

Preparing for Round Two of the Quadrennial Review of General Education Courses

The General Education Committee is three-quarters of the way through the first round of the quadrennial review (QR) of General Education (GE) courses. The systematic assessment of performance on student learning outcomes in the GE courses is a new effort at A-State, and the work thus far has certainly been a learning experience for members of the GEC and, we expect, for departments which offer GE courses. Even with hiccups in the first round of the QR, the GEC believes that departments offering GE courses and the committee itself are poised to make QRII an easier and even more productive exercise.

To that end, the GEC calls on all departments offering GE courses, with the exceptions of Biological Sciences and Chemistry & Physics, to submit a document detailing their assessment plans for QRII by 25 January 2016; the GE courses offered by Biological Sciences and Chemistry & Physics are being reviewed beginning this fall, and so their plans for QRII will be due by 18 April 2016.

While the GEC recognizes that departments are burdened with lots of report-writing, we believe that, based on the QRI exchanges the GEC has had with individual departments, there is a substantial understanding of what must be done for an effective assessment of the GE curriculum. As such, by referring back to the QRI documents exchanged between the GEC and itself—the result in every case having been a clear direction of how departments should go about building on their first round assessments—it should be relatively easy for a department to prepare the planning document. (Departments which did not keep documents from the first round can ask for them from Ms. Luna Unnold, lunnold@astate.edu, in the Office of the Provost). Moreover, below, we list a series of points that the GEC, having learned much from the first round of the QR, wishes to share for the benefit of GE-offering departments. Many of these points address elements that were problematic for the assessment efforts of one or, more often, several departments.

We sincerely believe that a good-faith effort on the part of departments to carefully and fully lay out their assessment plans, along with a thoughtful and timely review with feedback from the GEC, will smooth the process of QRII, reduce frustrations all way around, and enhance the university's assessment of the GE program.

Technical Assistance

The call for QRII planning documents provides a fitting moment to remind departments of the services of the Office of Assessment (972.2989; Dr. Summer Deprow, Director, and Dr. Topeka Small, Assistant Director). That office is not only responsible for liaising with and writing reports for the Higher Learning Commission and facilitating student learning at A-State, but also stands to assist departments with their assessment efforts. That office cannot and will not do assessments for departments, but is prepared to help (or find help for) departments with problems in assessment instrument design, data collection and storage, data analysis, and utilizing assessment results for improved teaching and learning.

Assessment Issues

In this section, we identify critical issues that departments should think over carefully as they plan for QRII. While we do not believe we are qualified to tell departments exactly how they should go about assessing their courses, there are principles of good practice that must be recognized and incorporated in assessment activities.

Relevance. Each GE course is associated with one of five GE goals, and each goal has one or two specific student learning outcomes. An assessment of a GE course must focus, laser-like, on **one** outcome and the assessment instrument must be clearly and tightly related to that outcome.¹ The validity of assessment items, that is the correspondence between the assessment question(s) and the designated outcome, was the greatest source of problems in QRI. An instrument that calls for recall of course material is not an assessment of student learning of the GE outcomes. A review of the [goals and outcomes](#) makes clear that students are expected to be able to apply what they have learned in various courses to demonstrate, for example, that they can communicate effectively (by being able to construct and deliver a well-organized, logical, and informative oral or written presentation, accurately documented, that demonstrates proficiency in standard American English) or, to give another example, that they have developed an appreciation of the arts and humanities (by being able to Interpret works of fine arts or literature). An assessment in the area of effective communications that does not require production of a presentation scored on those attributes is not a valid measure of the outcome, nor is an instrument in the arts or humanities which, given the interpretation outcome, does not require students to interpret a work. We are asking departments to explicitly justify why they believe their assessment instruments capture the outcome of interest.

In the course of their assessment activities, departments may well wish to include other items which test students' knowledge on various matters. When it comes to reporting GE assessment results, the GEC is only interested in those items which directly bear on the designated outcome. Items which are not relevant to the outcome should be set aside from the report of GE assessment results.

