Assessing Student Learning Outcomes: The Nature and Use of Evidence

By Zina T. McGee and Spencer R. Baker

What is assessment? How do you define it?
Assessment requires making expectations and standards for quality explicit and public. It involves systematically gathering evidence on how well performance matches those expectations and standards, analyzing and interpreting the evidence, and using the resulting information to document, explain, and improve performance. Assessment is a natural component of outcome-based instruction. After a department articulates the learning goals for majors, it must design ways to evaluate student performance. Examples include an experiential capstone (the project draws on students’ knowledge of the discipline, ability to work in teams to develop creative solutions to problems), portfolios of students’ work, and performance of some kind to demonstrate students’ understanding of concepts, methodology, and critical thinking in the field.

Maximizing Student Learning Outcomes
Assessment should focus on improving student learning. The focus should not be limited to the classroom, but should include the wide range of processes that influence learning. Assessment is a process embedded within larger systems that should focus on collective attention and create linkages to enhance coherence within and across the curriculum. Most importantly, the tension between assessment for improvement and assessment for accountability must be managed.

Measurable Outcomes
The most important outcomes are also the most difficult to measure and often require multiple measures. When developing student learning outcomes, the most important test for value of specification of an outcome is whether attainment of this outcome can be measured. For example, to maximize the following student learning outcome, “Students will be able to function effectively as team members to solve a significant problem in the field,” departments must be able to address these questions: Are there opportunities in the curriculum for the students to demonstrate their ability? Can the department assess its’ attainment? Outcome specification may suggest needed changes in the curriculum. The next statement, “The student will appreciate the great art of the world,” is an example of a non-measurable outcome. How is appreciation defined? How is great art
defined? Discussions about the contextual meaning would be done in the service of defining student learning outcomes. To end with a potentially measurable outcome may be the last important result.

*What is Evidence?*
Evidence differs from “information,” “data,” and “facts.” Evidence involves what is advanced to support the contention that something is true, and it must be intentional and purposeful, interpretive and reflective, integrated and holistic, quantitative and qualitative, and direct or indirect. Regarding the principles of evidence in assessment of learning, evidence should cover knowledge and skills taught throughout the program’s curriculum; should involve multiple judgments of student performance; should provide information on multiple dimensions of student performance; and should involve more than surveys or self-reports of competence and growth by students.

*Principles and Means of Assessment*
Good practices in assessment include encouraging contact between students and faculty, developing reciprocity and cooperation among students, using active learning techniques, giving prompt feedback, emphasizing time on task, communicating high expectations, and respecting diverse talents and ways of learning. We suggest use of some of the following means of assessment to evaluate student performance both within and beyond the classroom:

- assessment seminar
- capstone course
- common multi-section course examinations developed by faculty
- external examiners
- focus groups
- internships
- interviews
- national licensing examinations
- oral presentations
- peer evaluations
- panel discussions
- performance in foreign languages
- process portfolio
- program portfolio
- presentation/product portfolio
- product/performance portfolio

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