This paper describes the experience of the Clemson University (South Carolina) faculty in choosing and administering a commercially available standardized test to assess general education at that institution. The paper emphasizes the importance of faculty involvement in the assessment of general education and its impact on the success of the process and the acceptance of the findings. The structure of general education at Clemson University is described as requiring students to take 38 semester hours in courses from 5 concentrations, with faculty having primary responsibility for these requirements and their evaluation. The process of selecting a standardized test, the concerns connected with that decision, and the value of using a commercial test are discussed. Also described is the assessment process itself, which involved testing random samples of the freshmen and junior classes, scoring by the testing company, and independent rating of the composition portion of the test. The use of the test results is detailed, covering the extent of dissemination of the results to students and staff, responses from students, and developments for future testing. Included are 11 references. (JB)
General Education: A Case Study

Involving Faculty in the Assessment of General Education: A Case Study

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Jean Endo
Chair and Editor
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General Education: A Case Study

Abstract

Assuring extensive faculty participation in the assessment of general education is crucial to the success of the process and acceptance of the findings. The process and timetable used at a state university are discussed. The use of a national test enabled the faculty to begin the process quickly. The results were used to foster discussion among the faculty about general education and how it should be evaluated.
Involving Faculty in the Assessment of General Education: A Case Study

In 1984 the National Institute of Education released a report, Involvement in Learning, which called upon colleges and universities to explicitly assess the impact they are having on students (NIE, 1984). As a result of that report, and others by the Association of American Colleges (1985) and the National Governors' Association (1986) national attention has been directed toward the assessment movement and toward improving the educational effectiveness of colleges and universities (Ewell & Lisensky, 1988). These concerns have caused a growing expectation of legislatures, governing boards, and academic administrators for assessment information on students' academic achievements to be made available (Warren, 1988). The results of the national trend are obvious in South Carolina in the requirement of assessment initiatives by the regional accrediting body, the Southern Association of Colleges and Schools (SACS), and the South Carolina Commission on Higher Education (CHE).

Once the requirement for assessment initiatives is set in motion, institutions are faced with at least two major decisions about an assessment program. The first regards the rationale for implementing assessment initiatives. It must be determined whether the assessment is for program improvement or simply to meet the requirements of the accrediting bodies. In our case
the truth is, of course, a little of each. However, the focus is really on program improvement and that is the only legitimate reason, from an academic perspective, for which assessment should be undertaken. The decision that program improvement is the purpose of assessment has implications for how assessment initiatives must proceed. Several authors (Halpern, 1987; Banta, 1985; Banta & Moffett, 1987) stress the importance of involving faculty in the assessment process if the efforts are to be successful. In addition, Halpern (1987) indicates that a program-improvement emphasis requires that faculty and administrators must actively use assessment information to effect change.

Once the rationale has been established for assessment activities, the institution must determine which aspects of the college experience should be assessed. Some of these decisions are in effect made by coordinating boards or accrediting bodies by virtue of their requirements. In South Carolina, for example, the CHE requires assessment in the area of general education as one of several components which it lumps under the more general category of institutional effectiveness. General education is frequently a target of assessment initiatives and has been an area requiring measurement in Tennessee since 1983 (Banta and Moffett, 1987).

If it is determined that general education will be assessed, another decision must be made regarding the most
effective and efficient way to assess that particular aspect of the college experience. Although there are several alternatives, one of the most frequently used is the commercially available standardized test. Although they do so with some reservations, Ewell and Lisensky (1988) recommend the use of a commercial test for this purpose. Generally there are three arguments for using commercially available standardized examinations; 1) ease of administration, 2) they are less open to charges of subjectivity and, 3) they provide scores which allow comparison among universities (Ewell, 1987). It was for precisely these reasons, including the requirement that general education be assessed by our CHE, that Clemson University decided to use a commercially available instrument to measure general education in 1989. The remainder of this paper is a documentation of the Clemson experience including our decision regarding which examination to use and our attempts to provide one of the major factors found by Miller (1988, p 12) to be associated with success, "appropriate faculty involvement and active participation, particularly among 'campus influentials'."

Background Information about Clemson University

Clemson University, founded in 1889, is a state-supported, land-grant institution in the northwest corner of South Carolina. At the time it undertook the evaluation process discussed in this paper, it offered the bachelor degree in 68 programs and graduate degrees in 96 areas. It had an enrollment
of 16,072 students (12,563 undergraduates) in the Fall of 1989. Approximately two-thirds of the undergraduates were residents of South Carolina and the average SAT score for the freshman class was 1025 (476 - verbal and 549 - mathematics). There were nine colleges with 27 percent of the students enrolled in Commerce and Industry and 25 percent in Engineering.

**General Education At Clemson**

The current general education requirements were instituted in 1984. They require the student to take 38 semester hours in courses from five concentrations. The concentrations and hours required are shown in Table 1. With the exception of the English composition requirement and the two-semester science requirement, students have considerable freedom in selecting courses to satisfy these requirements. For example, over 44 departments have courses listed under the applied science requirement.

