76	.09
CT3	2.22	2.14	2.45	.16
CT4	2.26	2.18	2.46	.14
CT5	2.26	2.28	2.47	.11
WC1	2.79	2.62	2.73	.08
WC2	2.56	2.40	2.59	.10
WC3	2.52	2.39	2.55	.08
WC4	2.36	2.20	2.38	.10
WC5	2.79	2.54	2.68	.12
IKC1	2.45	2.34	2.33	.07
IKC2	2.40	2.29	2.35	.05
IKC3	2.54	2.41	2.42	.07
IKC4	2.42	2.05	2.29	.19
IKC5	2.35	2.16	2.25	.10
IKC6	2.43	2.40	2.31	.06

In addition to the descriptive statistics, Table 9 provides multiple measures of inter-rater reliability. The percentage agreement value was calculated to determine the percentage of artifacts for which all three assessors scored at the either the same or within one performance level. Values for *Total Agreement* provided in Table 9 represent the percentage of artifacts for which all three assessors selected the same score (e.g., Assessors 1, 2, and 3 all selected 3). *Agreement (within 1 level)* represents the percentage of artifacts for which all three assessors scored the artifact at the same performance level or within one level (e.g., Assessor 1 selected a score of 3, Assessor 2 selected a score of 2, and Assessor 3 also selected a score of 2). If the assessor assigned “not requested” for the artifact that was treated as a 0 for the inter-rater reliability analysis since a 0 and “not requested” would both indicate the reviewer did not see the student demonstrate any component of the rubric measure.

In addition to percentage agreement, a one-way, average-measures intra-class correlation coefficient (ICC) was calculated to assess inter-rater reliability. ICC coefficients between .75 and 1.00 are considered excellent, .60 to .74 considered good, .40 to .59 fair, and below .4 is considered poor (Cicchetti, 1994).

Table 9

Inter-rater Reliability for Critical Thinking, Written Communication, and Intercultural Knowledge and Competence VALUE Rubric Measure

Competency Measure	Total Agreement	Agreement (within 1 level)	ICC	95% Confidence Interval
CT1	14.0%	70.2%	.58	(.50-.65)
CT2	24.8%	67.5%	.55	(.46-.62)
CT3	13.8%	64.5%	.56	(.47-.63)
CT4	12.7%	62.3%	.58	(.50-.65)
CT5	14.9%	63.9%	.61	(.53-.68)
WC1	17.4%	73.8%	.62	(.55-.69)
WC2	15.4%	69.7%	.67	(.60-.72)
WC3	14.0%	74.1%	.63	(.55-.69)
WC4	16.5%	63.4%	.61	(.54-.68)
WC5	23.7%	78.8%	.61	(.54-.68)
IKC1	14.3%	57.3%	.54	(.45-.62)
IKC2	11.8%	62.3%	.60	(.52-.67)
IKC3	13.8%	59.2%	.51	(.42-.60)
IKC4	12.9%	52.3%	.32	(.17-.44)
IKC5	20.1%	65.6%	.44	(.32-.54)
IKC6	15.2%	54.3%	.50	(.39-.58)

Syllabus Review

The Provost requests that all faculty load their syllabi to Blackboard© each semester. These syllabi are then available through the university’s course catalog system. For the purpose of this review, the Cardinal Core Office collected all Arts & Humanities (AH) syllabi that were loaded to Blackboard in Spring 2018.

The review of syllabi sought to answer two questions:

- 1) Does the syllabus contain the content specific Cardinal Core learning outcomes approved for the course?
- 2) Are assessment methods stated that support the content-specific Cardinal Core learning outcomes approved for the course?

An evaluation of the congruence between the listed assessment methods with the content specific approved Cardinal Core learning outcomes was not conducted when a reviewer determined that the syllabus does not contain a statement of the approved content specific Cardinal Core learning outcomes.

The syllabus review included syllabi from 109 of 136 Arts & Humanities Cardinal Core course sections offered in the Fall of 2018 resulting in a 80.2% sample. Crosslisted courses only counted once. Appendix Table 1 provides a breakdown of the number of Cardinal Core syllabi available, the number of syllabi with the outcomes stated, and the number of syllabi (from those that included outcomes) that also included the assessment methods.

