DISTANCE EDUCATION
Why are the Attrition Rates so High?

Johnette Moody
Arkansas Tech University

Distance education is being hailed as the next best thing to sliced bread. But is it really? Many problems exist with distance-delivered courses. Everything from course development and management to the student not being adequately prepared are problematic and result in high attrition rates in distance-delivered courses. Students initially perceive distance learning courses as easy. However, it may be this perception that ultimately results in the student dropping the course.

Distance education is not a new subject, but recently it has come in vogue (Terry, 2001). With the dawn of new educational and training technologies made possible by the Internet, distance education is a practical option for today's time-starved students. Enrollment in distance-delivered courses is on the increase. Although enrollment is relatively high, it is important to note that the attrition rate is higher in online courses (Morgan & Tam, 1999). Distance learners throughout the world are characterized by having a higher attrition rate than their campus-based counterparts (Losty & Broderson, 1980).

If the attrition rate is higher for distance-delivered courses, why does a student choose asynchronous, online learning rather than the traditional campus-based synchronous learning? As Svetcov (2000) has noted, online education is convenient (no moving, no commuting, no leaving the house) and collaborative (students in China and Minnesota can work together on presentations). Student benefits associated with Internet instruction include increased access to higher education, flexible location, individualized attention from the instructor, less travel, and increased time to respond to questions posed by the instructor (Matthews, 1999). Research also indicates that many students enter into distance education with the perception that the course will result in an "easy A."

Regardless of the benefits that distance education can offer students, the problems associated with distance education diminish the overall benefits. Other problems such as the

• **Johnette Moody**, Arkansas Tech University, Corley 258, Russellville, AR 72801. Telephone: (479) 968-0670. E-mail: johnette.moody@mail.atu.edu

The Quarterly Review of Distance Education, Volume 5(3), 2004, pp. 205–210 ISSN 1528-3518

mode of delivery, the establishment of a learning community, loss of personal contact, cheating, and assessment plague distance-delivered courses. Problems even exist with basic course development. In the final analysis, even what first appeared as a benefit of distance education, can, in fact, result in a negative impact. These problems contribute to high attrition rates in distance education.

Student attrition is a recognized major problem that has both economic and educational implications. The attrition rate is also seen as a measure of the quality of education offered by the institution (Thompson, 1999). The costs for development, delivery, and assessment, as well as lost tuition revenue, result in wasted expenditures for the institution delivering the courses at a distance.

HISTORICAL AND THEORETICAL PERSPECTIVES

While a great deal of research has been conducted concerning attrition rates, only a minimal amount of that research has been directed toward gaining insight in to attrition rates in distance education. Potential explanations for the higher attrition rates include students not being able to adjust to the self-paced approach in the virtual format, the rigor of study being more difficult than students anticipated, and a lack of student and faculty experience with the instruction mode (Terry, 2001). An imperative for educators has been to identify what leads distance learners to drop out and then to take appropriate preventive measures (Morgan & Tam, 1999).

Historically, the online student has been presented with the exact course information as the campus-based student. Mode of delivery has been the primary difference between the two courses. Email has been, and continues to be, the primary source of interaction between student and professor. Surveys and questionnaires have been developed and transmitted via email to online learners in an attempt to gain insight into the higher attrition rates. Kember, Lai, Murphy, Siaw and Yuen (1995) developed the distance education student progress inventory (DESP), which can be completed by students. Results from this inventory have proven useful in determining if a student is likely to fail an online course. Course delivery tools are also being utilized to narrow the interaction gap created by distance education.

PROBLEM SIGNIFICANCE

While online courses provide easier access to high quality education, it is apparent that online courses fall short of meeting the student's needs or expectations. While convenience is the number one reason for enrolling in an online course, this "convenience" may eventually result in a student withdrawing from the course. Research has shown that attrition rates are higher in online courses. The higher attrition rates result in a "no win" situation for all involved: the student fails and the institution providing the course, in a sense, fails as well.

The face of education is changing as a result of the Internet. Delivering quality education to students via the Internet has the potential to benefit students and significantly increase the enrollment of an institution. Additional research must be conducted with the intent of lowering the attrition rates for online courses.

REVIEW OF LITERATURE

What is distance learning? It is important to understand exactly what distance learning is. The term distance learning applies to a variety of learning situations. Almost all distance learning relies on more than one means of exchanging information across time and space (Mariani, 2001). The terms distance learning, distance education, virtual education, virtual classrooms, online learning, online education, distance-delivered, and Web-based courses are all used interchangeably in the educational arena.

Distance education has a historical foundation. The concept of distance education is not new. In 1840, Sir Isaac Pitman developed a plan for delivering education to an unlimited audience. His concept of correspondence courses was well received. Within a few decades, regular and, in some cases, extensive programs were available in the United Kingdom, Germany, the United States, and Japan (Curran, 1997). In 1969, the Open University in England provided audio and video materials with its correspondence courses. As a result, the British Open University pioneered distance education on a massive scale (Normile, 1997). The majority of higher education institutions in the United States have distance learning programs ("NCAES," 1997).

Development of distance-delivered courses is a problematic area. The online course environment is meant to mimic the methodologies of face-to-face courses. Class discussions are moved to asynchronous bulletin boards, or synchronous chats, which use text-based postings to try to replicate the give and take of students and professors talking about a topic or question (Harvey, 2002).

Course development is extremely expensive. At some institutions, faculty members are expected to create distance-delivered courses with little or no support, whereas other institutions provide technical support and faculty training (Boettcher, 1999). Perreault, Waldman, Alexander, and Zhao's (2002) research has indicated that 53% of course developers create courses in their spare time. Faculties are not adequately prepared to develop online courses. Release time is not allotted for course development.