Responsibility for the general education requirements and their evaluation is held by the Commission on Undergraduate Studies and the University Curriculum Committee. Membership on both committees is almost exclusively faculty.
TABLE 1. General Education Requirements at Clemson University.

<table>
<thead>
<tr>
<th>Section</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Composition and Speaking Skills</td>
<td>9 hrs.</td>
</tr>
<tr>
<td>(6 hrs. - English Composition)</td>
<td></td>
</tr>
<tr>
<td>(3 hrs. - Public Speaking or Advanced Writing)</td>
<td></td>
</tr>
<tr>
<td>B. Mathematics</td>
<td>6 hrs.</td>
</tr>
<tr>
<td>C. Science and Technology</td>
<td>11 hrs</td>
</tr>
<tr>
<td>(8 hrs. - 2-sem. sequence of science with lab)</td>
<td></td>
</tr>
<tr>
<td>(3 hrs. - applied science course)</td>
<td></td>
</tr>
<tr>
<td>D. Humanities</td>
<td>6 hrs.</td>
</tr>
<tr>
<td>E. Social Sciences</td>
<td>6 hrs.</td>
</tr>
</tbody>
</table>

Note. Courses are described in terms of semester hours.

Evaluation of General Education

There had been no formal evaluation of general education since the new requirements were instituted in 1984. A University Assessment Committee was formed in the Spring of 1989 to address two immediate concerns, the SACS self-study scheduled to begin that Fall and newly legislated state requirements to report on institutional effectiveness. The evaluation of general education is one component in the state reporting mandate.

The University Assessment Committee, chaired by a faculty member, consists of approximately 20 members representing the colleges and support divisions of the University (e.g., Student
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Development, Alumni Services, Business & Finance, Registrar's Office). This committee, faced with coordinating the assessment activities across the University, turned to existing committees and commissions for input and assistance. The responsible committee for general education was the Commission on Undergraduate Studies. It became clear, however, that the relative inexperience of that committee with assessment, and its already substantial agenda, made it unlikely that the committee could devote sufficient time to the assessment of general education. This leads to our first suggestion, Responsibility for assessment of general education should be assigned to a committee whose sole charge is general education or to a committee formed to address assessment activities. Rather than expecting the Commission on Undergraduate Studies to take the lead in identifying the assessment tools for general education, the Assessment Committee provided the Commission with suggestions and recommendations and used the Commission's reactions in developing the evaluation process.

The Assessment Components

The Assessment Committee relied on two primary measures of general education. The first was a locally prepared alumni survey. The second was a nationally normed, commercially available general education test. The University had been surveying its alumni for a number of years, although much of it focused on employment patterns. The Assessment Committee
decided to include items pertaining to general education on the university survey to alums who had graduated one year and five years earlier. Alumni were asked to rate (using a Likert-type scale) their preparation in a number of skill areas including composition and writing, public speaking, analytical reasoning, mathematics, cultural awareness, and computer use.

The selection of a commercially available test followed the committee's evaluation of several exams. The committee recommended the matrix form of the College BASE test from Riverside Publishing for several reasons. Two of the more important concerns were time demands on the students and the ability to evaluate writing skills. The matrix form could be administered during a 50-minute class period and one of every six students would be required to write an essay. The recommended use of the Riverside College BASE test was accepted by the Commission on Undergraduate Studies. The recommendation included the caveat that this was a trial test of the College BASE test and that its appropriateness would be evaluated following its use.

The selection process for the test and the identification of questions for the alumni survey occurred over a period of one year while the University Assessment Committee itself was learning about evaluation and was also dealing with other assessment requirements related to the SACS self-study and those mandated by the state. While the Committee would have preferred
a locally prepared test with wide university involvement, it was clear that was not going to occur easily. This leads to our second suggestion, The **judicious** use of a commercially available test can get the assessment process going quickly as long as everyone understands that the process and the appropriateness of the test itself will be evaluated. The fact that everyone acknowledged that a commercially available test may not be an appropriate assessment tool for all aspects of our general education program made it easier for the University community to accept its use on a trial basis. This provided the University Assessment committee with the opportunity to solicit wider university participation in the evaluation process.

**The Assessment Process**

The use of the alumni survey resulted in little, if any, controversy for several reasons. Surveying the alumni was an ongoing, if limited, process. The items on the survey dealing with general education skills had face validity. The data indicated that the majority of our alumni felt Clemson had prepared them sufficiently in those areas. Not surprisingly, the students felt least prepared in the areas of computer use and cultural awareness, two components not specifically addressed in our general education requirements.