Table 10

Arts & Humanities Syllabus Review

	<u>Syllabi Available</u>	<u>AH Outcomes Listed in Syllabus</u>	<u>D1 or D2 Outcomes Listed in Syllabus</u>	<u>Assessment Methods</u>
AH Courses	109 (80.2%)	74 (67.9%)	59 (83.1%)	64 (86.5%)

The review of 109 Cardinal Core syllabi identified 74 syllabi (67.9%) containing the Arts & Humanities (AH) Cardinal Core learning outcomes approved for the course. Further review of the 37 syllabi containing the AH Cardinal Core learning outcomes revealed that 64 syllabi (86.5%) also listed the assessment methods for the Cardinal Core outcomes. Courses classified as meeting the U.S. Diversity (D1) or Global Diversity (D2) requirement were also reviewed, with 59 syllabi (83.1%) with a diversity designation also including those outcomes.

The Cardinal Core Curriculum Committee (CCCC) has continued to emphasize the importance of incorporating the Cardinal Core learning outcomes into course syllabi. Integration of the Cardinal Core outcomes into the syllabus is one indication to the committee that faculty are incorporating the learning outcomes into the course curriculum.

Results of the Arts & Humanities assessment were compared against the findings from the syllabus review to determine if there were any significant differences in the performance of students on the learning outcomes for courses that incorporated the outcomes and assessments into their syllabus versus courses that did not incorporate the outcomes and assessments. A one-way analysis of variance (ANOVA) revealed that there were significant differences in student performance between courses that included AH outcomes in the syllabus and courses without AH outcomes listed in the syllabus for Critical Thinking VALUE Rubric measures CT1 [F(1, 917) = 20.6, $p < .01$], CT2 [F(1, 915) = 11.57, $p < .05$], CT3 [F(1, 914) = 33.64, $p < .01$], CT4 [F(1, 916) = 33.02, $p < .01$], and CT5 [F(1, 915) = 36.43, $p < .01$]. Results of ANOVA also indicated significant differences in student performance for courses with AH outcomes listed in the syllabus and courses without AH outcomes listed in the syllabus for Written Communication VALUE Rubric measures WC1 [F(1, 922) = 15.65, $p < .01$], WC2 [F(1, 922) = 14.21, $p < .01$], WC3 [F(1, 922) = 15.57, $p < .01$], WC4 [F(1, 913) = 8.35, $p < .01$], and WC5 [F(1, 922) = 14.42, $p < .01$]. The results of ANOVA for Intercultural Knowledge and Competence VALUE Rubric measures indicated significant differences between courses with AH outcomes in the syllabus and syllabi that did not include the AH outcomes for IKC1 [F(1, 899) = 35.58, $p < .01$], IKC2 [F(1, 886) = 43.86, $p < .01$], IKC3 [F(1, 886) = 51.21, $p < .01$], IKC4 [F(1, 875) = 37.10, $p < .01$], IKC5 [F(1, 883) = 32.78, $p < .01$], and IKC6 [F(1, 921) = 15.55, $p < .01$]. As shown in Table 11,

the mean was higher for courses that included the AH outcomes in their syllabus for all rubric measures.

Table 11

Mean Score by Outcomes in Syllabus for Critical Thinking, Written Communication, and Intercultural Knowledge and Competence VALUE Rubric

	<u>Syllabus</u>	<u>Mean</u>
IKC1	No Outcomes	2.10
	Outcomes Included	2.54
IKC2	No Outcomes	2.03
	Outcomes Included	2.51
IKC3	No Outcomes	2.13
	Outcomes Included	2.64
IKC4	No Outcomes	1.96
	Outcomes Included	2.41
IKC5	No Outcomes	2.01
	Outcomes Included	2.39
IKC6	No Outcomes	2.26
	Outcomes Included	2.55
CT1	No Outcomes	2.47
	Outcomes Included	2.77
CT2	No Outcomes	2.31
	Outcomes Included	2.54
CT3	No Outcomes	2.02
	Outcomes Included	2.42
CT4	No Outcomes	2.03
	Outcomes Included	2.44
CT5	No Outcomes	2.07
	Outcomes Included	2.49
WC1	No Outcomes	2.56
	Outcomes Included	2.81
WC2	No Outcomes	2.35
	Outcomes Included	2.61
WC3	No Outcomes	2.34
	Outcomes Included	2.60
WC4	No Outcomes	2.19
	Outcomes Included	2.39
WC5	No Outcomes	2.52
	Outcomes Included	2.74

