



Cardinal Core Assessment of Written Communication (Fall 2020 Sample)

Cardinal Core Program

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 Commission on Colleges' (SACSCOC) 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 SACSCOC 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 SACSCOC 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 2020 assessment was focused on courses in the Written Communication (WC) content area. Samples of student work from WC courses 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 Written Communication content area are provided below.

University of Louisville Written Communication Learning Outcomes

Written Communication is the ability to develop and express ideas, opinions, and information in appropriate forms. To fulfill this requirement, students will complete, revise, and share a substantial amount of writing in multiple genres or media. Students who satisfy this requirement will:

1. Produce writing that reflects a multi-stage composing and revising process and that illustrates multiple strategies of invention, drafting, and revision.
2. Select and/or use appropriate genres for a variety of purposes, situations, and audiences.
3. Apply academic conventions in different writing situations; employ structural conventions such as organization, formatting, paragraphing, and tone; and use appropriate surface features such as syntax, grammar, punctuation, and spelling.
4. Employ critical thinking processes to create an understanding of knowledge as existing within a broader context and to incorporate an awareness of multiple points of view.
5. Select, evaluate, and integrate material from a variety of sources into their writing and use citation appropriate to the discipline.

Statewide Written Communication Student Learning Outcomes

1. Write clear and effective prose in several forms, using conventions appropriate to audience (including academic audiences), purpose, and genre.
2. Listen and speak competently in a variety of communication contexts, which may include public, interpersonal, and/or small-group settings.
3. Find, analyze, evaluate, and cite pertinent primary and secondary sources, including academic databases, to prepare speeches and written texts.
4. Identify, analyze, and evaluate statements, assumptions, and conclusions representing diverse points of view; and construct informed, sustained, and ethical arguments in response.
5. Plan, organize, revise, practice, edit, and proofread to improve the development and clarity of ideas.

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 four scoring categories, 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. The University of Louisville further disaggregates the zero option into a “not applicable” rating that can be selected for assignments that did not provide an opportunity for the student to demonstrate the criterion within the rubric measure, as opposed to the student simply not demonstrated the rubric criteria.

Assessment Process

For the Fall 2020 assessment of student work from the Written Communication (WC) content area, the Cardinal Core Office collaborated with Director of Composition regarding the details of the upcoming assessment to ensure faculty participation and appropriate sampling. A formal memo outlining the project and process was provided to the Director of Composition and to all faculty teaching Cardinal Core courses within the WC 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.

Mid-semester, the Cardinal Core Office retrieved the class rosters for all WC 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. Instructors of all WC courses were sent a list of students selected for the assessment along with detailed instructions requesting that instructors provide a copy of one assignment prompt 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 completed mandatory training/rubric norming. Due to the COVID pandemic, and in contrast to previous assessments, the training was conducted completely online in Blackboard. Training materials were developed in collaboration with the CCCC Assessment Subcommittee and based upon UofL's long-standing general education assessment training practices, as well as AAC&U VALUE Institute training procedures. The training module consisted of an overview of the assessment process and holistic assessment practices, a dissection of the VALUE rubrics, and scoring of 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 were given a week to complete the training module in Blackboard and submit their scores for all benchmark samples. The results of the benchmark scoring were compiled and sent out to all assessors. Competency areas (rubric rows) with disagreement among reviewers were discussed in the findings shared with reviewers to clarify intended applications of the rubrics. The results from scoring benchmark samples for the Critical Thinking, Written Communication, and Intercultural Knowledge and Competence VALUE Rubrics is provided in Appendix A.

After completion of the assessment training/rubric norming, each 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. Assessors were given a week to complete all assessments.

Data Collection Overview

The enrollment for Written Communication (WC) Cardinal Core courses in Fall 2020 was approximately 2900 students at the time the sample for the assessment was selected. (The Cardinal Core Office has traditionally waited to identify a sample after the deadline to withdraw from courses has passed, but that deadline was extended in Fall 2020 and would have been too late in the process to notify instructors of the identified students. As a result, the Cardinal Core Office requested a larger sample to account for students that may have withdrawn after the sample was identified.) The Cardinal Core Office collected a stratified random sample and received 333 student work samples. All samples were from ENGL 101, ENGL 102, and ENGL 105 courses, including dual-credit sections and sections taught in Panama.

Summary of Assessment Data

For the assessment of Written Communication (WC) outcomes, 333 student artifacts were assessed by faculty and graduate teaching assistants using the AAC&U Critical Thinking, Written Communication, and Intercultural Knowledge and Competence VALUE Rubrics.

Tables 1-3 provide the percentage of work samples scored at each rubric level for the Critical Thinking, Written Communication, and Intercultural Knowledge and Competence VALUE Rubrics. All AAC&U VALUE Rubrics provide an option for a “0” score and for purposes of understanding why a “0” was assigned, the Cardinal Core Assessment provided reviewers with the option of “Not Applicable”. The “Not Applicable” indicates an absence of the assessment criteria due to the type of assignment, while a “0” indicates that the student could have demonstrated the criteria and did not.

