Assessing Students’ Online Learning: Strategies and Resources
Patricia Comeaux, University of North Carolina – Wilmington

The educational community in higher education has, for some time, debated assessment issues. With the proliferation of online classrooms and the emphasis on constructivist approaches to learning, these issues have taken on even more importance.

Constructivist learning paradigms are learner-centered and posit that learning occurs when students are actively engaged in making sense of phenomena as well as constructing and negotiating meanings with others (for an extensive review and analysis of this literature, see Comeaux, 2002). Thus, learning is a reflective and analytical practice as well as an intellectually transformative act. It works when it engages students in active, co-responsible ways of knowing. In this way, teaching and learning become reciprocal enterprises as teachers and learners co-exist in a communal space of shaping and transforming knowledge and understanding.

In constructivist learning environments, assessment and learning are integrally linked. In such environments, students are aware from the onset what is expected of them; they know they are expected to demonstrate understanding of the subject matter and apply their
understanding in authentic situations. As the report from the Education Commission of the States (1996) claimed, "Students learn more effectively when expectations for learning are placed at high but attainable levels, and when these expectations are communicated clearly from the onset" (p.5). Boud (1995) made a similar claim when he explained that our assessment methods and requirements probably have a greater influence on how and what learners learn than any other single factor (pp. 39-40).

Consequently, effective communication becomes a key ingredient in assessment practices, especially in online environments. While the same is true of the relationships between effective communication, assessment, and learning in face-to-face classrooms, the demands of assessment are even more challenging in online environments. Without consistent, timely, and relevant feedback, online students more easily interpret their classroom experience as impersonal and a hindrance to their learning.

Furthermore, this paradigm of assessment acknowledges that an important function of assessment is to facilitate and promote learning. It emphasizes the importance of assessing process (formative) as well as product (summative). Huba and Freed (2000) described assessment as a process of "gathering information from multiple and diverse sources in order to develop a deep understanding of what students know, understand, and can do with their knowledge as a result of their educational experiences" (p. 8). This kind of assessment encourages purposeful dialogue, multiple discourses, collaboration, and peer and self-evaluation. It also contributes to a sense of community and shared purpose among a community of learners.

**Benefits of Online Learning and Assessment**

Interactive technologies provide us with a vast collection of resources that can enhance and extend learning environments and open up a world of possibilities in instructional design and assessment. Assessment in online constructivist learning environments should be as varied as the learning activities. In constructivist learning environments the appropriate assessments are shaped by the intended outcomes, products, or learning activities embedded in the
Interactive technologies provide multiple advantages and benefits for online instructors and learners. These include:

- More efficient management, collection, and transfer of assessment information;
- The ability to track, monitor and document students’ activities automatically;
- Multiple communication tools to facilitate and document dialogues that can be revisited as part of the learning and assessment process;
- More opportunities and ways for providing feedback to students;
- Vast libraries of resources and interpretive tools;
- Increased student participation in discussions (i.e., more students can participate in online asynchronous threaded discussions than in face-to-face classrooms);
- An increased emphasis on student thoughts and reflections as students learn to express their ideas in writing;
- More precise grading of student participation in the course content (process) because their discussions are captured in print;
- Online tests free from restrictions of time and place imposed on testing in face-to-face classrooms.

Strategies and Resources for Online Assessment and Learning

Instructors with a belief in and appreciation for constructivist learning acknowledge the importance of using authentic tasks for evaluating students’ performance in online courses. These assignments provide students with opportunities to solve problems and complete projects analogous to those of their future careers. Websites and electronic portfolios are excellent ways for students to demonstrate their competencies in a variety of areas. Burnett and Roberts (2005) described an assignment designed for pre-service high school education majors, which challenged them to learn the course material, work collaboratively, and create a teaching online environment that they could use in their own classes in the future. An electronic portfolio provides students with a creative, efficient way of showcasing numerous authentic projects created throughout their
college career.

Online instructors recommend the use of self-assessment and team-assessment tools to help students check and improve their progress as they develop understanding and products. Moallem (2005) provided a detailed model for assessment of online learning which involves three stages of assessment: initial, progress, and product. Each of these stages includes tools for self-assessment, peer-assessment, and expert/instructor-assessment. Belfer and Wakkary (2005) provided guidelines and checklists for team assessment in online courses.

Online instructors make use of self-tests as study guides and as ways to help students deepen their understanding of the course material. Hall, Molan, Bannon and Murphy (2005) described the use of interactive digital video which creates a problem scenario in a manufacturing firm requiring students to use statistical analysis to solve. Students use these online assessment tools to help them understand why their answers on an online multiple-choice test are right or wrong. Byington (2005) described how online multiple choice tests and T/F tests can provide advantages not available in face-to-face classrooms. Perhaps one of the most valuable assessment strategies for online students is a rubric which provides them with clear performance expectations at the onset and guides them through a project. Hofmeister and Thomas (2005) provided guidelines for helping instructors build and use rubrics (scoring guides) for assessing students’ writings in online discussion boards. They also provided suggestions for structuring and moderating online discussions with questions that challenge students to think and write more analytically.

In sum, online instructors recommend that students receive consistent, frequent, and ample feedback throughout their online course.

References


Patricia Comeaux (Ph.D., Southern Illinois University) is Professor in the Department of Communication Studies at the University of North Carolina Wilmington.