Summary and Plan for Improvement

The Arts & Humanities assessment was the first assessment of the Cardinal Core program and will serve as a baseline for future assessments. The Cardinal Core Curriculum Committee (CCCC) is already taking steps to address inter-rater reliability by engaging faculty and key professional staff in AAC&U VALUE Rubric training and scoring. Participation in the training will support greater understanding of the assessment instruments to better support the committee's future assessments.

Further clarification of the “not requested” scoring category needs to be incorporated into future trainings. The data indicate that 0 and “not requested” were used interchangeably and this differentiation is critical to the understanding of how many assignments did not align with the outcomes (not requested) versus how many students truly did not meet the outcomes (0). This will be addressed in greater detail in future assessments.

The findings from the syllabus review and the significant differences in performance for courses with AH outcomes included and not included indicates future work is needed on ensuring communication of the Cardinal Core learning outcomes and program philosophy with faculty teaching Cardinal Core courses to support integration of the outcomes into the course curriculum and to improve student development of the key intellectual skills identified as critical to student success as part of the Cardinal Core program.

References

- Association of American Colleges and Universities. (2009). *Critical Thinking VALUE Rubric*. Retrieved from <https://www.aacu.org/value/rubrics/critical-thinking>
- Association of American Colleges and Universities. (2009). *Intercultural Knowledge and Competence VALUE Rubric*. Retrieved from <https://www.aacu.org/value/rubrics/intercultural-knowledge>
- Association of American Colleges and Universities. (2009). *Written Communication VALUE Rubric*. Retrieved from <https://www.aacu.org/value/rubrics/written-communication>
- Cicchetti, D. V. (1994). Guidelines, criteria, and rules of thumb for evaluating normed and standardized assessment instruments in psychology. *Psychological Assessment*, 6(4), 284-290. doi: 10.1037/1040-3590.6.4.284
- Fletcher, I., Mazzi, M., & Nuebling, M. (2011). When coders are reliable: The application of three measures to assess inter-rater reliability/agreement with doctor–patient communication data coded with the VR-CoDES. *Patient Education and Counseling*, 82(3), 341-345. doi:10.1016/j.pec.2011.01.004
- Hallgren, K. A. (2012). Computing inter-rater reliability for observational data: An overview and tutorial. *Tutorials in Quantitative Methods for Psychology*, 8(1), 23-34.
- Herman, J. L., Osmundson, E., & Dietel, R. (2010). *Benchmark Assessment for Improved Learning*. (AACC Report). Los Angeles, CA: University of Cali

Appendix A. Results from Assessment Training for Critical Thinking, Written Communication, and Intercultural Knowledge and Competence VALUE Rubrics

Table 1. Critical Thinking VALUE Rubric

Results of Benchmark Sample 1 – Critical Thinking VALUE Rubric

Measures	<u>Capstone (4)</u>	<u>Milestone (3)</u>	<u>Milestone (2)</u>	<u>Benchmark (1)</u>	<u>(0)</u>
CT1	45.8%	37.5%	16.7%	0	
CT2	0	69.6%	30.4%	0	
CT3	4.3%	56.5%	34.8%	4.3%	
CT4	0	52.0%	40.0%	8.0%	
CT5	0	36.0%	64.0%	0	

Results of Benchmark Sample 2 – Critical Thinking VALUE Rubric

Measures	<u>Capstone (4)</u>	<u>Milestone (3)</u>	<u>Milestone (2)</u>	<u>Benchmark (1)</u>	<u>(0)</u>
CT1	10.0%	25.0%	60.0%	5.0%	
CT2	0	19.0%	71.4%	9.5%	
CT3	0	22.7%	68.2%	9.1%	
CT4	0	31.6%	31.6%	36.8%	
CT5	5.0%	10.0%	65.0%	20.0%	

