



Report to the Senate on the Multi-State Collaborative: Pilot Year Summary

I. Historical Background

CCSU is regionally accredited by the New England Association of Schools and Colleges (NEASC). This accreditation is one of the requirements CCSU must meet and maintain in order to offer Title IV financial aid (examples of Federal financial aid are Pell grants and subsidized student loans). In 2009, 2011, and 2013, CCSU was cited by NEASC for not adequately assessing our academic programs which includes general education. In 2013, the most recent 5-year self-study and review, NEASC requested that CCSU pay special attention to assessment of general education and specifically Standards 4.16¹ and 4.19² – in essence we have been asked to include a supplemental report in our upcoming 10-year self-study that addresses our progress in assessing general education, describing our activities and how we have used the information gained from those activities to make improvements.

While CCSU has made some progress in assessing academic programs, to date we have very little information about whether or not students are gaining the intended knowledge base and skills from our general education program and meeting the university-wide general education learning outcomes. To be fair, there are a few departments that are assessing their contribution to general education (GenEd), but they have been doing so with little to no coordination or communication with other departments. Hence the current process is designed to have each department act independently on a university-wide program which every department contributes to or gains from. This process results in the following:

- A. Each department decides which GenEd courses they will assess, however:
 1. The assessment may or may not correspond to one of CCSU's GenEd learning outcomes;
 2. Some learning outcomes will be covered while other learning outcomes are not; and/or
 3. Some departments have created GenEd learning outcomes that do not align with the stated university general education learning outcomes.
- B. Each department decides what criteria are important to that GenEd learning outcome and how to assess the learning outcome.
 1. Learning outcome criteria are inconsistent between departments coupled with inconsistent performance thresholds for students.
 2. Results are specific to the departmental course(s), not an outcome
 3. Difficult to interpret and use results – which results do you use to make decisions regarding pedagogy/content?

¹ NEASC Standard 4.16 The general education requirement is coherent and substantive. It embodies the institution's definition of an educated person and prepares students for the world in which they will live. The requirement informs the design of all general education courses, and provides criteria for its evaluation, including the assessment of what students learn.

² NEASC Standard 4.19 Graduates successfully completing an undergraduate program demonstrate competence in written and oral communication in English; the ability for scientific and quantitative reasoning, for critical analysis and logical thinking; and the capability for continuing learning, including the skills of information literacy. They also demonstrate knowledge and understanding of scientific, historical, and social phenomena, and a knowledge and appreciation of the aesthetic and ethical dimensions of humankind.

This lack of coordination and communication between departments reduces the credibility of meaningful assessments that are taking place, regardless of how good the intentions are or the quality of assessments. If no one agrees on what should be assessed or how high the standards should be set for CCSU graduates, then how can we be confident in our offerings?

II. An Opportunity

The BOR asked several institutions in the CSCU System to participate in the Multi-state Collaborative (MSC), a nine-state assessment initiative developed and coordinated by the State Higher Education Executive Officers (SHEEO) and the American Association for Colleges and Universities (AAC&U). The initiative focuses on students who had completed 75% of their undergraduate curriculum at the start of the semester – for CCSU this is 90+ credits. In year one of the initiative, students were assessed on their ability to think critically, communicate in a written format and to interpret and explain quantitative information. Student work was evaluated by faculty from outside of Connecticut using predefined rubrics (AAC&U's VALUE rubrics) that have gained traction nationally and have a standard set of criteria and performance thresholds. There were two particularly attractive guiding principles of this initiative: the first was to work with existing assignments that faculty had already developed and integrated into their curriculum and the second was to use assignments that were important to the student (i.e. graded).

A. Process in Fall 2014 (Year 1)

1. Invited faculty teaching courses with ≥ 10 students with 90+ credits to participate in the initiative. **Participation in this initiative was completely voluntary.**
2. Interested faculty reviewed the rubric(s) to determine if they had an existing assignment(s) that aligned well with one or more of the rubrics
3. If needed, faculty member made minor adjustments to the assignment
 - a) Adjustments that were made were not supposed to modify the intended objective of the assignment but rather provide additional clarification to the student as to what was expected
4. Documentation provided by participating faculty:
 - a) Completed a cover sheet (a check list) which provided guidance as to which criteria in a rubric were covered by the assignment (prevents the evaluators from assessing students on something they were not asked to do)
 - b) Faculty contributing to Quantitative Reasoning provided assignment instructions and an answer key to assist the evaluators
 - c) Faculty contributing to Written Communication provided assignment instructions
 - d) Faculty provided OIRA with a copy of each student's assignment (before it was graded), regardless of student level
 1. Assignments were provided to OIRA via BlackBoard, email, photocopy, etc. (whichever method was most convenient for the faculty member).
5. OIRA de-identified and recoded all assignments (removed student and faculty names and identifiers, references to course, CCSU or Connecticut)

