

A Proposal for Assessing General Education at NC State

Presented to the Council on Undergraduate Education

On April 19, 2002 (Revised August 23, 2002)

Executive Summary

NC State University is engaged in a revitalized process of academic program review, including a review of general education. The Council on Undergraduate Education (CUE) is charged with the task of "advising the Vice Provost for Undergraduate Affairs on procedures for evaluating the effectiveness of general education and the General Education Requirements (GERs) and related policies as they are implemented and for initiating proposals for policy revisions." This proposal is offered in the spirit of that charge.

It recommends that the CUE adopt a plan that implements assessment of general education on two levels: (1) the university level: the CUE would generate objectives and apply those objectives as criteria to courses seeking to be included in particular categories of the GERs; and (2) the academic program level: each program with courses in the GERs would assess those courses according to whether or not students were attaining learning outcomes that meet the objectives. This approach to assessment will provide a viable means by which the CUE can lead NC State in the process of continually improving its students' general education.

Problem Statement

NC State has initiated a long-term, campus-wide project of program assessment aimed at the continuous improvement of education and services for students. The GERs play a crucial role in the education of every undergraduate, ensuring that each student receives a broad range of learning experiences that can serve as the foundation both for advanced work in the student's discipline and for a lifetime of further learning and informed participation in the communities in which they will live.

However, such a broad program presents considerable challenges for meaningful assessment because it involves scores of courses taught by hundreds of faculty from dozens of widely diverse academic programs, all of which are administered by the already-overworked faculty members of the CUE. Despite these challenges, it is the responsibility of the CUE to determine how well the GERs are achieving the mission of general education at NC State and to guide the continuous improvement of the general education program. This proposal offers an effective plan for attaining that end.

Criteria for Effective Assessment of General Education at NC State

An effective plan for assessing a program in general education must meet the following criteria:

1. It must be meaningful. *Meaningful* in this case describes an assessment plan that offers the potential for viable improvement in general education; that is, it must provide both the data and the means appropriate for improving the program.
2. It must be located in the institutional unit(s) providing the most effective and appropriate administration of assessment. Where does responsibility for assessing general education lie, in the CUE or in each academic program represented within the GERs? A good plan will establish a locus of assessment that offers the best possibility for continual improvement of general education.
3. It must be based on student outcomes. The CUE's assessment plan should reflect the broader assessment initiative of the university, particularly its emphasis on defining and measuring success according to student outcomes.
4. It must unify both the individual GER categories and the full general education program. Students and teachers involved in general education courses should have a strong sense that they are participating in a coherent program in general education; that is, they should be able to discern the common purpose and features that define both a category of courses within the GERs and general education itself. A good plan will create greater consistency within the categories and at the same time create a greater sense of unity in formal general education at the university.
5. It must provide a sound foundation for determining which courses belong in a particular category of the GERs and which do not. There have been numerous complaints that certain courses presently listed in the GERs do not belong in a particular category. There have been other complaints that some courses have been unfairly excluded from the GERs. As a corollary to the consistency criterion, then, a good plan should also provide a basis for inclusion of courses within the GER categories that relies on more than course prefixes and university politics.

Overview of Proposed Assessment Plan

The two critical elements in this assessment plan are (1) the *general education objectives* for each category of the GERs and (2) the *learning outcomes* for each course in the GERs, outcomes designed to enable students to meet the category objectives.

1. The proposed general education objectives will be broad statements describing what each course in a particular category of the GERs should, at a minimum, enable students to learn. One problem with the present GER rationales is that they are sometimes unrealistic. For example, someone in the Department of Mathematics pointed out that the goals listed in that category could be achieved by only two of the twenty courses listed in the mathematics GERs. It's not clear, then, on what basis the other courses have been included in that category. In contrast, the proposed objectives would map out a set of broad goals that *every* course in a GER category should meet. For example, here is a set of objectives

for the mathematics GERs that has been suggested as a replacement for the present rationale:

Each course within the General Education Requirements in Mathematical Sciences will provide instruction and guidance to help students to:

1. improve and refine their mathematical problem-solving abilities and
2. develop the ability to communicate mathematically and
3. develop their logical reasoning skills

Though each course in a GER category should meet all the objectives of that category, different courses will likely have different emphases, one course focusing more on one objective, another course focusing more on another one.

It is proposed, then, that the CUE continue to take the lead in drafting the new objectives in consultation with faculty from appropriate colleges and university committees.