Results of Benchmark Sample 3 – Critical Thinking VALUE Rubric

Measures	<u>Capstone (4)</u>	<u>Milestone (3)</u>	<u>Milestone (2)</u>	<u>Benchmark (1)</u>	<u>(0)</u>
CT1	0	26.7%	73.3%	0	
CT2	6.3%	18.8%	68.8%	6.3%	
CT3	0	6.3%	68.8%	25.0%	
CT4	0	26.7%	73.3%	0	
CT5	0	21.4%	64.3%	14.3%	

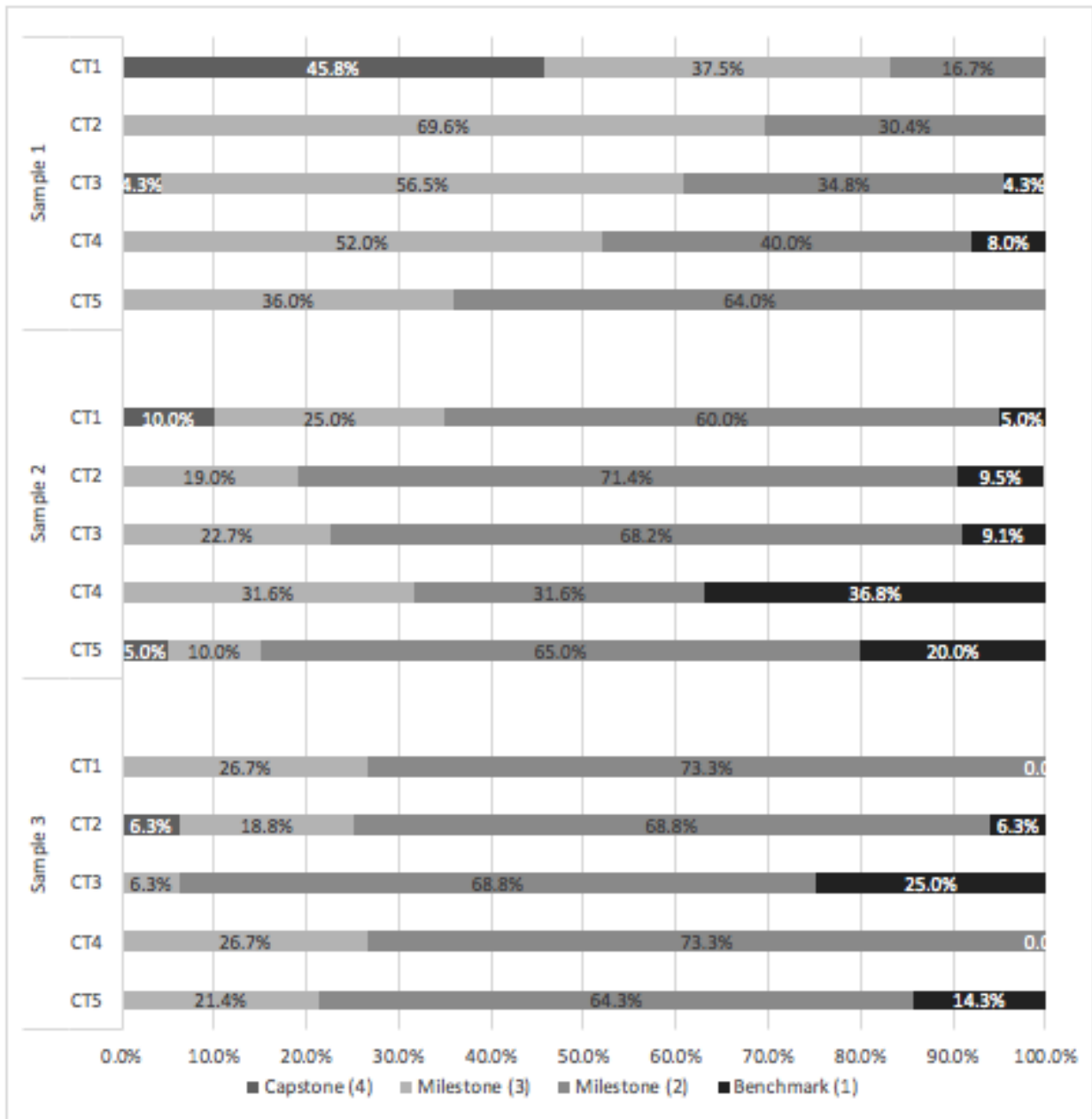


Figure 1. Critical Thinking VALUE Rubric Training Results

Table 2. Written Communication VALUE Rubric

Results of Benchmark Sample 1 – Written Communication VALUE Rubric

Measures	<u>Capstone (4)</u>	<u>Milestone (3)</u>	<u>Milestone (2)</u>	<u>Benchmark (1)</u>	<u>(0)</u>
WC1	20.8%	66.7%	12.5%	0	
WC2	8.3%	66.7%	25.0%	0	
WC3	0	66.7%	33.3%	0	
WC4	12.5%	66.7%	20.8%	0	
WC5	16.7%	75.0%	8.3%	0	

Results of Benchmark Sample 2 – Written Communication VALUE Rubric

Measures	<u>Capstone (4)</u>	<u>Milestone (3)</u>	<u>Milestone (2)</u>	<u>Benchmark (1)</u>	<u>(0)</u>
WC1	0	47.6%	52.4%	0	
WC2	5.0%	25.0%	60.0%	10.0%	
WC3	5.3%	5.3%	78.9%	10.5%	
WC4	0	19.0%	57.1%	23.8%	
WC5	4.8%	28.6%	57.1%	9.5%	

Results of Benchmark Sample 3 – Written Communication VALUE Rubric

Measures	<u>Capstone (4)</u>	<u>Milestone (3)</u>	<u>Milestone (2)</u>	<u>Benchmark (1)</u>	<u>(0)</u>
WC1	0	20.0%	80.0%	0	
WC2	0	12.5%	68.8%	18.8%	
WC3	0	6.7%	60.0%	33.3%	
WC4	0	37.5%	31.3%	31.3%	
WC5	0	26.7%	53.3%	20.0%	