6. Assignments from students with 90+ credits were uploaded into the MSC database and a sampling of those artifacts were evaluated by faculty from the other 8 states and who had been trained on how to assess student work using one of the three rubrics. The results from this portion of the initiative are referred to as the “MSC Faculty” in the data tables below.
7. Assignments from all students, regardless of level, were kept for scoring by CCSU faculty (“CCSU Faculty” in the data tables below) at a 2-day assessment retreat held June 2015.
8. Participation in the retreat was voluntary. Faculty who participated were compensated with a small stipend and lunch for the two days.
 - a) Retreat began with a norming session for each of the AAC&U VALUE rubrics being used followed by scoring of the artifacts.

B. Results (year 1)

1. Participation and Collection
 - a) Tables 1 and 2 – CCSU participation and collection
 1. 533 Artifacts collected in total, 284 submitted to the MSC (Table 1)
 2. Artifacts collected from students representing 45 of CCSU’s undergraduate degree programs; great cross-section of the student body (almost 75% of the undergraduate majors were represented; Tables 1 and 2)

Table 1. CCSU Participation Rate by Faculty and Student Level – Number of Artifacts Collected for each Learning Outcome by Student Level

Multi-State Collaborative 2014-15 - Year 1					
Learning Outcome	Fresh	Soph	Jr	Sr	Total
Critical Thinking (33 Majors)	16	21	58	130	225
Quantitative Reasoning (19 majors)		6	29	82	117
Written Communication (28 Majors)	13	19	62	97	191
Grand Total (45 majors)	29	46	149	309	533

3. 27 faculty representing 18 (45%) academic departments participated in collecting artifacts for this initiative (Table 2)

Table 2. CCSU Participation by Faculty and Student Level

27 Faculty

29 Courses

Learning Outcome & Faculty	First Year	Sophomore	Junior	Senior	Total for CCSU Gen Ed	Total for MSC
Critical Thinking (33 Majors)	16	21	58	130	225	119
Adams				10	10	10
Broadus-Garcia				4	4	4
DiPlacido	1	6	15	30	52	29
Durant				16	16	14
Koski			5	15	20	13
Moriarty	1	1	7	10	19	10
Mulrooney			3	4	7	3
O'Connor			4	1	5	1
Petterson			1	14	15	13
Pozorski		1	8	10	19	8
Smith	1	5	6	10	22	9
Specter - Hist 344		3	7	5	15	5
Specter - Hist 122	13	5	2	1	21	N/A
Quantitative Reasoning (19 majors)	0	6	29	82	117	78
Kostelis			7	10	17	9
Larsen		1	4	2	7	2
Liard-Muriente		5	13	17	35	16
Robinson			3	17	20	16
Vasko			2	36	38	35
Written Communication (28 Majors)	13	19	62	97	191	87
Baratta		6	8	1	15	1
Cohen				9	9	9
Crespi			3	12	15	11
Dharavath					0	0
Durant				16	16	14
Gigliotti			5	7	12	7
Larsen		2	6	2	10	2
Mijid			5	4	9	4
Mulcahy				16	16	16
Pozorski		1	8	10	19	8
Sideriadis		2	17	3	22	2
Specter - Hist 122	13	5	2	1	21	N/A
Specter - Hist 344		3	7	5	15	5
Tracey			1	5	6	4
Zanella				6	6	4
Grand Total (45 majors)	29	46	140	318	533	284

b) Table 3 – CCSU had the 6th highest submission of all 60 institutions participating in the initiative