2. The other element critical to this plan is the learning outcomes for courses in the GERs. For a course to continue to be included in the GERs, or to be considered for inclusion, faculty responsible for that course must demonstrate that it incorporates, along with other outcomes for the course, specific learning outcomes that enable students to meet all the objectives listed for the category (though faculty are expected to meet all the objectives, they need not focus on them all equally). The course syllabus should contain both the objectives appropriate to the general education category and course-specific learning outcomes associated with those objectives.

Assessment of university general education would take place on both the university and program levels, each fully integrated into the other. On the university level, the CUE would assess each course according to one overriding criterion: the course's learning outcomes should enable students to meet the all of the category objectives stated by the CUE. (The Course Action Form would be revised so that this information would be readily available to reviewers.)

On the program level, each program would make sure that its GER courses provided for viable assessment of the learning outcomes (e.g., tests, papers, presentations, projects) associated with the general education objectives. And just as each academic program will report to the university on the outcomes-based evaluation of its majors, it should also report on the assessment of its GER offerings, describing for each course the GER objectives, the learning outcomes related to those objectives, the means of assessing the outcomes, the findings of the assessment, and any changes in course or curriculum resulting from the assessment. This proposed GER assessment process directly aligns with the academic program review process already in existence.

Evaluation of the Proposed Assessment Plan

The proposed assessment plan meets the above criteria:

1. It provides for meaningful assessment, the potential for productive improvement of the program. In terms of the effectiveness of university general education, the most important point of contact with students is the individual courses of the GERs. Yet, the CUE now has little if any influence on those courses as a part of the broader general education of NC State students. The proposal will have the effect of, first, encouraging faculty who teach those courses to teach them *as* general education courses and, second, providing the means for assessing and improving those courses *as* general education courses. This assessment is meaningful, then, because it allows for improvement of the courses within the GERs according to the criteria from the CUE.
2. It establishes effective and appropriate institutional loci of assessment. It is clear to most observers that the CUE cannot be the single locus of assessment. Not only is this an unwieldy task at such a large university, but also it is also unrealistic to conceive of the CUE as able to play a productive role in encouraging improvement of individual courses, where assessment is most meaningful. However, it is unrealistic as well to place the locus of assessment solely in the academic programs because the programs by themselves cannot be expected to be guided by the broader vision of general education.

The proposed plan offers two loci of assessment, both the CUE and the academic programs within the GERs. The CUE provides the broader vision of general education and also the necessary oversight of courses in the GERs as a way of guiding the academic programs. Its assessment concerns the inclusion of courses in the GERs, based on whether or not those courses fit that vision of general education. And the academic programs provide the implementation of that vision. Program assessment is focused on the effectiveness of its courses in helping students to achieve that broader vision.

3. It is based on student outcomes. The proposal provides a way for the general education program to adhere to the larger mission of NC State to encourage continual improvement of student education and services by tying that improvement to student outcomes. The CUE has an important influence on student outcomes by specifying the objectives that courses should meet, objectives that describe in general terms what courses should enable students to *do*. And the courses themselves assess students on the basis of particular learning outcomes derived from the objectives. Academic integrity and autonomy are maintained by allowing faculty to articulate learning outcomes as well as to choose the appropriate methods of assessing the outcomes in their courses.
4. It creates a stronger sense of unity within the GER categories and within the general education program. It is apparent that some of the GER categories are so diverse they can hardly be considered a program at all. The humanities category serves as a prime example. It contains such a wide range of descriptions in its

rationale and such disparate courses in many of its subcategories that it's difficult to discern any categorical unity.

The proposal, however, provides a way to create a much greater sense of unity. Each category (and each subcategory where necessary) will be defined by a set of objectives. Each course within that category will meet all those objectives. This would create a much-needed consistency in each of the GER categories. The syllabi for courses in each category will contain the general education objectives appropriate to that category and learning outcomes derived from those objectives. Thus, both teachers and students would be aware of the connection among courses in a category and would see more clearly how they all work together to define a coherent general education at NC State.

5. It provides a sound foundation for establishing principles of inclusion in the GERs. Because every course in the GERs must demonstrate that it offers specific learning outcomes that meet the category objectives, the proposed plan would likely reduce complaints of those who say that a course does or does not belong in the GERs. It will be the responsibility of the faculty teaching each course to demonstrate that the course deserves to be included in a category by showing that the learning outcomes meet the GER objectives. And it will be the responsibility of the CUE to certify the course on the basis of those learning outcomes, according to what the course enables students to do.

