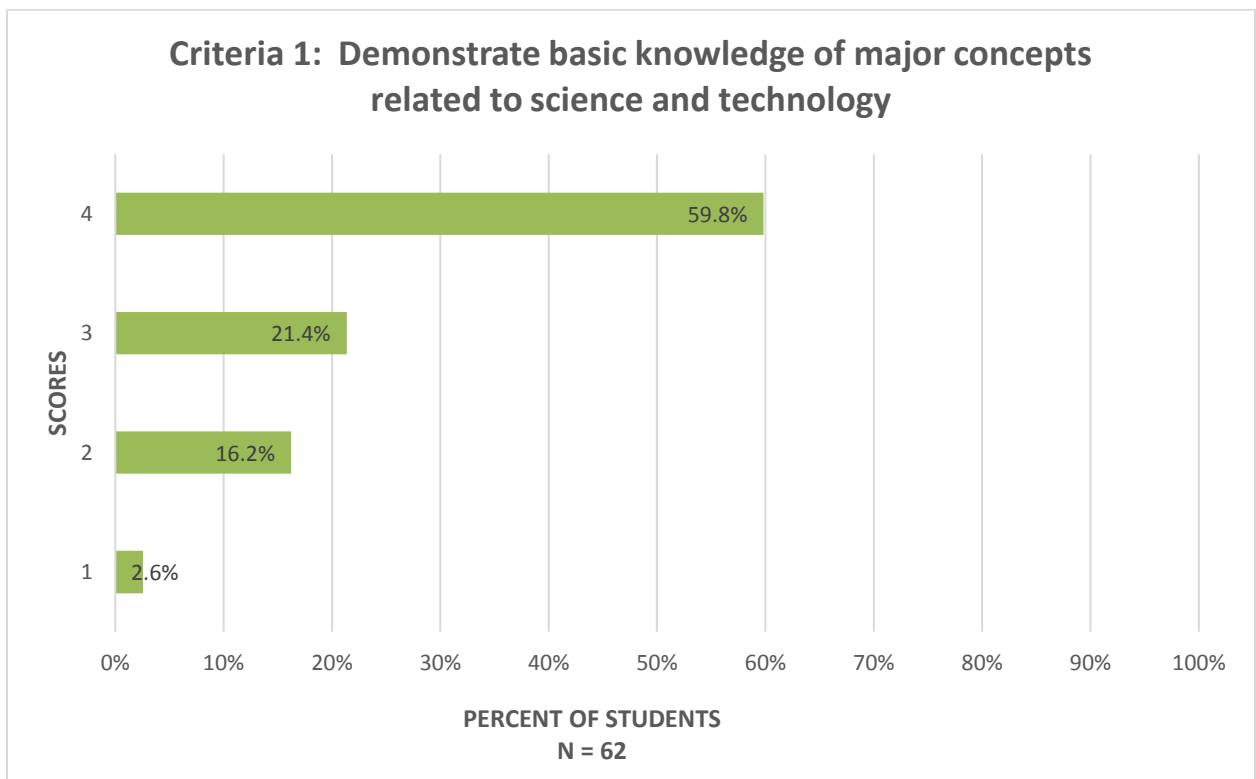
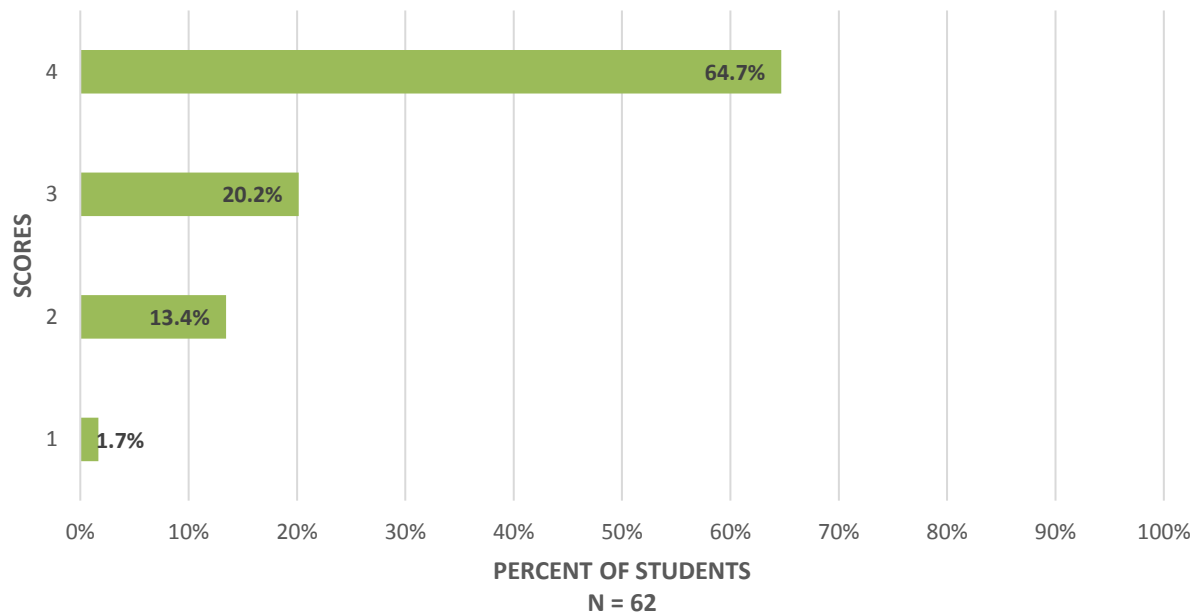


Science & Technology 2016 - 2017

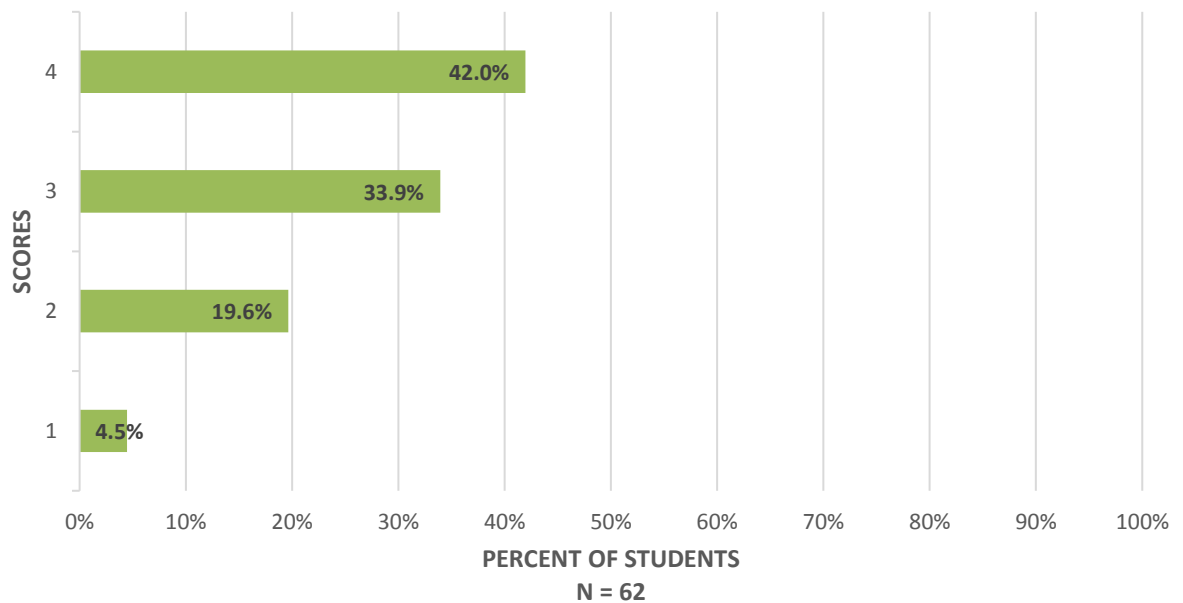
The committee conducted its first institutional assessment of our Science & Technology core skill. The new [rubric](#) was sent to faculty in SP16 in order to encourage their inclusion of assignments in AY16-17 that would elicit the criteria. Because we were relying on a fairly small group of faculty, primarily from the sciences and health programs, the committee was pleased that 62 student artifacts were submitted for assessment. Three faculty, two from the sciences and one from the health sciences, acted as raters. Each student artifact was read twice, and rated on a scale of 1 - 4. N/A was used when a criteria could not be rated. The charts below show scores as averaged from both raters.

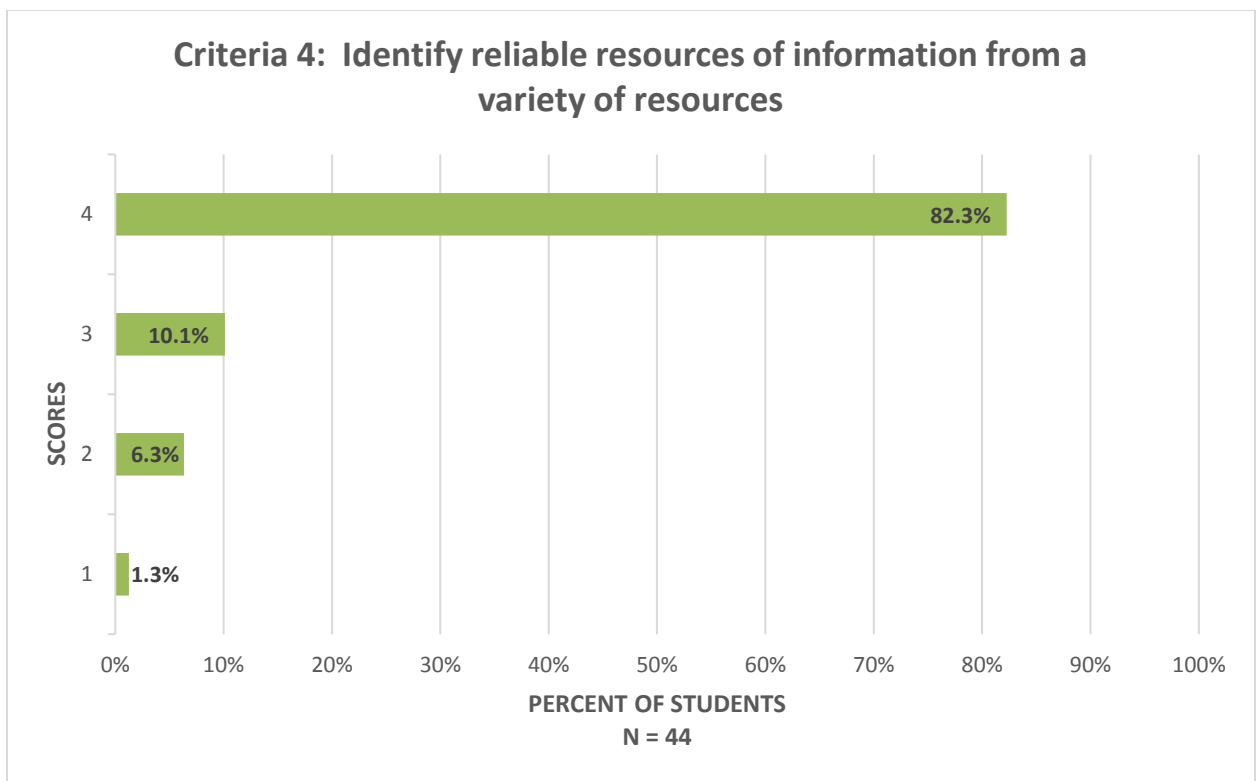


Criteria 2: Critically read, evaluate and interpret research findings and/or theories and draw reasonable conclusions

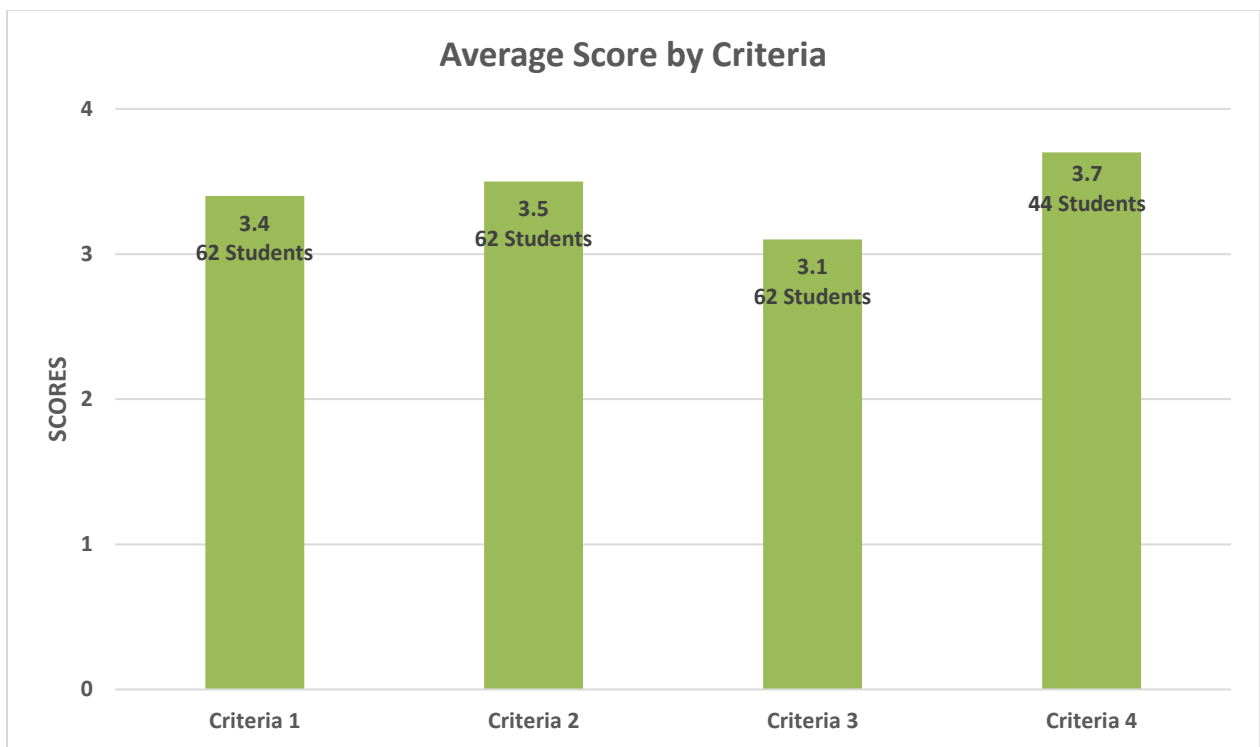


Criteria 3: Transfer, adapt, and apply prior knowledge to science and technology related issues in order to develop a new understanding





It should be noted that the number of students rated in Criteria 4 is much lower than the total number of students assessed. This is because raters were unable to discern whether or not students could perform the designated task. The scores reported (above) are based on percentages calculated *excluding* the N/A responses. Raters gave the N/A response 36% of the time for this criteria. Their comments indicated that this was often due to a lack of specificity in the accompanying assignment, an important element of feedback for our faculty as they refine their assignments in the future.



New Evaluation Process – This year NECC took a big leap forward by purchasing a new software package, TK20, to utilize for institutional and program assessment. Implementing the software required a good deal of start-up work for MIS and CIT, in terms of integrating the program with our existing software (ie., Banner and Blackboard), and in terms of training faculty and administrative staff to use it. With that accomplished, the college has expanded its capacity to gather student products, distribute them, and track them in a variety of applicable pools. For example, the same artifact may be appropriate for assessment at the departmental, programmatic and institutional levels. The software is also equipped to enhance planning and to facilitate juried assessment.

One of our priorities in choosing a software package was its ease of use for faculty. The committee hopes to garner larger numbers of student artifacts for assessment because TK20 integrates seamlessly into Blackboard. Essentially, once a faculty member has agreed to participate in institutional assessment, s/he will simply need to identify or designate the assignment which elicits the criteria specified on the assigned rubric. Student work can then be submitted to the instructor for grading, and simultaneously pulled into the assessment pool. Our traditional means of collecting student products from faculty will continue, as well, since not all faculty use Blackboard to supplement their classroom teaching.

In our AY16-17 institutional assessment process, raters were able to access TK20 remotely and rate artifacts on their own schedule, a much-appreciated feature. One rater wrote: "The process was much easier than the face-to-face assessments I've done - probably because there was no arguing over the details." This comment highlights both the positive and negative aspects of that

particular attribute. On one hand, ratings are likely to remain “cleaner” if they are not subject to a lot of discussion; on the other hand, arguing over details can be an enlightening, if difficult, process for faculty. In general, however, the software is expanding our assessment capacity at all levels and simplifying our collection of data.

Next Institutional Assessment – The committee has designated Quantitative Reasoning as the Core Academic Skill to be assessed in AY17-18. It was last assessed in 2012-13. A workshop was offered for faculty on May 17th, to help them understand the QR rubric and to help them brainstorm ways to include QR in their courses across the disciplines.

The committee is investigating more efficient and effective models for conducting institutional assessment. For example, if we did not adhere to the 45-credit limiter used by the MSC and instead used artifacts from *all* the students in participating classes, we could greatly increase the pool of products for assessment. However, since this model would focus more on *specific classes* teaching QR, careful attention in gathering artifacts and reporting scores would be essential in order to ensure that individual instructors could not be identified or singled out. The committee will explore the advantages and disadvantages of this model in early FA17.

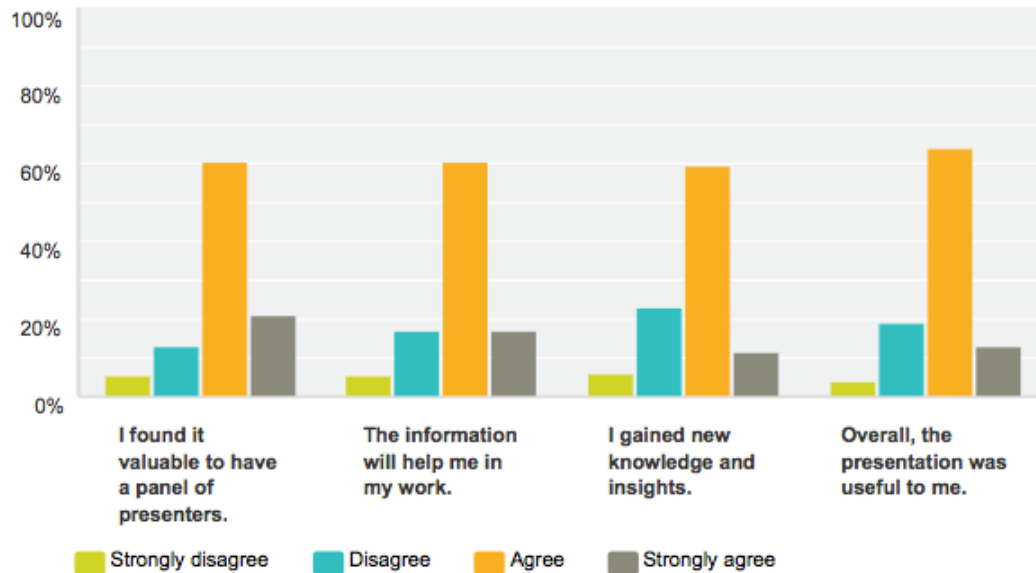
Assessment Day FA16

The Assessment of Student Learning Committee helps promote awareness and participation in assessment by playing an integral role in our now-annual Assessment Day. This year Assessment Day was held on Friday, October 28th, when classes were suspended so that all faculty members could participate. The goal of the event is to allow time for cohorts of faculty to plan, implement, and/or evaluate diverse assessment projects relevant to their department, to their program, or to the institution. A one-hour opening session, led by a panel of 4 NECC faculty members, discussed various aspects of student expectations, including how faculty expectations impact students and how student expectations impact their success. Subsequent one and two-hour sessions allowed smaller working groups to focus on specific projects.

Once again our follow-up survey indicated that faculty felt the program and discussion provided by Assessment Day were valuable. Over 85% of those responding to the survey indicated that they gained new insights from their colleagues and that the information will help them with their work. See full results below.