The committee recognized the greater potential for criticism with the use of a commercially available general education test. Therefore, use and discussion of the test was
always prefaced by the statement that this was a trial use of the test. The committee wanted to ensure wide exposure of the test and yet did not want to burden the faculty with its implementation. Therefore, two proportionate random samples of freshmen and juniors were selected for testing (rather than testing the entire population of both classes). The Freshman and Junior classes were selected to provide a "value-added" measure for the University.

Approximately 23 sections of the first English Composition course were selected for the Freshman sample. The selection of the Junior sample was more involved. Courses having primarily junior-level students were identified. Courses from that group were then selected which provided an appropriate mix of students, in terms of enrollment, across the nine colleges. Over 20 junior-level courses were selected. The instructors were contacted by letter from the Provost asking them to provide one class period for testing during the first six weeks of the Fall semester. All instructors agreed and the test was administered at a mutually convenient time for each section. The committee was pleased with the cooperation of the faculty and was surprised that several additional instructors called and offered their sections if needed.

The administration of the test increased University involvement through the 40+ instructors whose classes were tested. The administration of the test itself was handled by
personnel from the Office of Institutional Research. The increased level of participation leads to our third suggestion, *Involve the University Community as much as possible in the assessment process.* The reliance on the cooperation of faculty was one mechanism for increased participation. Another was the evaluation of the appropriateness of the College BASE test itself.

With the approval of the Riverside Publishing Co, a complete form of the test was reviewed by the Commission on Undergraduate Studies. The Commission was asked to review the content of the test for its appropriateness regarding Clemson's mission. The review took place without the Commission knowing the performance of the students.

Lastly, prior to returning the tests to Riverside Publishing for scoring, copies of the essay portion of the test were made. The English Department was asked to independently rate the writing samples. The essays were coded so that the raters were blind as to whether the essays were written by freshmen or juniors. The Director of English Composition coordinated the grading and involved seven English faculty in the scoring.

**Use of the Test Results**

The results of the College BASE test were returned near the end of the Fall semester. Feedback was provided across campus. With the exception of the University Assessment Committee, which
reviewed the test results very carefully, the findings were discussed in terms of trends and component differences, with little or no emphasis on the actual test scores themselves. This effort to avoid discussing numbers was intentional to preserve the goal of using this test as a trial run. The dissemination of the findings resulted in our fourth suggestion, *Target the assessment results to specific groups on campus.*

We felt a responsibility to provide the students who took the test with feedback. Although the matrix form does not provide data on individual performance, we offered to provide an overview of the findings and the rationale for using the College BASE test to the students who participated. We scheduled a meeting time during the last week of classes. It was an overwhelming failure! Not one of the more than 900 students who took the test or any of the 40+ instructors involved attended the meeting. A dean and an assistant dean constituted the audience. We took a different approach the following semester and scheduled presentations with the Student Senate and Faculty Senate. Reporting to recognized groups on campus resulted in considerable discussion of the test and its merits. The Student Senate meeting resulted in a front-page article in the campus newspaper.

The findings of the test were also discussed with the Commission on Undergraduate Studies. They were surprised to find that their evaluation of the test did not always correspond
with the test results. For example, our students, both freshmen and juniors, had geometry performance among their highest overall scores. Yet, the Commission when reviewing the test felt this was one component inappropriate for us to evaluate (based on our general education mission).

The Riverside Publishing Co. indicated there was little difference in the writing samples of freshmen and juniors. Yet, our English Department's blind scoring of the essays resulted in significantly higher scores for the junior essays. This finding has resulted in a very important plus for the assessment program at Clemson. The English Department has formed a committee to examine the issue of writing at Clemson and plans to propose alternative means of assessing writing at Clemson.

Lastly, an ad hoc committee formed by the President to examine general education has been given the results of the test. Based on those data, changes to a proposed general education plan have been made.

Conclusions

With the leadership provided from a broadly represented University Assessment Committee and the support provided by the Offices of Institutional Research and Assessment, Clemson University was able to evaluate its general education process over an 18-month period. The assessment required a committee taking charge of the process and involving as much of the university community as possible. The success of the process
was partially due to the committee avoiding the "perfect data fallacy" (Ewell, 1988). Recognizing that no one commercially available test would completely meet the needs of Clemson University, the Assessment Committee agreed to use a test which best met Clemson's needs. At the same time, the Committee assured the University community that this was a trial test which was subject to reevaluation and change. This leads to our final suggestion, The Committee responsible for the process must ensure that the process does not end once the results are reported.

At large universities there may be a natural tendency to assume the process has ended once the results are discussed and the reports are prepared. The committee responsible for the process, in the case of Clemson, the University Assessment Committee, must continue to involve the university community. The approach we are taking is to build on the position that the preceding process was a trial attempt. It is now the responsibility of the university community to evaluate it and recommend changes in the process. We see that already occurring in the English Department. The University Assessment Committee must foster that dialogue in other departments responsible for general education courses as well as within the Commission on Undergraduate Studies.
References