Because the proposed assessment plan meets the criteria for an effective assessment plan, it is proposed that the CUE accept this proposal.

A Proposal for Implementing Assessment of General Education at NC State

Presented to the Council on Undergraduate Education On April 19, 2002 (Revised December 18, 2002)

This proposal describes a set of steps to be taken by the CUE in implementing “A Proposal for Assessing General Education at NC State.” As a reflection of the complementary relationship of the CUE and academic programs in the assessment of general education, it also outlines corresponding responsibilities of each academic program under the proposed assessment plan.

After accepting “A Proposal for Assessing General Education at NC State,” it is recommended that the CUE adopt the following plan of action and target dates of completion. For more information, see attached General Education Assessment Timeline.

1. Prepare a formal assessment timeline outlining the complementary responsibilities of the CUE and the academic programs in the assessment of general education (target date for completion, December 2002). This timeline will describe the full implementation of GER assessment for at least a five-year period.
2. Create objectives for each category and, where necessary, subcategory of the GERs (target date for completion, December 2002). The process will involve CUE faculty members in consultation with faculty from appropriate colleges.
3. Generate a schedule for initial and periodic assessment of GER courses (target date for completion, December 2002). The CUE will decide when courses in a particular category will submit Course Action Forms to the CUE. It may be best to organize the schedule according to GER categories and the UAPR schedule of program reviews. No program will be expected to present the assessment of their GERs as a part of UAPR until Fall 2005.
4. Revise the University course action form so that it incorporates information necessary for assessing courses for the GERs (target date for completion, May 2003). This information will include the GER category, the GER objectives for that category, the course learning outcomes and their relationship to the GER objectives, and a description of assessment tools (the means of assessment to be used to measure the learning outcomes); the attached sample syllabus will display the GER objectives, course learning outcomes, and assessment instruments.
5. Disseminate information, including assessment procedure, GER objectives, and assessment schedule, to critical university committees for their response. Meet with college curriculum committees to inform them of new GER assessment and

provide training in how to evaluate new course action forms (target date for completion, May 2003).

6. Launch a pilot program for new GER assessment (target date, May 2003). Pilot teachers may come from such groups as the Hewlett Initiative and will be provided workshops on creating course learning outcomes, identifying appropriate instruments for assessing outcomes, revising syllabi, and filling out new course action forms.
7. Refine procedure to be used by the CUE for assessing course action forms and assessment results for GER courses (target date for completion, December 2003, pending approval of objectives by Vice-Provost). These procedures to be followed will include a rubric to be applied in determining whether or not courses should be included within the GERs. CUE will try out new procedure to course action forms completed by pilot group and revise accordingly.
8. Assess course action forms for new courses seeking inclusion in the GERs (target date for beginning this process is August 2003, pending timely approval of new objectives and GER assessment process).
9. Refine rubric and procedure for assessing GER assessment reports (target date, May 2004). CUE will use reports from pilot courses to aid in this process. Items contained in GER assessment reports will be similar to those UAPR reports: GER category objectives, course learning outcomes, instruments for assessing outcomes, summary of findings from GER course assessments, outline of any changes that have been or will be made to improve students' performance on GER objectives.
10. Identify faculty from August 2005 GER assessment cohort teaching GER courses and provide workshops and other resources for helping them to create course learning outcomes, identify means of assessing outcomes, and writing GER assessment reports (target date, May 2005).
11. Apply assessment procedure to reports submitted by August 2005 assessment cohort (target date, May 2005).

In addition, it is recommended that the CUE accept the following outline of responsibilities of academic programs in the proposed assessment plan:

Each academic program with courses in the GERs is responsible for:

1. Submitting revised course action forms—including the GER category objectives, the course learning outcomes and their relationship to the GER objectives, and a description of assessment tools (the means of assessment to be used to measure the learning outcomes); and an attached sample syllabus displaying the GER objectives, course learning outcomes, and assessment instruments—for each

course it seeks to have included in the GERs. The timing of the initial and subsequent periodic submissions will depend on the schedule created by the CUE.

2. Assessing its course offerings in the GERs. Each department is responsible for assessing its GER courses in terms of the student learning outcomes derived from the GER objectives. Results of this assessment should be used to improve GER courses.
3. Documenting the assessment of GER courses and the decisions made to improve the courses as a part of its periodic program assessment for the university. For each course in the GERs, the academic program will provide the GER objectives, learning outcomes related to those objectives, the means of assessing those learning outcomes in the classroom, the results of the assessment, and any changes in the course or curriculum resulting from the assessment.