Outcomes. At the end of any GE course, the expectation is that the course will produce for most if not all students a certain learning outcome. This is what the GE assessment is all about, measuring the degree to which students have achieved a certain level of skill with respect to that outcome. Accordingly, a pretest-posttest design is not required by the GEC. Rather, our attention is focused on the summative results of a course. While departments may find a pretest-posttest design useful for their own purposes (perhaps to identify where and how to introduce pedagogical changes), this should not distract from the GEC focus on student outcomes. We all expect students to show gains in

¹ The original intent was that where a course has two student learning outcomes the department would be responsible for assessing performance on both outcomes. However, the GEC agreed that this would not be required for QRI. The GEC has decided to extend this into QRII, and so departments with courses marked by two outcomes are instructed to assess only one.

knowledge and skill over the course of the semester, but the question at issue is the degree to which students at the end have a certain level of competency with respect to the designated student learning outcome. Thus, the question is not how much better in biology or physics students are after 14 weeks of instruction but what proportion of them understand concepts of science as they apply to contemporary issues.

Format. Departments might assess student learning any number of ways. The GEC does not have a preference as to format but is only concerned that the format chosen works to generate evidence of student learning with respect to the indicated outcome. Of the assessments reviewed thus far, the GEC has seen a mix of multiple choice or “objective” questions and open-ended short answer or longer essay items. There are advantages to one format or another, but each has its own set of problems.

So-called “objective” items are easily and cheaply scored but it is a difficult task to write good questions, especially so when one is trying measure a learning outcome rather than a fact or a simple skill. The GEC has frequently seen purely factual questions or ones that ask for definitions of terms or that are nominal in the sense that they call on students to associate a particular label with some phenomenon; such assessments are not adequate. The student learning outcomes are necessarily vaguer and more ambitious phenomena (for example, demonstrating the ability to explain the processes and effects of individual and group behavior) than recalling facts or performing specific operations, and so it will be necessary when choosing to use “objective” items to be enterprising in crafting good instruments. A good “objective” instrument will include a good number of items and truly challenging ones; we would also like to encourage departments to include items of varying difficulty so as to be able make more sophisticated appraisals of student learning.

Good *open-ended assessments* may be easier to design and may yield more nuanced or sensitive evidence of students’ abilities, but they involve higher scoring costs.² Whether they be short-answer items or several-page essays, it is vital that a carefully designed rubric is developed and that graders are well-trained in its use. The GEC strongly prefers that two graders independently score each artifact and that there be a test for inter-coder reliability (with corrective action when this is low). If it is infeasible to double-code open-ended items, a fallback position is to have someone other than the instructor grade the works produced in a section; at the very least, an instructor grading his or her own students should do so “blind,” hiding the students’ names when doing the reading.

² There are creative ways to reduce the costs of administering open-ended assessments. Grading can be done by graduate students who have the requisite knowledge of the substance of the prompt, who have been well-trained in the use of the rubric, and who are effectively supervised; it is even possible that, with the same conditions, advanced and talented upper-level students could be employed for the assignment. Alternatively, as is already being done by one department, an assessment task can given to all students in all sections in a particular course, work that is submitted to a student’s instructor for a grade but that is simultaneously deposited in a repository; of all the works collected in the repository, some are selected by a sampling procedure, and those selected works are graded independently and blindly by two graders with a check for inter-coder reliability.

Benchmark. As departments develop their instruments, they should devote some time and care to specify what scores they expect their students to achieve. While the GEC did not initially ask for a benchmark, it found that not having one made it very difficult to make real sense of reported results. With a given benchmark, the GEC will be better able to appreciate department's assessment results. Even more important, the GEC believes that departmental assessment efforts will be improved if they have established an *a priori* benchmark so that the faculty will have an interpretive lens for taking in their results, identifying areas of weak student performance, charting ways to improve student learning, and evaluating these changes. The GEC has no intention of using departmentally-generated benchmarks for assigning pass/fail grades to GE courses but instead sees them as a way to improve assessment efforts.

Data collection. The GEC is responsible for assessing all GE courses that are considered A-State-Jonesboro courses, where an A-State-Jonesboro course is defined as one in which an A-State-Jonesboro department chair (1) selects and hires and/or (2) certifies and approves the instructor. This rule applies to all courses offered on the Jonesboro and Paragould campuses as well as concurrent courses and, equally, applies to all course delivery modes.³ Note that many of these courses are offered in the fall and spring semesters (over 14 weeks or in shorter or accelerated blocks), in the two summer terms, and may be offered at other times; no matter when they are offered, they are GE courses and are equally subject to assessment requirements.