Table 3. MSC Participation across the Nine States

Multi-State Collaborative 2014-15 - Year 1

State	Institution	Critical Thinking		Quantitative		Written		Total Faculty (duplicated)	Total Artifacts
		Faculty Count	Artifact Count	Faculty Count	Artifact Count	Faculty Count	Artifact Count		
MO	Truman State University	1	95	9	178	1	94	11	367
MN	Inver Hills Community College	10	87	17	125	16	112	43	324
UT	Salt Lake Community College	9	84	8	109	8	108	25	301
MA	Framingham State University	16	101	12	100	17	99	45	300
MN	St Olaf College	10	89	11	98	12	104	33	291
CT	Central Connecticut State University	12	119	5	78	13	86	30	283
MN	Hamline University	15	93	7	82	17	98	39	273
MN	Minneapolis Community and Technical College	9	90	8	76	9	95	26	261
MO	Central Methodist University	10	105	7	67	10	89	27	261
MO	Southeast Missouri State University	5	64	6	93	9	98	20	255
IN	Vincennes University	26	99	16	75	18	76	60	250
KY	University of Kentucky			9	181	7	54	16	235
MN	Gustavus Adolphus College	9	79	7	63	8	78	24	220
OR	Chemeketa Community College			3	135	5	78	8	213
RI	Community College of Rhode Island			16	122	23	86	39	208
MN	Saint Cloud State University	11	74	9	49	12	73	32	196
MN	The College of Saint Scholastica	11	61	8	60	11	70	30	191
OR	Oregon Institute of Technology	3	23	9	79	9	85	21	187
CT	Southern Connecticut State University	4	35	6	69	10	76	20	180
CT	Three Rivers Community College			15	90	13	86	28	176
UT	Snow College			16	91	25	81	41	172
MA	University of Massachusetts Lowell	6	53	5	40	8	78	19	171
UT	Utah State University			8	78	11	78	19	156
MA	Northern Essex Community College	18	55	8	27	17	71	43	153
MN	North Hennepin Community College	34	64	28	61	12	22	74	147
OR	Portland Community College	6	40	2	17	18	75	26	132
IN	Purdue University Calumet	15	47	12	25	26	58	53	130
UT	University of Utah			7	74	7	52	14	126
MA	Worcester State University	9	50	3	20	8	45	20	115
CT	Manchester Community College			3	25	12	88	15	113
CT	Naugatuck Valley Community College			9	59	9	52	18	111
MA	Middlesex Community College	6	38	5	33	5	40	16	111
MN	Southwest Minnesota State University	4	31	5	27	8	52	17	110
MA	Bristol Community College	14	49	8	27	9	33	31	109
IN	Indiana University Bloomington	1	10	4	18	12	78	17	106
MN	Augsburg College					14	101	14	101
MA	North Shore Community College	7	39	3	26	6	35	16	100
MA	Fitchburg State University	2	43	1	9	2	47	5	99
MN	University of Minnesota-Morris					6	97	6	97
MN	Minnesota West Community and Technical College			22	51	26	45	48	96
KY	Bluegrass Community and Technical College			5	58	6	35	11	93
CT	Western Connecticut State University			3	35	5	53	8	88
MO	Ozarks Technical Community College	2	28	1	45	1	14	4	87
MN	Minnesota State Community and Technical College	1	34			3	49	4	83
MA	Cape Cod Community College	17	27	14	32	11	24	42	83
CT	Eastern Connecticut State University	3	30	1	5	5	47	9	82
MO	University of Central Missouri	1	19	1	19	3	42	5	80
MN	Itasca Community College	8	41			8	39	16	80
MA	Berkshire Community College	6	25	2	9	9	46	17	80
MN	Century College			7	43	7	34	14	77
MA	Mount Wachusett Community College	2	12	4	25	4	31	10	68
MA	Holyoke Community College	8	21	4	22	8	25	20	68
MA	Massasoit Community College	4	16	2	9	5	36	11	61
IN	Ivy Tech Community College of Indiana	1	10			6	37	7	47
MN	Hibbing Community College	7	28			3	13	10	41
MN	Vermilion Community College	3	16			4	14	7	30
KY	Hazard Community and Technical College	1	6			6	22	7	28
OR	Oregon State University					3	24	3	24
OR	Southwestern Oregon Community College					12	23	12	23
IN	Purdue University North Central	1	9					1	9

2. Results

- a) Table 4 – CCSU’s artifacts evaluated by MSC Faculty scored slightly *higher than the national average* for 4-year institutions (N=31). All calculations for this comparison included values of zero³.