Table 1

Percentage of Artifacts Scored at Each Rubric Level for Critical Thinking

	CT1	CT2	CT3	CT4	CT5
Capstone (4)	13.3%	5.3%	5.9%	6.1%	6.9%
Milestone (3)	38.2%	28.0%	25.7%	26.4%	23.2%
Milestone (2)	36.9%	44.8%	38.0%	36.0%	46.4%
Benchmark (1)	8.6%	14.1%	23.9%	27.5%	17.9%
(0)	1.4%	3.5%	5.4%	2.7%	3.3%
Not Applicable (NA)	1.5%	4.2%	1.0%	1.2%	2.2%

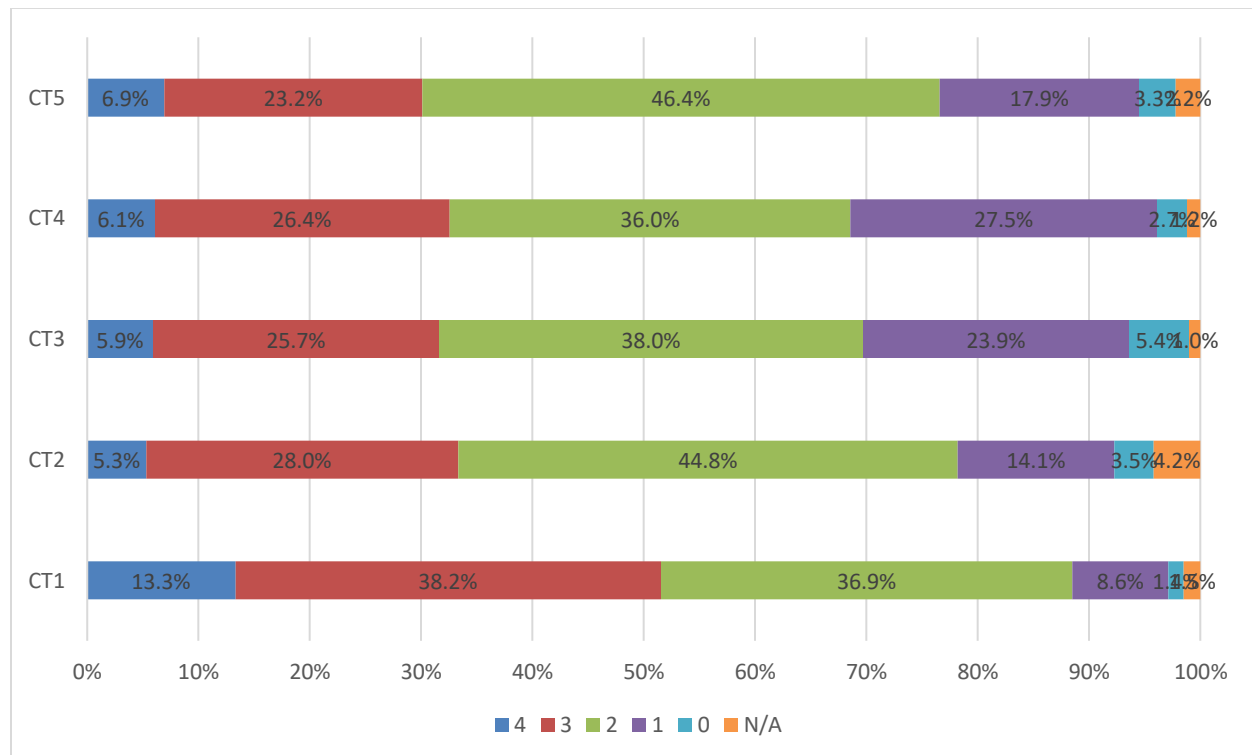


Figure 1. Percentage of Artifacts Scored at Each Rubric Level for Critical Thinking

Table 2

Percentage of Artifacts Scored at Each Rubric Level for Written Communication

	WC1	WC2	WC3	WC4	WC5
Capstone (4)	13.6%	9.6%	8.7%	7.3%	8.8%
Milestone (3)	34.8%	32.0%	31.6%	28.4%	45.3%
Milestone (2)	38.5%	35.4%	41.3%	36.0%	36.2%
Benchmark (1)	12.2%	21.5%	17.1%	19.6%	9.3%
(0)	0.8%	1.4%	1.2%	4.5%	0.3%
Not Applicable (NA)	0.0%	0.0%	0.0%	4.1%	0.0%