The GEC does not require departments to assess learning by every student in every term but does expect departments to demonstrate that they have used a carefully designed data accumulation procedure that is intended maximize the likelihood of a representative sample of student learning assessments. Data collection methods should be developed in such a way as to avoid any systematic bias with respect to term of offering, mode of delivery, instructor characteristics, or other factor that might reasonably be expected to skew results.

Assessment data may be collected during the course of a final examination, but it is not necessary to do so, nor is it necessary to administer an assessment at the very end of the semester. Obviously, however, assessment should occur after the pertinent instructional material has been delivered.

In their QRII planning reports, departments should estimate the number of observations their collection procedures will yield. For example, if a department randomly samples 30% of the assessment results from 14 sections (randomly selected) and sections average 27 enrollees, the procedure should net 113 observations $[(.3)(14*27)=113.4]$.

Results. The GEC hopes to see increasingly sophisticated analyses of assessment results, going beyond a simple summary of aggregate performance. Where appropriate, departments should carry out item analyses. Similarly, when it is possible to investigate how students perform with respect to increasingly challenging assessment tasks, that information adds to an understanding of how GE courses contribute to student learning. Moreover, the GEC encourages departments, perhaps with the help of the Assessment Office, to look at factors associated with variations in performance. These might include mode of delivery, location of instruction (on-campus as opposed to off), term and time of day,

³ This definition was adopted by the GEC on 20 March 2014 in consultation with the Office of the Provost and the Office of the Registrar.

differences in pedagogy if they can be identified, student characteristics (such as class grade, GPA, hours completed, late registration, major field of study, self-reports of interest in the course and study habits, and such). On the other hand, assessment reports should obscure section numbers and faculty names.

“Closing the loop”. As a general matter, there was only limited effective work by departments in QRI to make use of their own assessment data. As we go forward, the GEC will expect more demonstrable efforts by departments themselves to critically evaluate assessment results, consider alternative strategies for collective changes, and implement these changes across all sections. This means that departments should share assessment results with all instructors, engage them in developing shared approaches to improving learning, and report on these activities.

Syllabi issues. The Assessment Office is in the process of developing a much better system for collecting course syllabi which must be submitted for the development of a repository for the Higher Learning Commission. The GEC will not include a call for syllabi in QRII but will have a report from that office on the frequency with which sections have all the requisite information--a description of the course as it appears in the current *Bulletin*, the GE goal for the course, and the GE outcome(s). Departments are advised to develop a template for this material to be used (near the head) on syllabi for all sections.

Specification of core course content. The GEC recognizes and appreciates that effective teaching in different sections of a given course means that material will be presented variably by instructors who draw on their particular specialties, interests, and skills. Nonetheless, it is expected that a multi-section course with a common number, title, and description will include core content that is covered in all sections. An item in QRI asked for an elaboration of that common core content, and most departments were able to respond well to that question. It would be a good idea for departments, as they prepare for QRII, to reaffirm instructors' understandings on this issue.

Timetable for QRII. Reports in electronic form for QRII will be due on the first Monday of October according to the following schedule

- 2016: Goals of communicating effectively (ENG 1003, ENG 1013, SCOM 1203) & using mathematics (MATH 1023, MATH 1043, MATH 1054)
- 2017: Goal of developing a life-long appreciation of the arts and humanities (ART 2503, MUS 2503, THEA 2503, ENG 2003, ENG 2013, PHIL 1103)
- 2018: Goal of developing a strong foundation in the social sciences (ANTH 2223, CMAC 1003, ECON 2313, ECON 2333, GEOG 2613, HIST1013, HIST 1023, HIST 2763, HIST 2773, POSC 1003, POSC 2103, PSY 2013, SOC 2213)
- 2019: Goal of using science to accomplish common purposes (BIO 2013/2011, BIO 1003/1001, BIO 1033/1001, BIO 1063/1001, BIO 2103/2101, BIO 2203/2201, CHEM 1013/1011, CHEM 1043/1041, GEOL 1003/1001, PHSC 1014, PHSC 1203/1201, PHYS 1103/1101, PHYS 2034, PHYC 2054)

Items for QRII Planning Report

Planning reports for QRII, due as noted above, should include the following materials

- Identification of outcome to be assessed
- Assessment instrument
- Justification of the assessment instrument as a valid measure of the chosen outcome
- Specification of a benchmark (the criterion which will discriminate between students who have achieved the learning outcome and those who have not)
- Data collection procedure
- Number of observations expected from data collection

The GEC thanks you and your faculty for their work on this important task.