

Quantitative Reasoning 2017 - 2018

Multi-State Collaborative

The Multi-state Collaborative project did not collect student artifacts this year, instead designating it as a Reflection Year. The purpose of this one-year moratorium was to allow institutions time to look more closely at the data collected in previous years and determine how to use that data for improvement in student learning. Thus we did not send student artifacts for evaluation this year, but we did continue to attend meetings and stay abreast of the multi-state collaborative activities.

Institutional Assessment of Quantitative Reasoning

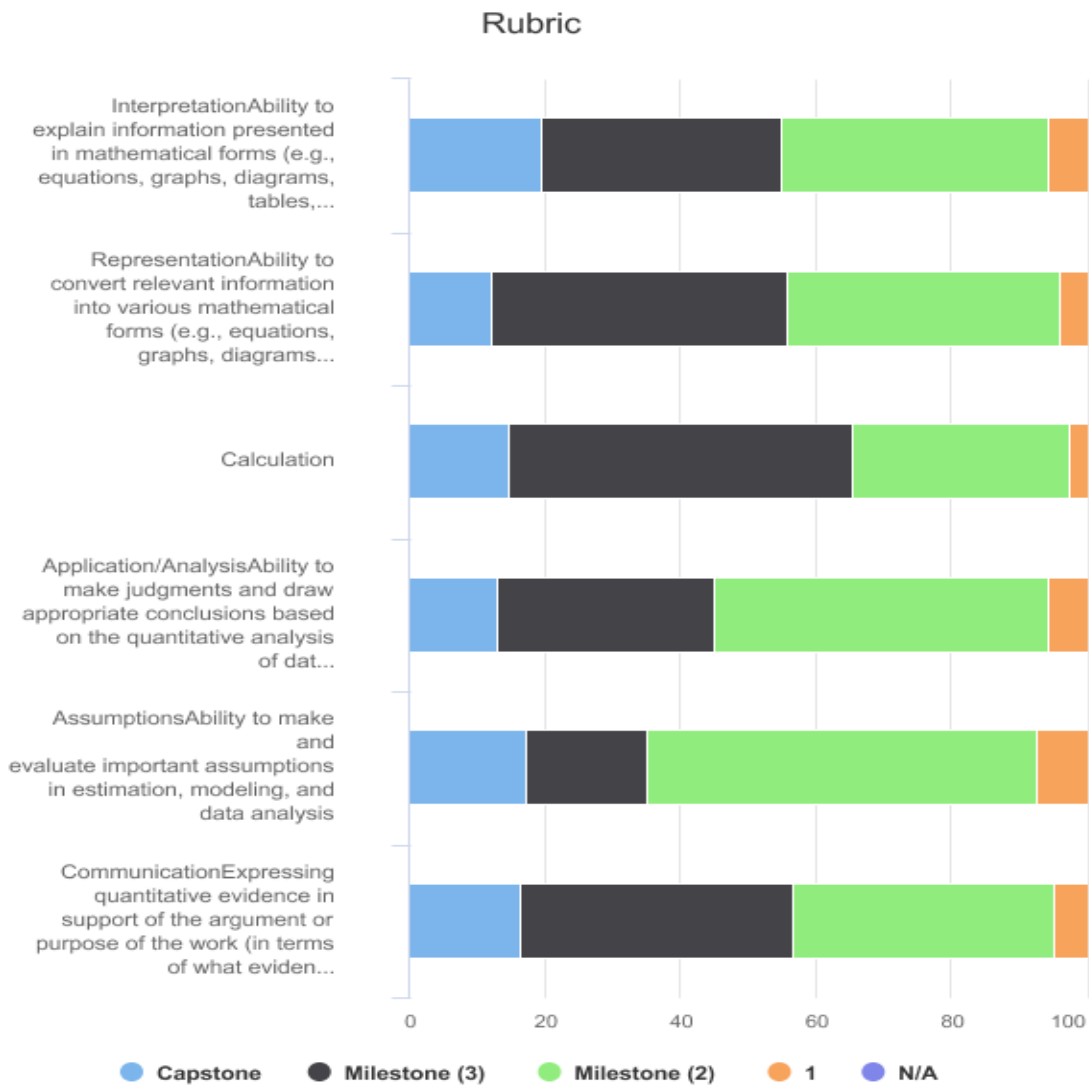
The committee elected to assess Quantitative Reasoning this year. As in previous years, we first determined which instructors had eligible students in their classes (students who had completed at least 45 credits prior to the beginning of the semester). Next, we contacted those instructors and asked for their voluntary participation if they were assigning papers or projects requiring students to demonstrate the learning outcomes defined by the VALUE rubric for Quantitative Literacy. Instructors who agreed to participate were contacted again later in the semester, reminding them to include a TK-20 link for collecting products or to forward clean copies of the designated students' work for assessment.