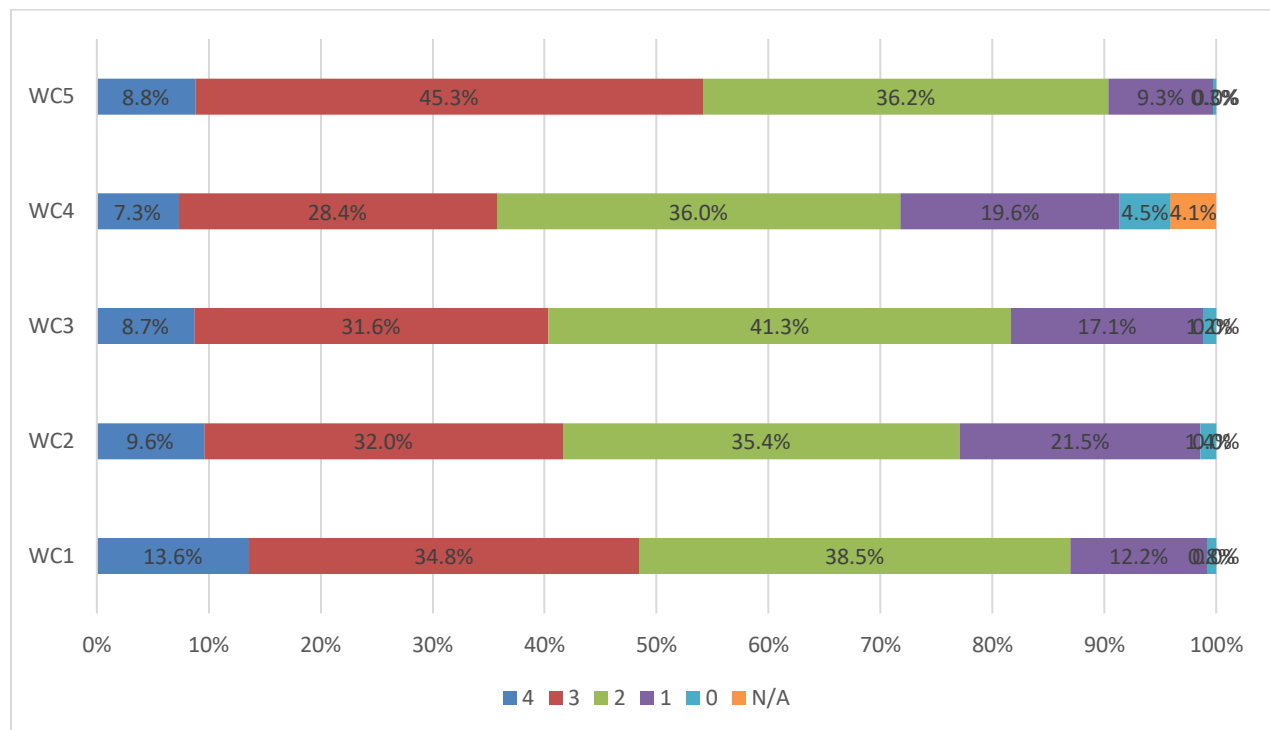


Figure 2. Percentage of Artifacts Scored at Each Rubric Level for Written Communication

Table 3

Percentage of Artifacts Scored at Each Rubric Level for Intercultural Knowledge and Competence

	IKC1	IKC2	IKC3	IKC4	IKC5	IKC6
Capstone (4)	2.5%	0.8%	2.3%	1.2%	1.2%	1.9%
Milestone (3)	21.0%	8.9%	19.4%	9.2%	15.3%	15.3%
Milestone (2)	28.2%	12.7%	22.8%	11.1%	25.6%	19.2%
Benchmark (1)	22.3%	13.9%	23.9%	10.4%	16.9%	20.5%
(0)	4.0%	5.8%	6.1%	4.8%	11.7%	6.6%
Not Applicable (NA)	21.9%	57.9%	25.4%	63.3%	29.2%	36.4%

