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ABSTRACT

College courses have now gone beyond the walls of the traditional college classroom into cyberspace. These new Internet course offerings bring about major instructional design issues that must be acknowledged and addressed during the course development phase. Two of the major issues are Internet access requirements and clarity of instruction as influenced by instructor absence, varying levels of interactivity, and "class" size. However, there are also other educational issues that must be considered such as incidental learning, quality control, and cultural climate. (Author/SWC)

Title:

Internet-Distributed College Courses: Instructional Design Issues

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Abstract

College courses have now gone beyond the walls of the traditional college classroom into cyberspace. These new Internet course offerings bring about major instructional design issues that must be acknowledged and addressed during the course development phase. Two of the major issues are Internet access requirements and clarity of instruction. However, there are also other educational issues that must be considered such as incidental learning, quality control, and cultural climate.

Internet-Distributed College Courses: Instructional Design Issues

Moving the campus to the cyberspace horizons has forced course designers to rethink their instructional strategies and delivery methods. We no longer think of single classrooms, but interlinked students both on campus and globally. Choices need to be made as to the target audience and whether or not it will be a university-wide virtual offering or a cyberspace, international virtual offering. As we enroll diverse students from a variety of nations, our instructional strategies have to break the mold associated with traditional, on-site, classroom-contained teaching methods (Shuell, 1993). As a result, ease of access to the Internet and clarity of instruction have become two paramount issues that must be dealt with at the onset of the course development process. Other educational issues also surface during course construction and delivery.

Internet Access

Internet access was one of the initial, major concerns that faced the authors. Although through the university's system, access capabilities typically included e-mail, gophers, telnet, and the World Wide Web, not everyone who enrolled in the courses would necessarily have access to the university's system or to all the levels of the Internet. Thus, an examination was done as to the capabilities on different systems.

For the most part, it was determined that individuals who would enroll in the Internet-distributed college courses would have accounts on a university system, a commercial Internet provider, a local school district system, or a local freenet system. Levels of Internet access varied with each of those systems. With university systems and commercial Internet providers, access to the Internet seemed to be the most complete. Next in line was a freenet system; however, some freenet systems did not have telnet or Web capabilities. Internet access via local school district systems seemed to be the most limiting, since many systems allowed for only e-mail access.

After the Internet access analysis was completed, the next thing that the authors did was decide on the Internet-related activities that they wanted the students to perform. In cases where the course consisted of information distribution and communication between peers and instructor, basic e-mail access was all that was needed. However, in the courses that required the enrollees to search the Internet for course-related information and material, e-mail only Internet access became a major obstacle. To prevent problems caused by people enrolling in courses and then later finding out that their Internet access was not sufficient to complete the Internet course, the decision was made to include requisite Internet access capabilities as part of the course description.

Clarity of Instruction

Instructor Presence

Clarity of instruction was the second key factor that caused concern for the authors. Professor and student "presence", in the traditional sense, was virtually eliminated with the Internet distributed courses. Thus, the professor had to clearly define the course content, while identifying all possible interpretations of what was actually included in the context of the information sent to the students. In an attempt to replace the professor-initiated, in-class reinforcement, learning objectives had to be correlated and specifically communicated to the students for each course topic covered and assignment given (Shuell, 1996). This was done to alleviate any misunderstanding and to show an interconnection between the course objectives, the topics covered, the assignments, and the use of the Internet. As a result, course preparation time and effort increased because of the expanded clarification demands.

Levels of Interactivity

Not only did the course information have to be clear and concise, the level of interactivity and quantity of communication were associate issues. It was important to consider the amount of interpersonal exchange necessary to

meet the course objectives (Shuell, 1993). Each course had its own level of interactivity. There were four levels of interpersonal exchange that entered into the design process: instructor-student, student-student, instructor-guest expert, student-guest expert. A decision had to be made as to the synchronous versus asynchronous communication that needed to occur at each interpersonal exchange level. To enhance professor-student intercourse, electronic office hours were established to create an atmosphere somewhat resembling the traditional office time required of professors teaching on-campus.

Course Enrollment

Course enrollment was yet another factor that influenced the communication exchange expected to take place during a virtual course. For courses that have a large enrollment (e.g., over 50 course enrollees), the quantity of synchronous communication has to be either severely limited or eliminated. Even for courses where the number of enrollees is fewer than 50, guidelines need to be formulated before the start of the course in an effort to keep the communication flowing, but manageable (Shuell, 1996).

Other Educational Issues

There were, and are, many educational issues associated with Internet-distributed coursework. Decreased incidental learning from cyberspace isolation must be considered not only in the development process but by the potential student. Quality control issues arise when there are no cyberspace proctors to validate a course enrollee's identification; do you know that the student who is receiving the grade did the work? There are cultural climate issues both in the development and implementation of the course related to instructor and student input, terminology, interpretation, and overall professional conduct. As university faculty and administrators become more experienced in offering virtual courses, the easier it will be to research educational issues and formulate solutions to the virtual problems that arise. Unfortunately, we are still struggling with these major educational issues, but that does not preclude their consideration and identification since those issues can impact the overall integrity of the Internet-distributed course.

Conclusion

As with all teaching, Internet-distributed courses need to be constantly evaluated and revised to continually improve the product and maintain the quality reputation of the professor and the offering institution. Conquering this new frontier is difficult and will remain challenging, but in today's society, universities who do not venture into this vast electronic world face the possibility of losing students to virtual competitors.

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