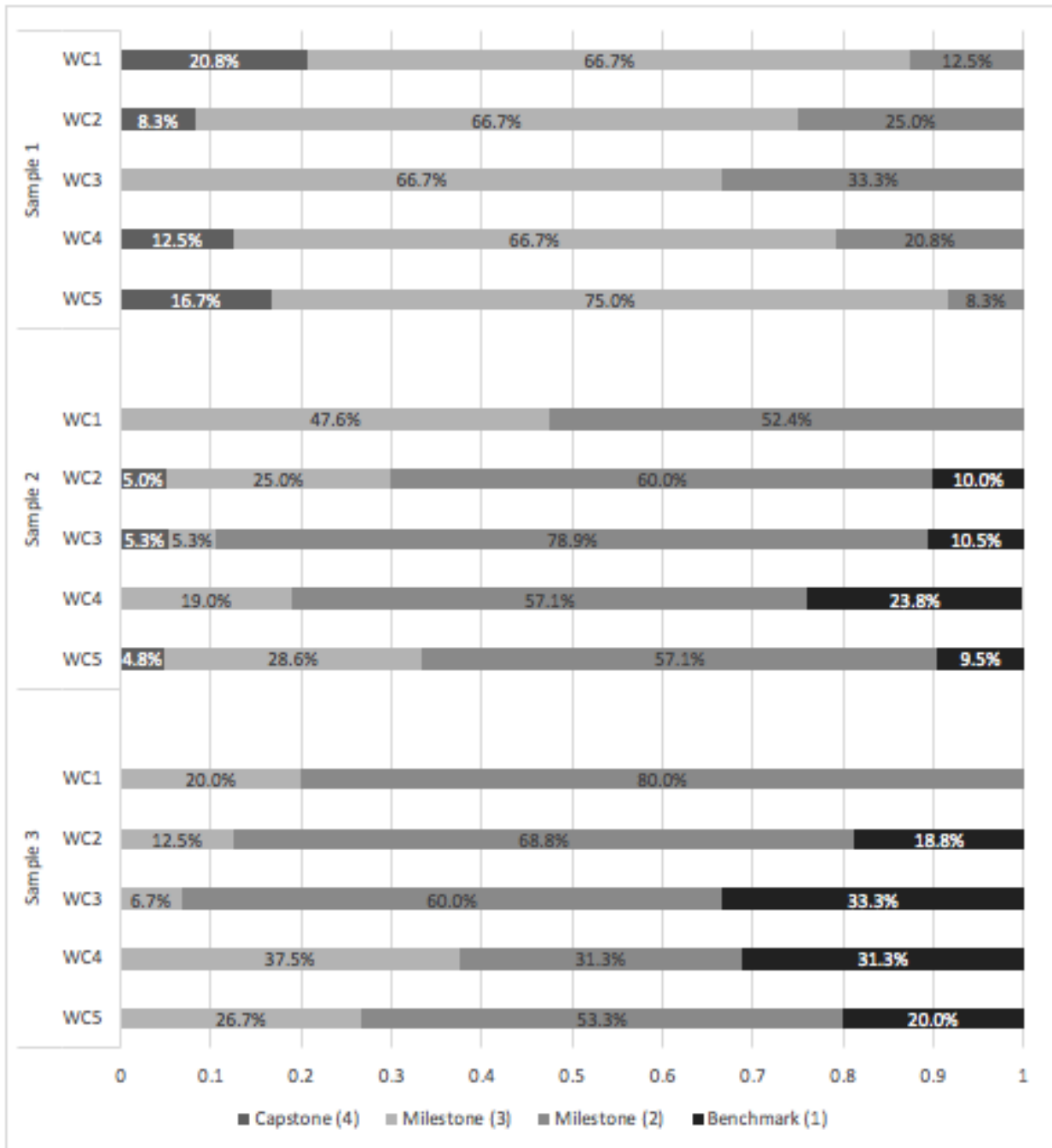


Figure 2. Written Communication VALUE Rubric Training Results

Table 3. Intercultural Knowledge and Competence VALUE Rubric

Results of Benchmark Sample 1 – Intercultural Knowledge and Competence VALUE Rubric

Measures	<u>Capstone (4)</u>	<u>Milestone (3)</u>	<u>Milestone (2)</u>	<u>Benchmark (1)</u>	<u>(0)</u>
IKC1	0	75.0%	20.8%	4.2%	0
IKC2	0	81.8%	18.2%	0	0
IKC3	12.5%	66.7%	16.7%	4.2%	0
IKC4	0	57.1%	38.1%	4.8%	0
IKC5	4.3%	52.2%	39.1%	4.3%	0
IKC6	13.0%	60.9%	21.7%	4.3%	0

Results of Benchmark Sample 2 – Intercultural Knowledge and Competence VALUE Rubric

Measures	<u>Capstone (4)</u>	<u>Milestone (3)</u>	<u>Milestone (2)</u>	<u>Benchmark (1)</u>	<u>(0)</u>
IKC1	0	30.0%	65.0%	5.0%	0
IKC2	4.8%	23.8%	57.1%	14.3%	0
IKC3	4.8%	57.1%	33.3%	4.8%	0
IKC4	10.0%	25.0%	55.0%	10.0%	0
IKC5	9.5%	9.5%	71.4%	9.5%	0
IKC6	5.0%	35.0%	45.0%	10.0%	5.0%

Results of Benchmark Sample 3 – Intercultural Knowledge and Competence VALUE Rubric

Measures	<u>Capstone (4)</u>	<u>Milestone (3)</u>	<u>Milestone (2)</u>	<u>Benchmark (1)</u>	<u>(0)</u>
IKC1	0	20.0%	46.7%	33.3%	0
IKC2	0	12.5%	56.3%	25.0%	6.3%
IKC3	0	46.7%	33.3%	20.0%	0
IKC4	0	7.1%	85.7%	7.1%	0
IKC5	0	6.7%	66.7%	26.7%	0
IKC6	0	13.3%	73.3%	13.3%	0