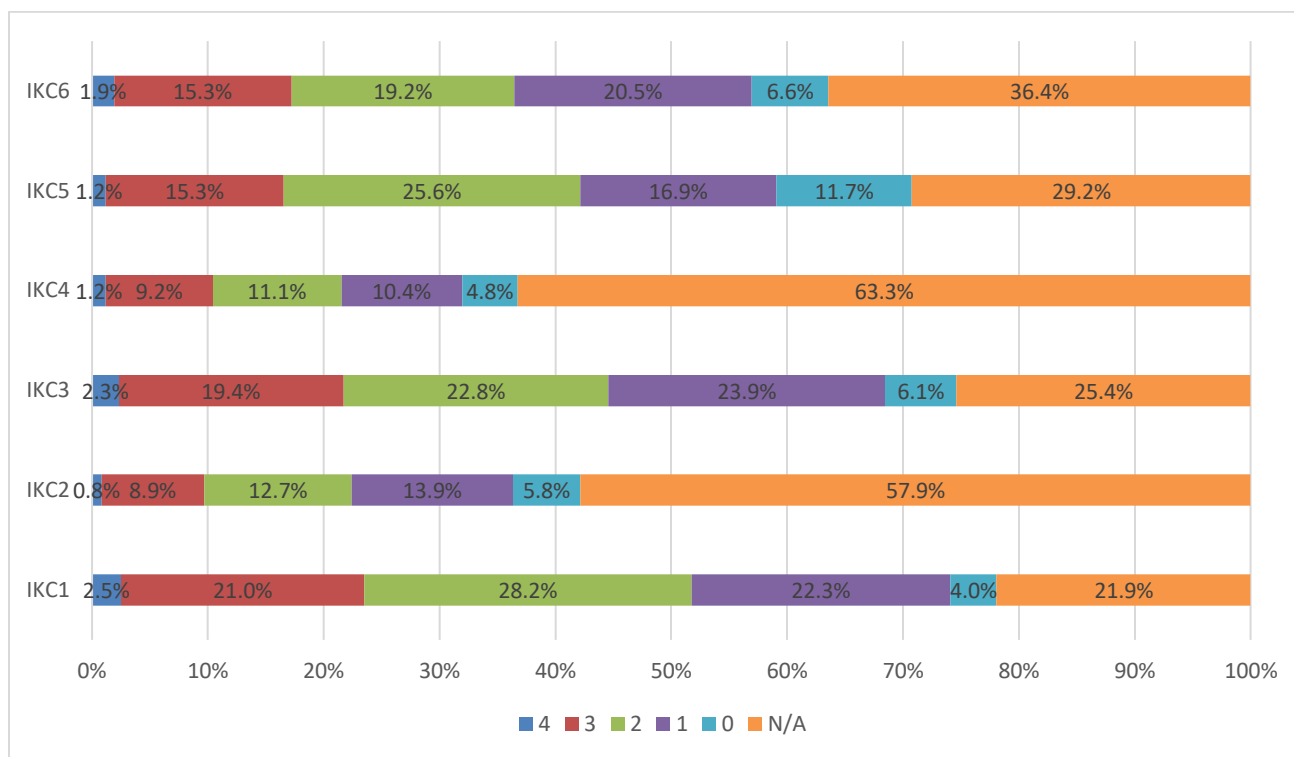


Figure 3. Percentage of Artifacts Scored at Each Rubric Level for Intercultural Knowledge and Competence

In alignment with AAC&U VALUE Institute practices, scores for each individual work sample were calculated based upon scores assigned by three separate reviewers. The scores from all three reviewers were averaged and rounded to determine individual work sample scores for each rubric row. The mode for the individual work sample scores is provided in Table 4.

Table 4

Mode of Individual Work Sample Scores

	Mode
CT1 – Explanation of Issues	3
CT2 – Evidence	2
CT3 – Influence of Context and Assumptions	2
CT4 – Student’s Position	2
CT5 – Conclusions and Related Outcomes	2
WC1 – Context and Purpose for Writing	3
WC2 – Content Development	2
WC3 – Genre and Disciplinary Conventions	2
WC4 – Sources and Evidence	2
WC5 – Control of Syntax and Mechanics	3
IKC1 – Cultural Self-Awareness	2
IKC2 – Knowledge of Cultural Worldview Frameworks	0 or N/A
IKC3 – Empathy	1

Table 4 continued

IKC4 – Verbal and Nonverbal Communication	0 or N/A
IKC5 – Curiosity	1
IKC6 - Openness	1

Inter-rater Reliability

Three separate readers assessed each student artifact. Table 5 displays the mean score for the three separate readings of all artifacts.

Table 5

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	2.58	2.40	2.53	.09
CT2	2.19	1.95	2.14	.13
CT3	2.03	1.95	2.05	.05
CT4	2.11	1.89	2.10	.12
CT5	2.23	1.84	2.17	.21
WC1	2.48	2.36	2.61	.13
WC2	2.20	2.14	2.47	.17
WC3	2.26	2.18	2.45	.14
WC4	2.05	1.89	2.24	.18
WC5	2.44	2.50	2.65	.11
IKC1	1.65	1.58	1.32	.17
IKC2	1.04	0.57	0.47	.31
IKC3	1.54	1.36	1.21	.17
IKC4	0.95	0.41	0.60	.27
IKC5	1.48	1.00	1.09	.26
IKC6	1.42	0.92	1.04	.26

In addition to the descriptive statistics, Table 6 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 6 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 6

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	14.1%	65.5%	.37	.24-.48
CT2	18.6%	68.2%	.60	.52-.67
CT3	11.7%	57.1%	.47	.36-.56
CT4	14.7%	61.6%	.48	.37-.57
CT5	15.3%	62.8%	.30	.16-.42
WC1	16.8%	70.0%	.59	.50-.66
WC2	10.5%	61.0%	.50	.40-.59
WC3	16.5%	68.2%	.55	.46-.63
WC4	15.0%	64.0%	.67	.60-.72
WC5	17.7%	79.9%	.57	.49-.65
IKC1	9.0%	45.0%	.34	.20-.45
IKC2	30.9%	57.4%	.34	.21-.46
IKC3	10.2%	43.2%	.39	.27-.50
IKC4	37.8%	54.1%	.27	.12-.40
IKC5	15.3%	39.6%	.33	.19-.44
IKC6	20.4%	44.7%	.42	.30-.52

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 Written Communication (WC) syllabi that were loaded to Blackboard in Fall 2020.

