

Introduction: Assessing Student Learning in the Disciplines

Trudy W. Banta

As Barbara Wright wisely observes in the first article in this collection, “The way to a faculty member’s head is through the discipline. . . . The discipline is where a faculty member lives. . . . It is love for and expertise in the discipline that (faculty) hope to cultivate in their students.”

Faculty Development for Assessment

Because faculty members’ thinking is immersed in the discipline(s) they teach, it often makes good sense to begin an assessment initiative at a college or university by focusing on student learning in the discipline, or academic major. In her article, Wright describes an approach to providing a key ingredient for any assessment initiative—faculty development. At an annual meeting of the New England Educational Assessment Network, faculty in three social sciences—psychology, sociology, and political science—were given opportunities to discuss the development of learning outcomes for students, the selection or design of assessment methods appropriate to the disciplines, the use of assessment findings to improve teaching and learning, and possibilities for turning work in assessment into scholarly presentations and publications in disciplinary journals.

Regional accreditation requirements and state mandates for accountability provide powerful catalysts for faculty involvement in outcomes assessment. The professional development network of Wright’s colleagues in New England was established in part to serve as a source of support for faculty seeking to accommodate a new emphasis by the regional accreditor, the New England Association of Schools and Colleges,

on evidence of institutional accountability for student learning outcomes. In the second article I write about the responses of faculty at the University of Tennessee, Knoxville (UTK), to the performance funding mandate of the state legislature and the Tennessee Higher Education Commission. While some faculty responded negatively to that early external mandate, others saw it as an opportunity to improve curricula, instruction, and ultimately student learning. With the assistance of faculty development provided by the Learning Research Center at UTK and a small competitive grant program provided by the provost, faculty in over 100 major fields selected or designed assessment strategies for seniors over a period of five years. In some cases, external experts in the discipline were brought to Knoxville to work with faculty on such assessment methods as case studies, in-basket exercises, field-experience evaluations, and senior design projects. Improvements in academic programs and teaching methods at UTK that can be attributed to the application of assessment findings are well documented in this article and in other publications on performance funding in Tennessee.

Student Competence as a Basis for Assessment

An essential step in developing an assessment process that leads to improvement is to state desired learning outcomes for students. Some faculty consider the identification of learning outcomes so important that they speak in terms of the dimensions of competence that characterize their graduates and refer to their curricula as competence-based. My article on student competence summarizes the experiences of three institutions in basing their curricula and approaches to assessment on statements of competence. One of the institutions bases assessment on six liberal-arts learning outcomes. The others involve employers in defining, assessing, and improving student competence in a variety of majors.

Since *Assessment Update* was first published in 1989, there has been pervasive interest in describing, teaching, and assessing competence, and then using assessment findings to further enhance learning. In an early issue in 1990 we reported on the use of a matrix by agricultural business

faculty “to assess congruence between course content and competence areas identified for undergraduate majors. Course titles are listed across the top of the matrix and 17 competence areas are listed on the left side.” This was the first of a number of articles over the years that have recommended the use of matrices to ensure that important learning outcomes are taught and assessed in multiple contexts across the curriculum in a given major.

Sixteen years later, *Assessment Update* authors are still focused on student competence. In 2006 David Shupe told readers how faculty can identify the learning outcomes associated with competence, develop rubrics that describe competence, and then use these rubrics to evaluate the work students do in their courses. The use of common rubrics permits cross-curricular electronic aggregation of competence data that can help students track their own progress and help faculty detect course and curricular strengths and weaknesses.

Assessment in Disciplines Subject to Accreditation

In fields like nursing, education, social work, and some subfields in engineering and business, the competence of graduates must be assured through licensure or certification because the influence of practitioners on public health and welfare is substantial. The need to provide quality assurance among graduates and practitioners, among other factors, has led to the formation of professional associations in these fields. A major responsibility of these associations is to accredit collegiate educational programs, and assessing student attainment of specified outcomes has long been a focus in the accreditation process. Thus it is not surprising that on most campuses faculty in disciplines subject to accreditation are the pioneers and trend-setters in developing approaches to outcomes assessment.

Just such a pioneer is Gloria Goldman, who writes about the use of simulated clinical experiences as an assessment tool in a two-year nursing program at Sinclair Community College. Goldman also addresses the important issues of reliability and validity in the faculty evaluations of nursing students’ performance as they react to patient case studies.

Next to students in health science majors, those specializing in education may be the most intensely scrutinized via assessment. Karen Schmid and Susan Kiger tell us about the performance-assessment system that teacher-education programs in Indiana must develop in response to criteria established by the Indiana Professional Standards Board.