Gillespie's (1998) application of instructional technology includes: providing increased opportunities for interaction between and among students and instructors; making available greater array of resources; enabling students to take active role in learning; addressing and supporting variety of learning styles; and promoting and developing higher-order cognitive skills. Will these five steps guarantee a successful distance learning course? Moore (1989) suggested that there are three types of interaction necessary for successful distance education: (1) learner-content interaction, (2) learner-instructor interaction, and (3) learner-learner interaction (Smith, Ferguson, & Caris, 2001). The best distance education courses incorporate all three types of interaction.

Virtual classrooms are not aimed at the traditional market of young college people, but rather are meant to serve disciplined adult learners (Guernsey, 1998). Distance learning helps many adult learners balance the demands of work and family with their pursuit of additional education (Mariani, 2001). Time-starved adults who want to further their education find distance learning courses easy to schedule into their already busy schedules.

The traditional college student enrolls in distance-delivered courses for a variety of reasons. Those reasons cover a wide gamut ranging from the student's perception of the course being an "easy A" to the course requiring no actual meeting time. However, traditional students also think they are time-starved, so distance-delivered courses eliminate one less demand of their time.

Interaction, most simply stated, is engagement in learning (Hillman, Willis, & Gunawardena, 1994). Because distance-delivered courses are not campus based and most require no actual meetings, there is a loss of interaction. This loss of interaction can result in a feeling of isolation. What can be done to minimize this loss? Kearsley (1998) wrote, "Educators fail to understand that distance education is really about creating a different kind of structure for learning and teaching, not the use of technology." Many commonly used technologies can provide support for online learning such as the Web, online discussion groups, online resources, and online courseware (Huang, 2002). Finally, to the degree that involvement matters, we also know that involvement matters most during the first year of college (Tinto, 1998).

Constructivists such as Vygotsky and Dewey believe that learners do not learn in iso-

lation from others, and cognitive psychology has gradually established that people naturally learn and work collaboratively in their lives (Petragalia, 1998). As a result of research in this area, a goal of distance education is the creation of learning communities. Perception of a community may assist learners with feeling connected or belonging (Halaby, 2000).

It is clear that building a learning community is necessary for successful faculty-student interactions and a sense of social presence in online courses (Wiesenberg & Hutton, 1996). Based on research, the impact of community-building strategies seems to occur more quickly and more readily in teams or small groups (Hill, Raven, & Han, 2002). Small groups or communities provide opportunities that campus-based courses do not. The shy learner can actively participate without feeling threatened. With the apparent anonymity of the Internet, students feel much freer to talk (Smith et al., 2001).

Students who participate in distance-delivered courses may encounter several technology-related difficulties (Perreault et al., 2002). Previous research indicates that students often overestimate their technical expertise when selecting an online course (White, 2000). Many distance-delivered courses have no minimum competency requirements. Students are not adequately knowledgeable with email or course delivery tools such as Blackboard.

Traditionally class attendance has had a direct correlation to student performance and persistence. Attendance in an online course can be created through the use of email and threaded discussions. Electronic toolkits offer a central point for students to view assignments, announcements, assessments, and to participate in threaded discussions. Electronic toolkits provide chat rooms that the instructor can use for virtual office hours (Sherer & Shea, 2002).

The attrition rate is seen as a measure of the quality of education offered by the institution (Price, Harte, & Cole, 1992). Student attrition in higher education is a major problem that has both economic and educational implications (Thompson, 1999). Research has indicated that attrition or persistence in distance-delivered courses is higher than campus-based courses. Thus the question of "Why" must be addressed. Potential explanations for the higher attrition rates include students not being able to adjust to the self-paced approach in the virtual format, the rigor of study being more difficult than students anticipated, and a lack of student and faculty experience with the instruction mode (Terry, 2001).

Retention studies by Pascarella and Chapman (1983) emphasized the academic and social integration of students as a major factor in retention. Students must perceive that they are integrated into the course. Assignments and immediate responses from the instructor and/or students can help accomplish this task. Writing assignments are also useful in making the student perceive an integration with other students. The emphasis of the written word encourages a deeper level of thinking in online courses (Smith, Ferguson, & Caris, 2001).

Almost all withdrawing students initially cite some sort of time constraint as the reason for dropping out (Morgan & Tam, 1999). However, there are other reasons such as the course being harder than the student initially thought it would be and the student lacked the technology background. By carefully identifying and dealing with barriers that are within its influence, institutions may well find that such actions are sufficient to persuade more students to continue with their studies despite the existence of other apparently more obvious and formidable barriers (Morgan & Tam, 1999).

CONCLUSION

Research supports the assumption that attrition rates are higher in distance-delivered courses than campus-based courses. Since distance-delivered courses are expensive to develop and support, universities and colleges should implement studies to research the reasons behind the high attrition rates. Factors such as

students not being adequately prepared and their perception of the course being easier than campus-based courses offer some insight into the higher attrition rates.

Osika and Sharp (2002) state that students are required to master the material covered in the course as well as fully understand the technology used to distribute the information and manage discussions. Though many students are being introduced to technology at an early age, this does not mean they are technically competent with the skills required to be successful with Web-based instruction. Colleges and universities should consider an introductory meeting at the beginning of the semester so that technology-related issues could be addressed.

Perhaps students should be required to hold virtual small group meetings. Small groups encourage participation and encourage a higher level of thinking. These groups help establish a learning community and learning communities help generate interaction. Interaction increases retention.

It is apparent that distance-delivered courses open an expanded market. Attrition needs to be researched so that additional insight can be garnered. Distance education opens the educational world to individuals who previously could not enroll because of employment and family obligations. An education is expensive. Students need to feel confident in an online education. Future research can be conducted in all areas of distance education.

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