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 127 WC Cardinal Core course sections offered in the Fall of 2020 resulting in a 98.4% sample. The review of 127 Cardinal Core syllabi identified 97 syllabi (76.4%) containing the WC Cardinal Core learning outcomes approved for the course. Further review of the 164 syllabi revealed that 90 syllabi (70.9%) also listed the assessment methods for the Cardinal Core 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.

Summary and Plan for Improvement

The results of this assessment are intended to serve as a baseline for future assessments in the Written Communication content area and intended to help guide continuous program improvement. Of the five critical thinking competencies, students performed best on “explanation of issues” and did not perform as well on using “evidence”, considering “context and assumptions”, stating a “position”, and drawing “conclusions”. The highest scoring competencies of the written communication rubric were related to providing “context and purpose for writing” and “syntax and mechanics”. Students did not perform as well on “content development”, applying appropriate “genre and disciplinary conventions”, and incorporating “sources and evidence” into their writing. The findings for the Intercultural Knowledge and Competence rubric indicate that a large percentage of the work samples collected did not ask students to demonstrate the competencies. It was expected that a significant number of work samples would be scored as Not Applicable for both “knowledge of cultural worldview frameworks” and “verbal and nonverbal communication”, since these rubric components are geared more toward assignments discussing global issues (D2 designated courses). While the CCCC is developing a new Diversity rubric for the next assessment cycle, it is recommended that WC courses continue to emphasize and incorporate the overarching competencies of the Cardinal Core program which includes historical, social, and cultural diversity. Specifically, instructors should take these overarching competencies into consideration when selecting the assignment that they submit for the assessment.

After transitioning some components of the assessment training to online in spring 2020, the CCCC recommended shifting more of the assessment training to online to align with AAC&U VALUE Institute practices and to improve inter-rater reliability. As a result of this recommendation and the COVID pandemic, the entire training process was transitioned to online. Inter-rater reliability was not as strong in this assessment as it was in the spring 2020 assessment of SB and SBH. Based upon observations of the Director of Cardinal Core Assessment and feedback from assessors, it is recommended that the majority of the training

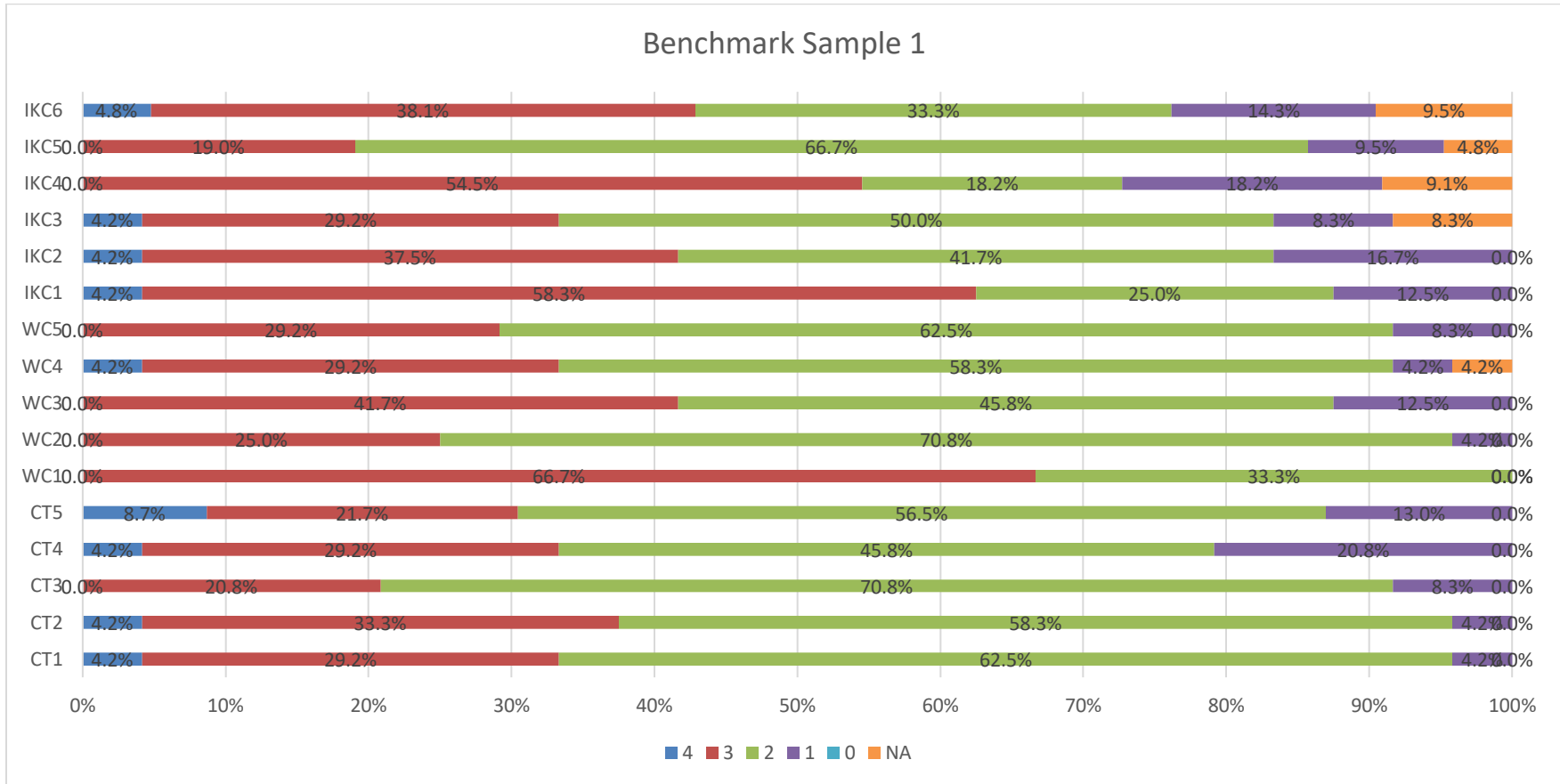
process continue online, however bring back a synchronous (face-to-face or online) meeting opportunity to discuss the results of the practice scoring and discuss any areas of disagreement among reviewers.

