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AUTHOR Cohen, Vicki L.
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ABSTRACT

Distance learning is rapidly gaining acceptance as a valid means of course delivery in educational institutions across the country, and these institutions are struggling to enhance the quality of teaching, learning and scholarship over the Internet, while trying to effectively integrate this type of instruction into the curriculum. Increasingly, educational institutions are employing this type of learning as part of their course offerings. In addition, many "virtual universities" sponsored by state departments or through commercial endeavors are offering a variety of programs and degrees via computer-mediated distance learning courses. As more institutes of higher education start offering computer-mediated distance learning courses, it becomes increasingly important that these courses are evaluated effectively. This new paradigm of learning requires a new model of assessment. This paper presents a model that focuses on six constructs that computer mediated distance learning courses should examine: Teaching and Learning, Developing a Community of Learners, the Instructor, The Student, Implementation of the Course, and Technology Use. These constructs become important elements in the design and evaluation of distance learning classes. (Contains 13 references.) (AEF)

G.H. Marks

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Distance Learning Instruction: A New Model of Assessment

By Vicki L. Cohen, Fairleigh Dickinson University

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Background

Distance learning is rapidly gaining acceptance as a valid means of course delivery in educational institutions across the country. With distance learning becoming an accepted form of instruction, these institutions are struggling to enhance the quality of teaching, learning and scholarship over the Internet while trying to effectively integrate this type of instruction into the curriculum. Increasingly educational institutions are employing this type of learning as part of their course offerings; in addition, many "virtual universities" sponsored by state departments or through commercial endeavors are offering a variety of programs and degrees via computer-mediated distance learning courses. Is this an effective way to offer instruction? What is the best way to assess this type of instruction?

As more and more institutes of higher education start offering computer-mediated distance learning courses, it becomes increasingly important that these courses are evaluated effectively. This new paradigm of learning requires a new model of assessment. This paper presents a model that focuses on six constructs that computer-mediated distance learning courses should examine: Teaching and Learning, Developing a Community of Learners, the Instructor, The Student, Implementation of the Course, and Technology Use. These constructs become important elements in the design and evaluation of distance learning classes.

The Model for Assessing Distance Learning

When looking at the first construct, *Teaching and Learning*, research supports that students of all ages who are provided easy access to well-crafted computer-mediated distance learning classes generally have a positive experience taking this type of course (Abbott and Faris, 2000; Baron and McKay, 2001; Gagne and Shepherd, 2001; Mitra and Steffensmeier, 2000). However, these studies also point out that an increase in positive attitude is directly related to instructional approaches used, meaningful assignments required, supportive faculty, and involvement in meaningful discussion groups (Abbott and Faris, 2000). As Baron and McKay (2001) point out, having the requisite computer proficiency also affected students' perceptions of the course.

Research also suggests that distance learning can provide the same level of academic excellence as courses taught in traditional modes. Moore and Thompson (1990, 1997) reviewed much of the research from the 1980's and 1990's on the effectiveness of distance learning, which included not only computer-mediated learning, but two-way interactive video and a variety of other technologies, as well. They concluded that distance education was considered effective when measured by the achievement of learning, by the attitudes of students and teachers, and by return on investment.

Developing a Community of Learners is the second construct to consider when assessing distance learning instruction. Educators are increasingly emphasizing the importance of electronic communities in distance learning courses as a key to effective implementation (Creed, 1996; Herrmann, 1998; Illinois Online Network, 2000; MacKinnon, 2000; Palloff

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and Pratt, 1999; Poole, 2000). As Palloff and Pratt (1999) say: “In distance education, attention needs to be paid to the developing sense of community within the group of participants in order for the learning process to be successful” (p.29). The role of the community is an essential component for the success of any distance learning class.