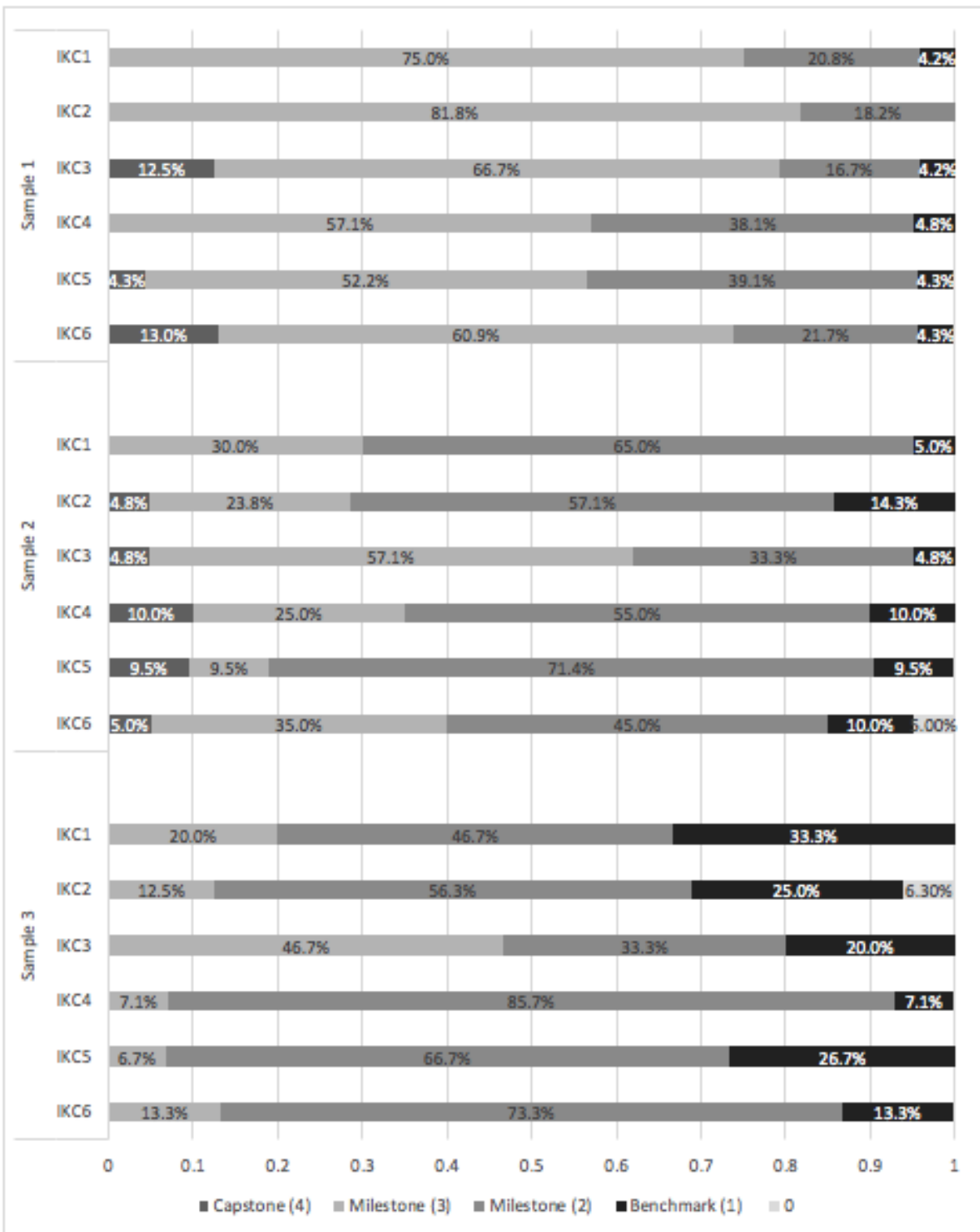


Figure 3. Intercultural Knowledge and Competence VALUE Rubric Training Results