In conclusion, the results of this assessment are intended to help faculty in identifying potential strengths and areas for growth in the Cardinal Core curriculum. While this first cycle of assessment has some limitations, the data indicate students are performing better on some measures or outcomes than others. It is recommended that faculty take this into consideration in their own curriculum and assignments to ensure that students are developing the knowledge, skills, and dispositions outlined in the Cardinal Core program.

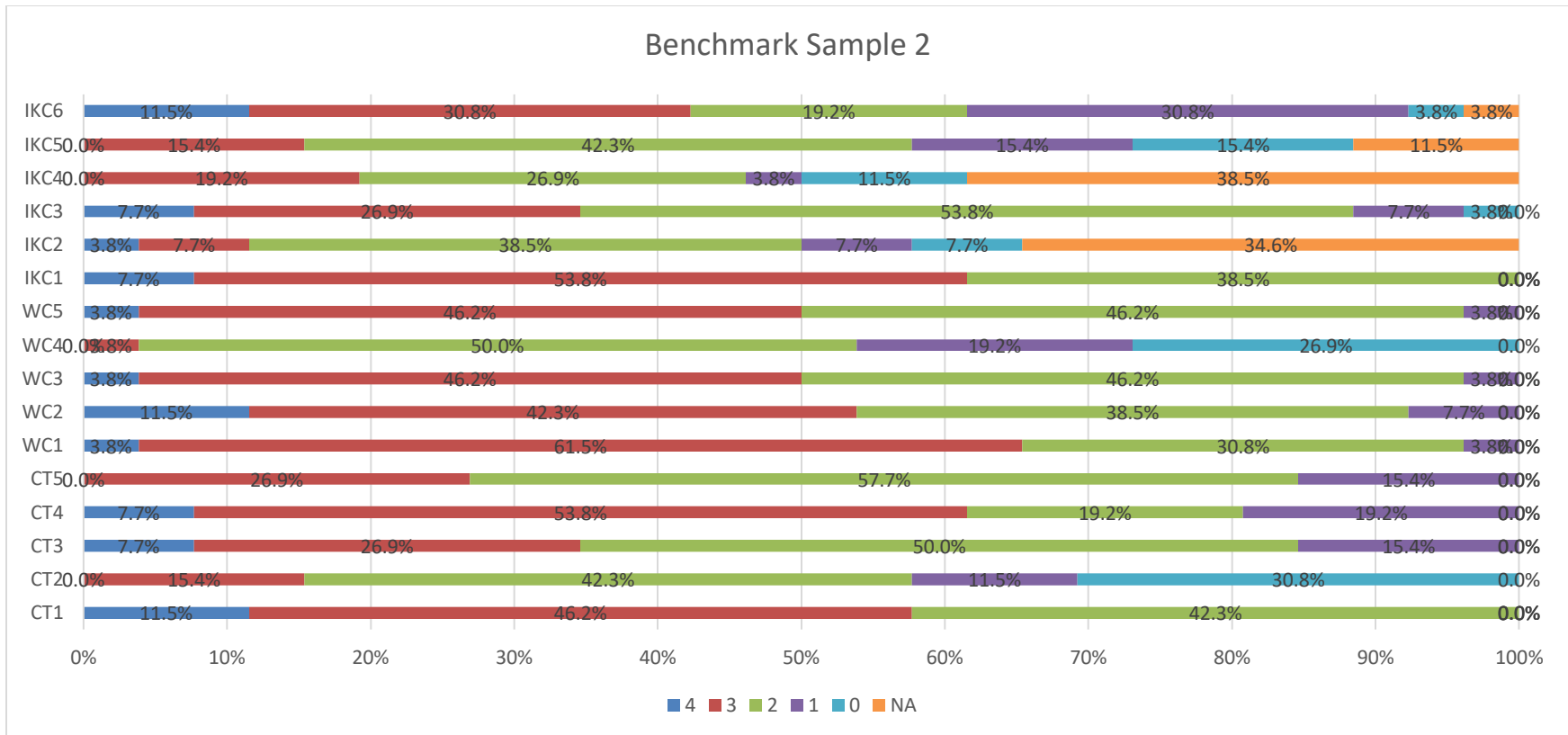
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Appendix A. Results from Assessment Training for Critical Thinking, Written Communication, and Intercultural Knowledge and Competence VALUE Rubrics with Notes to Assessors



Notes: After scoring Benchmark Sample 1, assessors were given an overview of how to score the work sample based on ratings assigned by the Cardinal Core Curriculum Committee’s Assessment Subcommittee.