Table 4 National MSC Scores Compared to CCSU's Artifacts Scored by MSC Faculty (zeros included)

Learning Outcome	National MSC Score (4-year institutions, N=31)	CCSU's MSC Faculty Score
Critical Thinking	1.99	2.04
Quantitative Reasoning	2.12	2.38
Written Communication	2.53	2.58

- b) Table 5 – Comparison between CCSU Faculty scores and MSC Faculty scores while scoring the same artifact (values with zero are excluded)
1. CCSU Faculty and MSC Faculty scoring the same artifact were within one point of each other 85% of the time. This high consistency in scoring demonstrates that CCSU Faculty are assessing artifacts with a similar critical eye as faculty from other states and externally validates the results of CCSU’s first assessment retreat.

³ Original data regarding national results from the MSC includes zeros in all calculations. Unfortunately, it appears that a value of zero in their dataset has two different definitions: 1) student’s work was not assessed because the assignment did not request that criteria, or 2) assignment did instruct student to address the specific criteria and student failed to do so. CCSU was not provided enough information to recalculate the national scores without zeros.

Table 5 Comparison: MSC Faculty and CCSU Faculty Scoring the Same Artifact
Score Range: CCSU and MSC scores for same artifact within:

Written Communication (N=45)	Equal	+/- 1	+/- 2	+/- 3	Same or within 1
Context	15%	69%	15%	0%	85%
Content Development	30%	55%	15%	0%	85%
Genre & Disciplinary Conventions	27%	58%	13%	2%	84%
Sources and Evidence	18%	61%	18%	4%	79%
Control of Syntax/ Mechanics	14%	70%	16%	0%	84%
Overall	21%	63%	15%	1%	84%

Quantitative Reasoning (N=70)	Equal	+/- 1	+/- 2	+/- 3	Same or within 1
Interpretation	29%	56%	15%	0%	85%
Representation	31%	62%	7%	0%	93%
Calculation	28%	62%	9%	1%	90%
Application/ Analysis	21%	70%	9%	0%	91%
Assumptions	14%	75%	11%	0%	89%
Communication	33%	49%	16%	2%	82%
Overall	27%	62%	11%	1%	88%

Critical Thinking (N=41)	Equal	+/- 1	+/- 2	+/- 3	Same or within 1
Explanation of Issues	16%	63%	18%	3%	79%
Evidence	22%	62%	13%	2%	84%
Influence of context	27%	45%	24%	3%	73%
Student's position	25%	55%	16%	5%	80%
Conclusions	23%	60%	15%	3%	83%
Overall	23%	58%	17%	3%	80%