When considering the third construct, *The Instructor*, in an online distance learning course, the role of the instructor needs to be examined. The instructor no longer stands in front of the room imparting information, directing all interaction, and facilitating activities. Instead, instructors must take advantage of the constructivist online course and create an environment that is learner-centered, collaborative, and egalitarian in approach. The governing principle is that learning is an active process in which learners construct rather than acquire knowledge and the instructor’s role is to support that construction rather than impart knowledge (Grossman and Wagner, 2000). Palloff and Pratt (1999) categorize the various tasks and roles required of an online instructor into four general areas: pedagogical, social, managerial, and technical. In the pedagogical area, the instructor must know how to design and implement an effective hands-on course and create an environment, which promotes interaction and exchange between all involved. In the social area, the instructor must direct all social intercourse that occurs online and ensure that communication is not just between instructor-student but is a multifaceted pattern, involving student-student-instructor. In the managerial area, the instructor must know how to manage a multitude of tasks and organize a multitude of files. Oftentimes, the managerial function can become overwhelming and an effective instructor utilizes organizational skills and timesaving techniques. Lastly, in the technical area, the instructor must be technically proficient so that the course runs smoothly. The instructor must provide technical feedback to students on basic requirements for exchanging and reading files, and using software, browsers, and operating systems. In a distance learning course, the role of the instructor changes dramatically.

In reviewing the next construct, *The Student*, the role of the student also changes significantly in a distance learning course. Many students will find the transition to this new type of online learning to be difficult, especially if they are used to a more traditional course where they are “fed” knowledge and evaluated using a test. Students in an online course must be active and engaged in knowledge generation. They cannot sit passively and expect the course to be given to them by the instructor. Palloff and Pratt (1999) categorize the role of the learner in an online course into three areas: knowledge generation, collaboration, and process management. In knowledge generation the student must learn how to construct and generate his/her own knowledge base. In collaboration, the student must learn how to collaborate electronically with other students via e-mail and discussion forums. In process management the student must take the responsibility for managing his/her time, as well as taking the initiative for researching topics and concepts. The student must learn how to manage the process of learning in a constructivist online course. This is an important construct to consider in assessing distance learning courses due to the low completion rate of students enrolled in computer-mediated distance learning courses.

One of the more important aspects of computer-mediated distance learning is effective implementation of the course which in the fourth construct, *Implementation*. This covers the basic instructional design of the course, the infrastructure available to support the course, the quality of the access to the course, and the level of technical support available. These factors affect each student's ability to access and successfully complete an online course.

The last construct, *Technology Use*, looks at how often students use various components of the course, and find each component useful. It is highly recommended that different aspects of the course be assessed for frequency of use and degree of usefulness. Such aspects that could be assessed are: the Discussion Forum, the Announcement Feature, the chat room, the white board, the Student Drop Box (where assignments are uploaded), the learning links, the lecture notes, the schedule of assignments, the syllabus, and the e-mail feature. This information will be very useful in the revision and implementation of the course.

Discussion

Computer-mediated distance learning involves a whole new array of factors to consider in the teaching-learning process. However, although distance learning courses involve various new factors to consider in their design and assessment, distance learning courses are fundamentally the same as any other course offered to students-- the basic denominator is effective instruction. The modality of delivering the course may change, but the basic tenants of good pedagogical theory remain the same. Although we are transforming education into a 21st century enterprise that utilizes the latest technological advances, the basic issues remain constant: what is effective instruction and how can we best teach to students who possess different learning styles and different competencies? How can we better prepare instructors to be effective? These are the questions we need to keep in mind as we conduct further research into the field of distance learning. In terms of effective course design, distance learning continues to represent one point along a continuum of design options, one other mode of delivery to consider.

The constructs outlined in this paper are those that should be considered in all courses; they are applied in somewhat different contexts within a distance learning course. As we move forward technologically, our theories of learning and instruction need to be applied consistently and persistently to the development of all courses, and our attention needs to be on the quality of the instruction, not on the modality of delivery. This "new" paradigm of learning needs to be grounded in time-tested and research-based theories of learning to ensure that our students receive the quality instruction they deserve.

Overview of This Session

The session at Ed-Media will present this new model of assessment by examining what the research recommends for each construct. A visual model will be presented and each construct will be reviewed according to what is recommended to assess this area. The session will demonstrate an assessment form that has been developed to assess the author's distance learning class, *Literacy and Technology Across the Curriculum*, that is

being offered at Fairleigh Dickinson University. The assessment form will be examined and copies will be distributed to participants. Preliminary data collected from the course will be presented. Specific examples of how this model helped the author to design and implement this course will be demonstrated. Questions and discussion on assessment in distance learning instruction will conclude this session.

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