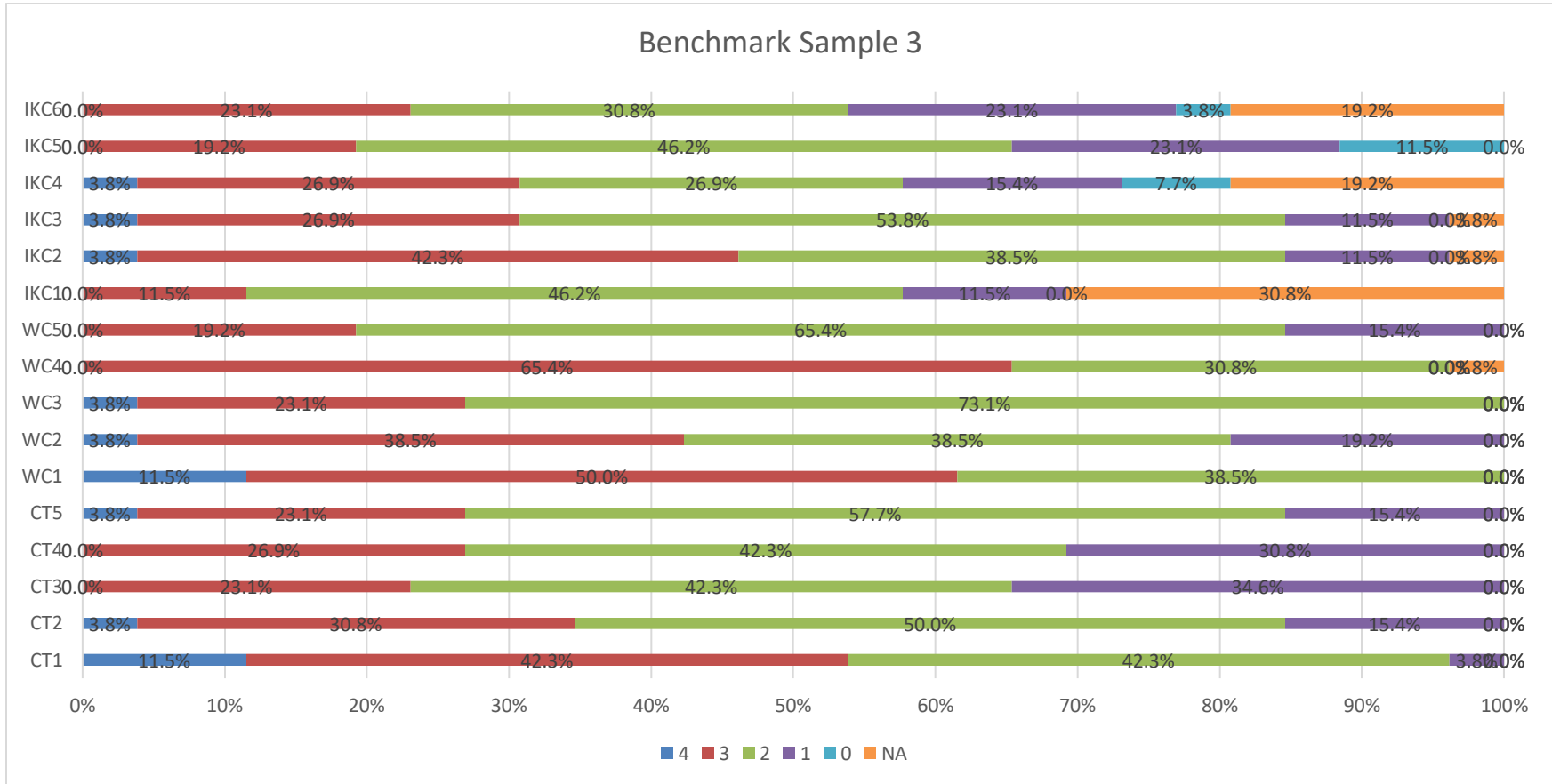


Notes to Assessors:

IKC2 – Knowledge of Cultural Worldview Frameworks – In alignment with AAC&U’s guidance for this rubric row, we would assign N/A since the assignment did not ask students to look at cultures outside of the U.S. While the different experiences of the author, Connor, and Camron represent different frameworks, AAC&U has defined worldview frameworks as discussion of global/non-U.S. cultures.

IKC4 – Verbal and Nonverbal Communication – In alignment with AAC&U’s guidance for this rubric row, we would again assign N/A since the assignment did not ask students to discuss communication of a culture outside of the U.S.