Ultimately five instructors participated in the fall semester, with 22 student artifacts collected; nine faculty members participated in the spring semester, with 101 student artifacts collected.

The rating process itself was conducted entirely through TK20 with 4 raters, all of whom were faculty with an expertise in Quantitative Reasoning. Two pools of artifacts were created and 2 raters were assigned to rate each pool. The chart and graph below display the results.

Category	4	3	2	1	Average
Interpretation	20%	35%	39%	6%	2.69
Representation	12%	43%	40%	4%	2.64
Calculation	14%	51%	32%	2%	2.78
Application	13%	32%	49%	6%	2.52

Assumptions	17%	18%	57%	7%	2.45
Communication	16%	40%	39%	5%	2.68



Over 90% of students scored at milestone 2 or above in each category. Our last assessment of Quantitative Reasoning took place in 2012-13. However, a detailed comparison of the results is not possible since artifacts were rated on a 5-point scale then, instead of the 4-point scale used this year. In general terms students were strongest in calculation and weakest in understanding assumptions in 2012-13, and the same is true in 2017-18.

Faculty raters noted a couple of concerns: first, the pool of artifacts was small; and second, many of the assignments given to students did not align well with the AAC&U rubric used to assess the artifacts. The scorers recommended more deliberate outreach to faculty in the area of assignment design.

TK-20 Software

The software program piloted in 2016-17 eased the collection process in 2017-18. While some instructors prefer to submit student artifacts on paper or via other electronic avenues, several faculty members elected to have students upload artifacts directly through a link in Blackboard. Beyond institutional assessment, several departments have used TK20 for various course and departmental assessment processes:

English: English Composition 101

Academic Preparation: Reading, Writing and Reasoning, and College Reading

Criminal Justice: Introduction to Criminal Justice 101, and the Criminal Justice Internship class

Sociology: Introduction to Sociology

Business: Business Law

Science: Biology

The tools for juried assessment were utilized by Criminal Justice and Sociology, and for the English 101 portfolio evaluation. In total, 1097 student assignments were submitted via TK-20 in FA17 and 478 in SP18 for various assessment purposes. In addition, TK-20 is being used by the Assessment Center to distribute student writing placement tests to faculty readers throughout the year. This has proven to be an efficient method for evaluating writing samples, decreasing the time necessary for delivering placement results to students and advisors.

Assessment Day 2017

The Assessment of Student Learning Committee helps promote awareness and participation in assessment by playing an integral role in Assessment Day. This year Assessment Day was held on Friday, October 27th, when classes were suspended so that all faculty members could participate. A one-hour opening

keynote address entitled ***Faculty Leadership in Assessment - Why it matters*** was presented by Dr. Mark Nicholas, Executive Director of Institutional Assessment at Framingham State University. He was accompanied by two faculty colleagues who play leadership roles in assessment at FSU. The presentation was followed by a poster session featuring NECC programs and their accomplishments in assessment. Since one goal of Assessment Day is to allow time for cohorts of faculty to work together on various aspects of assessment, afternoon breakout sessions were planned for department, program, and institution-level projects.

Once again our follow-up survey indicated that faculty felt the program and discussion provided by Assessment Day were valuable. Over 90% of those responding to the survey indicated that they gained new insights and found the information useful. See results below:

