

Undergraduate Outcomes Assessment Committee, Minutes #4, Monday, November 26, 2012, 2:00-3:00 pm, Taylor Room, Campus Center

Present: Peter Hansen (Chair), Dean Art Heinricher, Nancy Bezies (SGA), Chrysanthe Demetry (Morgan Teaching & Learning Center), Neil Heffernan, and Satya Shivkumar (acting secretary)

Chair Peter Hansen called the meeting to order at 2:00 pm.

1. Acceptance of the Minutes of Meeting #3 held on 11/12/2012.

Some changes were made to the minutes of the meeting on 11/12/2012 and it was approved.

2. NEASC Final Report on Reaccreditation

Peter Hansen distributed the NEASC Final Report which continued WPI's reaccreditation. WPI was commended on many of its achievements. NEASC was pleased with WPI's effective assessment practices for the three capstone projects. The final report will be made available to the general faculty after review by the administration.

The report outlined five items to be addressed by WPI in its fifth-year interim report by Fall 2016. Of these, #3 and #4 are closely related to the work of this committee.

3. revising the student course report to accurately estimate time on task;
4. systematically using the Great Problems Seminars and Major Qualifying Project to assess student achievement and using the results to improve academic programming;

The report noted UOAC's concern that existing student course reports may have underestimated student's time on task. Dean Heinricher reported that a new version of the student course report will be used at the end of Term C-2013.

NEASC was pleased to learn that the Great Problems Seminars were designed to introduce project experiences in the first year and that learning outcomes were being developed.

NEASC also noted with favor that the MQP is a capstone requirement for students in every discipline. However, NEASC was concerned that assessment practices across departments were inconsistent in the review and analysis of results.

Further discussion focused on developing a more consistent assessment of the MQP across all departments. In addition, some discussion concerned the Humanities and Arts Requirement, which was not mentioned in the NEASC final report, and the broader implications for revision of the Assessment Plan for Institutional Learning Outcomes:

- a) The MQP is the capstone experience completed by every student in their senior year: therefore, the assessment of MQP learning outcomes deserves the highest priority of UOAC and all departments and programs as the main source for summative assessment of undergraduate learning outcomes.
- b) The learning outcomes of the IQP and Humanities and Arts Requirement should be assessed at regular intervals for their own sake; in addition, the assessment of learning outcomes in those requirements indicates formative progress toward institutional learning outcomes. The goals of these requirements are mapped to one another and the assessment of learning outcomes should be coordinated.
- c) Dean Heinricher handed out copies of the approved undergraduate learning outcomes, the MQP learning outcomes, the IQP learning outcomes, and an example of program learning outcomes from Biomedical Engineering.
- d) As per the Assessment Plan Matrix, MQP evaluation is scheduled to be conducted every 3 years, but the last one used in the UOAC matrix was conducted in 2006.
- e) Dean Heinricher mentioned that in some departments, 2 or 3 faculty members meet jointly in the summer to review all MQP's, or a random sample.
- f) As an example, some aspects of the MQP review in Mechanical Engineering were discussed; they indicate challenges in writing, design, computer skills and presentation and poster skills.

- g) It was suggested that UOAC could facilitate the development of campus-wide assessment formats. It might be possible to develop an institutional template for MQP assessment. This could contain a set of core questions common to all MQP reviews, with provisions for each department or program to add questions or criteria to tailor the review to their purposes. Such a shared template could provide more useful data for institutional assessment of our undergraduate learning outcomes.
- h) Since a campus-wide assessment methodology exists for the IQP, similar techniques could be adopted for assessment of other requirements.
- i) One problem with the existing Matrix is that certain outcomes are demonstrated merely by the fact of graduation. If you complete an MQP, then you demonstrated integrating multiple sources. But this criterion could be assessed not as yes/no, but rather as how well. Assessment of MQPs by faculty and by students themselves could be done more effectively.
- j) Student surveys, such as the recently-approved MQP survey or the IQP student survey, could provide additional sources of information.
- k) It was noted that NEASC asked for an update concerning the Great Problem Seminars, but they are not a degree requirement.
- l) The Humanities and Arts Department is discussing rubrics to assess projects completed in all Inquiry Seminars and Practicums. The HUA requirement is completed in diverse formats including research seminars, performance practicums, and a sequence of courses in foreign languages. The goals of the requirement are already mapped to the undergraduate learning outcomes, and a set of shared HUA learning outcomes needs to be developed and assessed.
- m) A common template to assess learning outcomes in the HUA Requirement could be helpful just as a common template for MQP surveys responds to the challenge posed by the diversity of MQPs across campus: a template for HUA assessment could include core questions mapped to undergraduate learning outcomes along with provision for a significant set of supplemental questions specific to the area of the final seminar, practicum, or course in foreign languages.
- n) Such an assessment rubric for the HUA Requirement could be developed and reviewed periodically. This rubric could inform new student surveys at the end of the requirement (such as surveys that students complete when they submit the MQP or IQP) as well as reviews conducted by faculty.
- o) The committee discussed ways to facilitate further discussion of the Humanities and Arts Requirement. Dean Heinricher and Peter Hansen indicated they will discuss these issues with the department head.
- p) For basic math skills—another of our undergraduate learning outcomes—it was also mentioned that the Math department has been conducting basic skills test for the past 5 to 6 years. It was indicated that these results can be correlated with student inputs in other surveys.

The committee will meet again on December 3 at 2 pm.

The meeting was adjourned at 3:00 p.m.

Respectfully submitted,
Satya Shivkumar, acting secretary
Mechanical Engineering