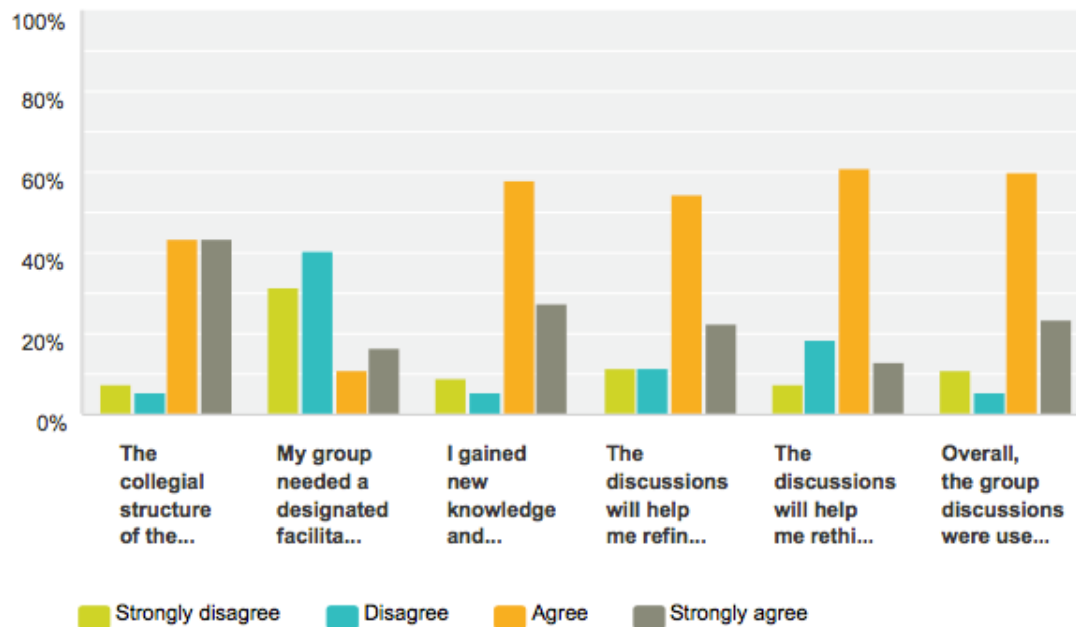
Q1 Opening Session

Answered: 53 Skipped: 2



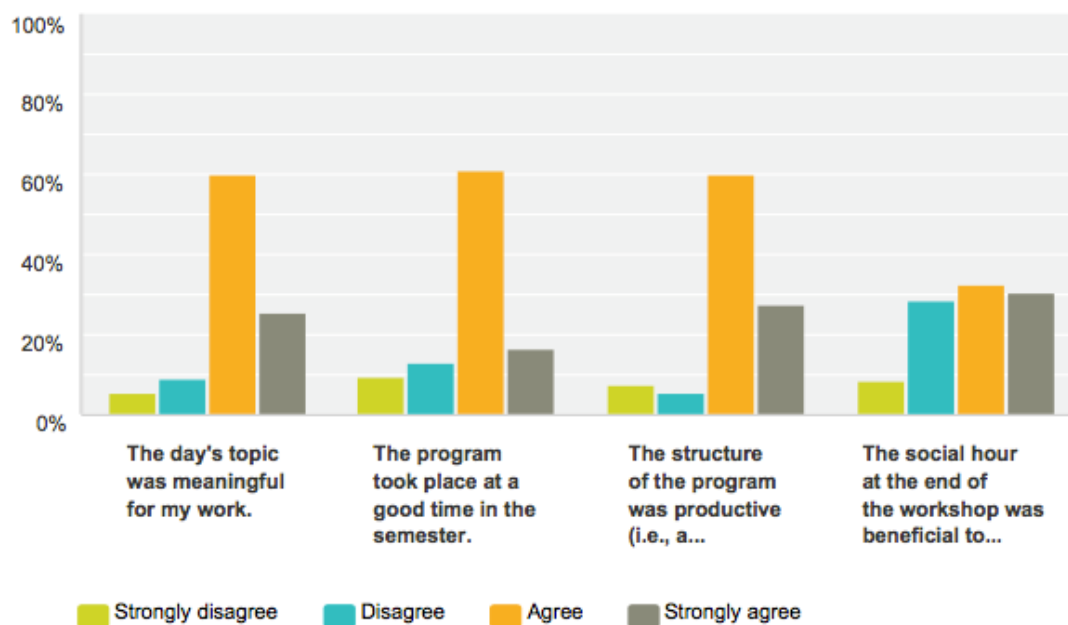
Q2 Group Discussions

Answered: 55 Skipped: 0



Q3 Overall Professional Day

Answered: 55 Skipped: 0



Summary

- Collection of artifacts for the Multi-State Collaborative increased by over 50% from 2015-16
- NECC students are on par in both Writing and Critical Thinking with students at MSC participating 2-year institutions
- AY2016-17 Institutional Assessment revealed that students averaged above a 3.0 in all criteria for Science & Technology
- TK20 software was successful in simplifying and streamlining the assessment process
- Assessment Day is seen as valuable work time by 85% of faculty responders

Recommendations

There is some indication that future participation in the Multi-State Collaborative project will come at some expense. The preliminary results from AY15-16 made us question whether the time and energy required for the MSC yields enough valuable information. For example, the data showed that of 123 Written Communication artifacts submitted to the MSC project by Massachusetts 2-year institutions, 88 came from NECC. Do the results, then, provide us with a valid comparison? If a significant financial obligation is required, the committee recommends suspending, at least temporarily, our participation so that we can focus our limited resources and energy on local assessments.