As Peter Ewell reminds us in the last article in this issue of *Collections*, most colleges and universities have shown little interest in inter-institutional comparisons. Thus the article by Roy Rodenhiser and Victoria Buchan about collaboration in assessment between two schools of social work describes a unique situation. In the piece by James Forest and Bruce Keith, both the institution—the U.S. Military Academy—and the comprehensive approach to engineering education and its assessment are also unique.

James McCambridge and Kathy Thornhill undertook a study of assessment in distance MBA programs. Responses to an on-line questionnaire for distance MBA providers revealed a wide range of assessment practices and much room for improvement in this arena.

Assessment in Disciplines Not Subject to Accreditation

Faculty in disciplines not subject to accreditation have often been the hardest to convince that outcomes assessment is an essential contributor to the improvement of teaching and learning. Nevertheless, there is much similarity across disciplines and types of academic institutions in the kinds of assessment instruments and methods employed. While the use of simulated patients may be uniquely applicable in health disciplines and senior design projects may be associated most readily with engineering education, measures of writing, oral presentations, case study analyses, and surveys of employers are ubiquitous across the spectrum of majors and institutions.

Barbara Fuhrmann gives us examples of the use of portfolios in history and surveys of entering and graduating urban studies and planning majors to assess growth in knowledge, skills, and attitudes. The urban studies and planning faculty devote a three-hour meeting to analyzing as-

assessment findings, and graduating seniors contribute their own perspectives on the data during that session.

Billy Catchings describes a one-credit Web-based course for senior communication majors in which students develop portfolios and then jointly plan a presentation where their work is adjudicated by faculty. Physical education faculty Gwen Robbins, Debbie Powers, and Jerry Rushton have used a test of knowledge, an opinionnaire, a life-style questionnaire, and a series of tests for cardiorespiratory endurance to assess the effectiveness of a fitness/wellness course.

Virginia McKinley and Spencer McWilliams in one article, and Patricia Murphy in a second, illustrate assessment methods that can be applied in every discipline. According to McKinley and McWilliams, seniors at Warren Wilson College have for many years been required to write a letter assessing their college experiences in response to several guiding questions. Persistent comments in the senior letters have convinced faculty in environmental studies to strengthen a course in wilderness ecology that involves a one-month trip to a wilderness area and intercultural studies professors to require study abroad or another extended cross-cultural experience.

Outcomes assessment at the graduate level is particularly difficult since the curriculum in most majors is individualized and common learning outcomes generally are not specified. Thus Patricia Murphy's description of assessment in graduate programs at North Dakota State University is quite unusual. Faculty have agreed upon four common outcomes for graduate students and use rubrics to assess students' competence as demonstrated in term papers, course exams, theses, and oral presentations.

Standardized Measures of Student Learning in the Major

Readers may note that none of the articles selected thus far mentions the use of commercial or standardized tests in assessing student learning in the major. Graduates of programs in several professional fields must pass standardized tests for licensure or certification, and a few of these fields

offer practice tests or exercises to help students prepare for those tests. The Educational Testing Service (ETS) offers tests in some fifteen majors (e.g., biology, history, and sociology), most of which are in fields not subject to accreditation. Where faculty agree that a standardized test provides a good match with the student learning outcomes they consider essential, the standardized tests provide the benefits of (1) being readily available, (2) possessing levels of reliability and validity that instructor-made tests may not attain without a lot of work, and (3) offering normative data against which the performance of local students may be compared.

Since standardized instruments must be administered in a time-constrained environment, they cannot cover all the aspects of college students' learning in a given major. Thus they must be supplemented by other measures designed or selected by departmental faculty. This issue of the *Collections* series provides a rich array of the kinds of measures faculty are developing and using in their own settings.

In the last article Peter Ewell explores the use and implications of standardized tests in teacher education. He notes that "the requirements for teacher certification and licensure differ markedly between states," then suggests that a consortium of states might "act together to align their standards, employ common tests, and report performance more consistently." The fact that such consortia have not been formed illustrates the pervasive resistance to comparing programs, institutions, and states in terms of college student learning. Most faculty and administrators believe that the diversity of opportunities provided across major fields, institutions, and states is one of the great strengths of higher education in the United States. But, as Ewell points out, the press to assess with a test that has swept over K-12 education in this country like a tidal wave is mounting among higher education's stakeholders. Only time will tell if the arguments for maintaining a diverse array of programs, curricula, learning outcomes, and assessment measures in our colleges and universities will prevail.