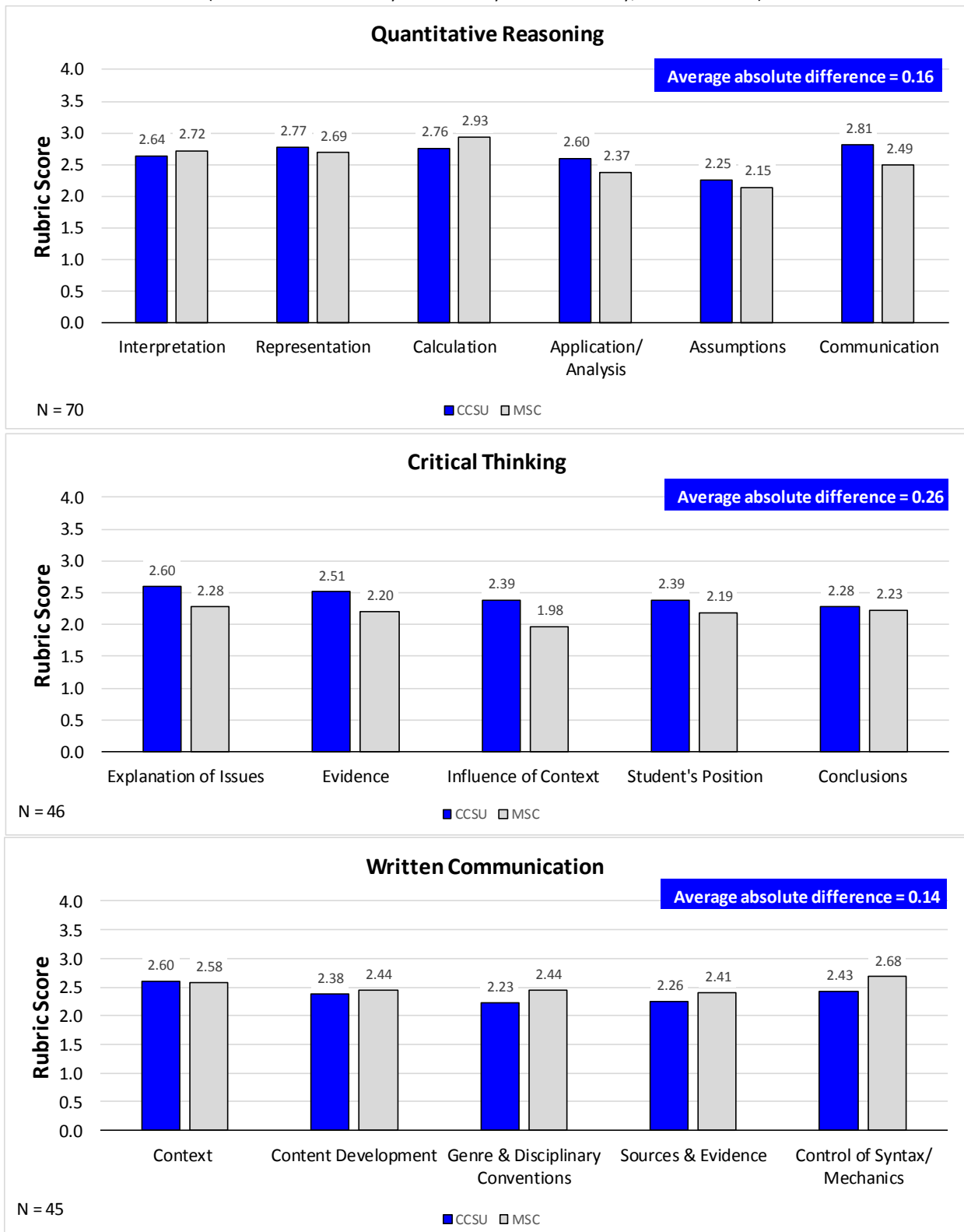
Overall Comparison (3 rubrics)	24%	61%	14%	1%	85%
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c) Figure 1 – CCSU Faculty scores compared to MSC Faculty scores for the same artifact, by criterion in rubric (zeros excluded)

1. Overall, CCSU Faculty scores were very similar to the scores generated by the MSC Faculty and the absolute value of the differences were very small:
 - a. Quantitative Reasoning = 0.16
 - b. Critical Thinking = 0.26
 - c. Written Communication = 0.14

Figure 1. CCSU Faculty Scores compared to MSC Faculty Scores

Multi-State Collaborative 2014-15 - Year 1
 (Same artifact scored by CCSU Faculty and MSC Faculty, zeros excluded)

