Chapter XXIII

Components of Effective Evaluation in Online Learning Environments

Steven R. Terrell, Nova Southeastern University, USA

The Components of Effective Evaluation in OLEs

Dringus and Terrell (1999) defined evaluation in an OLE as:

...an iterative process for assessing the efficacy and validity of online learning environments (OLEs). Evaluation should take place from the conceptual stage of OLE development through the measurement of learning outcomes of an online course. Accurate and ongoing assessments of learners, teachers, the instructional process, the course content, and the OLE as an entity will include a combination of formative and summative evaluations for each of these components and their effectiveness as a unit. (p.61)
Other authors (e.g., Bunderson, 2003; Govindasamy, 2001; Hirumi, 2000; Khan, 2000; Williams, 1999) have addressed similar issues on a conceptual and theoretical level, but there is a need for further examination at the application level.

In the traditional face-to-face environment, the instructional process consists of integrating three primary components: curricular material, instructional methods, and the learner. A valid and accurate assessment of a traditional learning environment includes evaluation of these components in the form of program evaluations (e.g., periodic program or course curricula reviews), evaluation of the instructional process (e.g., end of term teacher evaluations), and student evaluations (e.g., examinations, term papers, or presentations).

In an online learning environment, where the environment is an open space of static and dynamic information, where there is discovery and sharing of information and ideas through electronic means, and where the OLE itself is an interface between the stakeholder and the online activity, the same three components are of equal importance. There is, however, an additional component that must be considered.

In the traditional setting, little emphasis is placed on the assessment of the physical environment because, as much as they are a necessity, most people do not conscientiously view buildings and walls as critical learning components. In an online setting, the OLE itself—the interface, the organization of online courses, information, material, activities, and communication modes—serves to create a sense of presence, atmosphere, and a state of being for stakeholders accessing the OLE. Because of this, the online learning environment must be evaluated.

Taking this into consideration, Figure 1 shows the iterative process that includes the formative and summative evaluation of course content, the instructional process, learners, and the online learning environment as an entity. The content component includes not only course content in terms of syllabus, course objectives, goals, and curricular material, but also the assessment of information resources that may be available in large scale via information on the World Wide Web. The instructional process component involves evaluation of teaching and learning styles, instructional methods, communication and interaction methods, as well as overall instructional processes. Learner assessment involves measures of student success (e.g., exams, term papers, case studies, etc.) as well as self-assessment by the learners themselves. Assessing the OLE as an entity involves evaluating the OLE as an interface between the instructor, the learner, the instructional material, and the information at large.

With these four components viewed as an entity, it is then possible to produce an effective evaluation process for online courses and the instructional process as a whole. When these components are evaluated as a unit, it is likely that administrators, course developers, and instructors will gain useful information concerning what may be needed to enhance the online experience and achievement of learners. These four components of effective evaluation in online learning environments will be discussed in terms of how they can be approached in both the context of assessing the online experience as well as the overall instructional process.
Usability Inspection of the ECONOF System's User Interface Visualisation Component
Nadir Belkhiter, Marie-Michele Boulet, Sami Baffoun and Clermont Dupuis (2003).
*Usability Evaluation of Online Learning Programs* (pp. 177-197).
www.igi-global.com/chapter/usability-inspection-econof-system-user/30609?camid=4v1a