* The Cardinal Core Curriculum Committee (CCCC) is currently working on a new UofL Diversity rubric that will allow for assessing these components in a U.S. or Global Diversity context, however as we finish our pilot of the AAC&U instruments we will try to remain consistent with their guidance on application of these instruments.

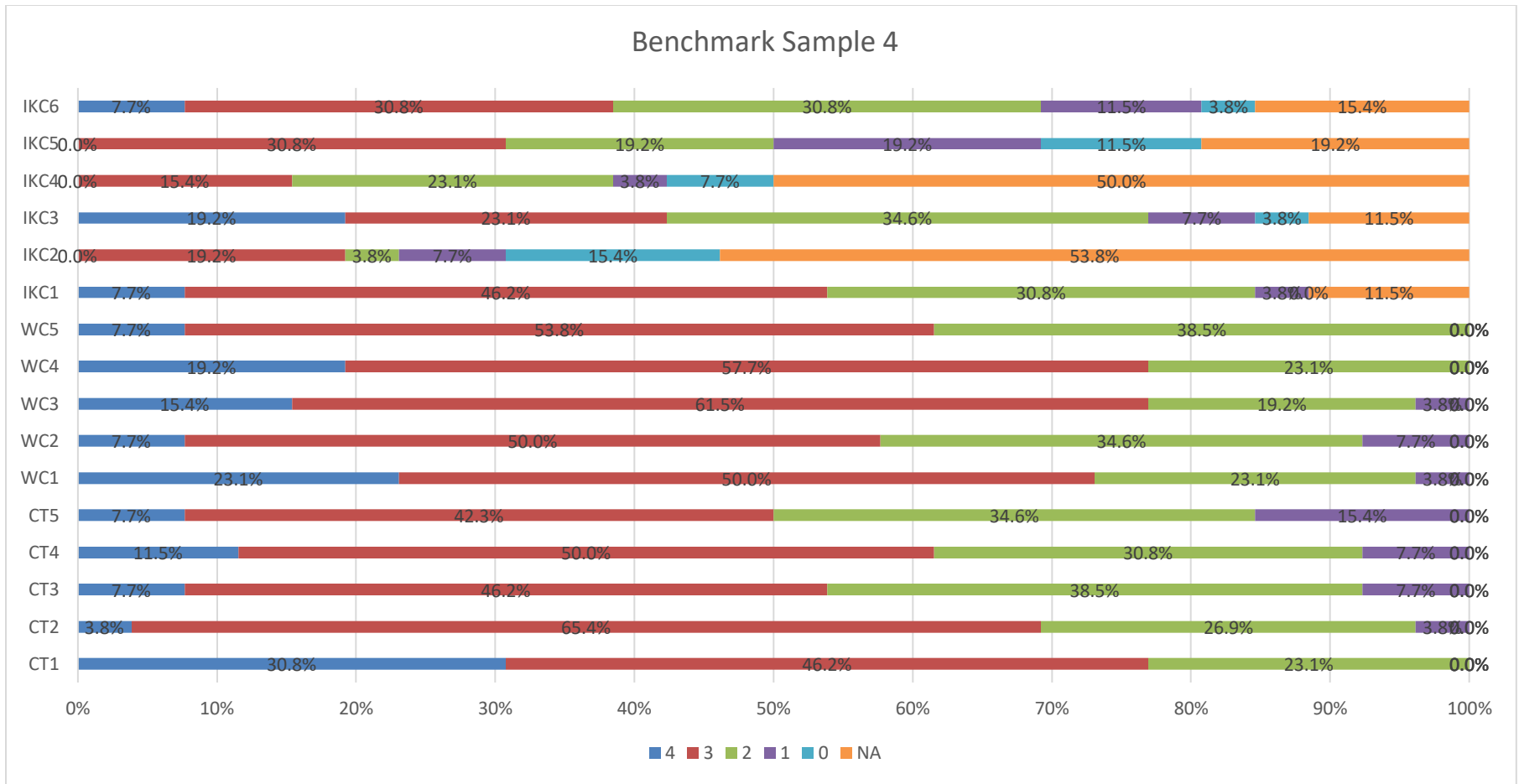


Notes to Assessors:

IKC1: While this assignment may not have explicitly asked the student to identify their own rules and biases, the potential is there due to the context of the assignment. When the student states in the first paragraph that “One might assume that these regions, both in Asia, would have similar structures” the student may have been demonstrating some of their own potential cultural rules/biases.

IKC2 and IKC4: These two rows can be assessed because we are discussing cultures outside of the U.S.

IKC6: In the case of this assignment, we can consider the student’s discussion of cultures as “interactions”.



Notes to Assessors:

IKC2 and IKC4 – N/A would be appropriate for this assignment as AAC&U has stated that these rows only apply in the discussion of global/non-U.S. cultures and the rubric was not intended to address U.S. diversity. This will be addressed in the new rubric developed by the Cardinal Core Curriculum Committee (CCCC).