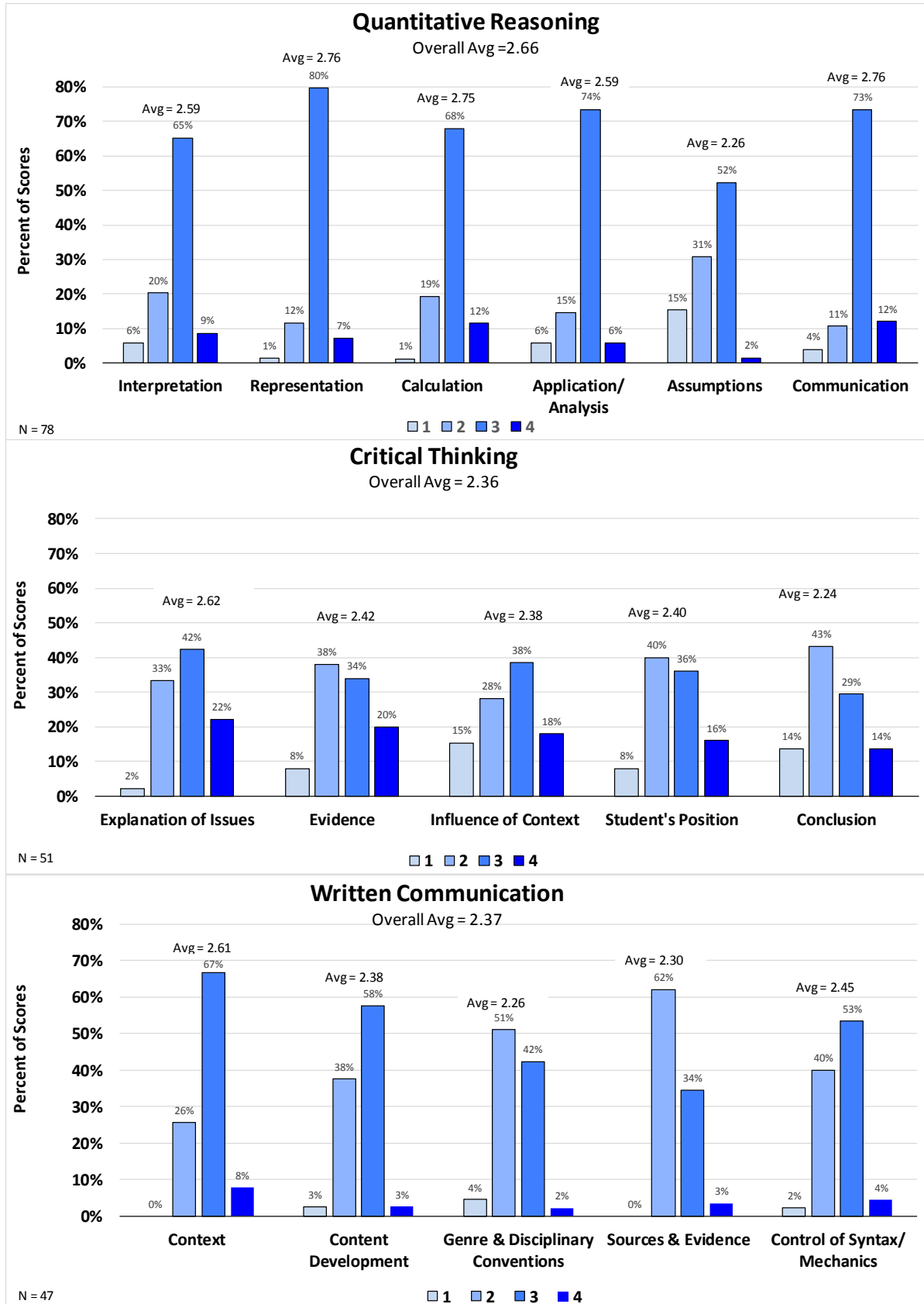


- d) Figure 2 – CCSU Faculty evaluation of artifacts
1. Quantitative Reasoning, average score 2.66
 - a. Interpretation: 2.59
 - b. Representation: 2.76
 - c. Calculation: 2.75
 - d. Application/ Analysis: 2.59
 - e. Assumptions: 2.26
 - f. Communication: 2.76

 2. Critical Thinking, average score 2.36
 - a. Explanation of Issues: 2.62
 - b. Evidence: 2.42
 - c. Influence of Context : 2.38
 - d. Student's Position: 2.4
 - e. Conclusions : 2.24

 3. Written Communication
 - a. Context : 2.61
 - b. Content Development: 2.38
 - c. Genre & Disciplinary Conventions: 2.26
 - d. Sources & Evidence: 2.30
 - e. Control of Syntax/ Mechanics: 2.45

Figure 2. CCSU Faculty Scores for Each Learning Outcome Criteria (zeros excluded)



3. Outcomes

- a) The results suggest that the MSC model of collecting information for use in assessing GenEd learning outcomes is sustainable and effective. A second retreat to score the remaining artifacts has already been completed and the results are being reconciled now. Preliminary benefits to this process are:
 - 1. Consistent criteria for each learning outcome
 - 2. Consistent performance thresholds for students
 - 3. Useable data
 - 4. Scalable (currently 3 rubrics were used, easy to expand to include additional learning outcomes and rubrics)
 - 5. Removes the burden for each department to assess their contribution to GenEd
 - a. Faculty submitting artifacts have a minimal time commitment while their contribution is invaluable
 - b. Faculty participating in the retreat commit to 12 hours of scoring artifacts over the course of two days (included are lunch and a small stipend), resulting in valuable assessment data for general education learning outcomes for the entire university – much less than the total time spent by individual departments.