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Delivering Quality Distance Learning: Perceptions of Business Faculty and Students

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The use of fiber optic cables to provide high quality interactive distance learning has increased dramatically over the past few years. Ready or not, education is being delivered to people who may otherwise not have the opportunity to further their education. Distance learning is helping students overcome barriers such as geographical distance, family responsibilities, and work hours to attend class. Distance learning is currently used at all levels of education as well as both business and government and in its many forms (video taped classes, telecourses, instructional television fixed service, and live interactive video network, to name a few) has provided answers to some of the dilemmas of location-bound students and limited budgets in practically every state.

The market for distance learning has also greatly expanded and is expected to grow at a rate of 25% to 35% per year over the next few years. This article explores the success story of teaching business classes through Interactive Video Network (IVN). Its main objective is to determine the characteristics that make distance learning effective in delivering quality education to geographically isolated students.

Background

The IVN system is an integrated distance learning technology classroom that allows student/teacher interaction. The electronic

classroom is equipped with cameras, microphones, an electronic graphics tablet, a computer, a VCR, and a facilitator to enhance distance learning capabilities all under full control of the instructor.

The IVN is interactive, that is, participants can see, hear, and communicate simultaneously to individuals at other connected sites. In addition, audiovisual aids such as slides, overhead, transparencies, videotapes

and computer software can be used to enhance presentations. There are some inherent limitations to using the distance learning strategy. There must be a recognition of the limits of the technology and

The IVN system provides distance learning programs for students who would otherwise have to travel significant distance or bypass an educational opportunity.

how best to use the current system in delivering education.

First, it is harder than teaching in a traditional classroom setting because students frequently resist a system that does not place a live instructor in their presence, and some instructors have difficulty adjusting to a different way of teaching. Second, the administration may resist the technology by withholding incentives to both students and faculty to participate in the new system; some administrators tend to avoid large expenses (typically \$250,000) and generally resist change.

The central administration has conducted evaluations of the IVN classes every term since its inception in the spring term of 1994. The primary areas of evaluation are: (a) the adequacy of the equipment,

(b) the attitudes of the faculty involved, (c) the attitudes of students taking the courses, and (d) differences in learning between students in the transmitting site and the receiving site. Separate student and faculty questionnaires were used for this evaluation. The next section provides a discussion of the perceptions of faculty in teaching these business classes.

Faculty Perceptions of IVN

I love it! I hate it! It's too much work! I can't get used to the cameras! It forces me to be a better teacher, to be more organized. I cannot see my students at the remote site! It provides a way for students to take my class when they could not before. It saves me travel time to remote sites! I do not feel like I know my students in my remote class. Students in my remote classes make better grades than students in my class in the transmission site! All of these are comments that we have heard from faculty who have taught over IVN.

Performance evaluations of those assigned to teach IVN classes were generally negative. However, those who volunteered to teach had statistically significant higher average scores than those who were assigned. There were no significant differences between the evaluation scores of those who had taught IV classes before and those who had not, nor between those who sometimes lectured from the other sites and those who did not. Most of the concerns in answering open-ended questions revolved around problems associated with transporting materials between sites, and the appropriateness of certain types of classes for the IV format.

Overall, most of the faculty were very pleased with the performance of the students and their room facilitators. Many of them hoped that they would have another opportunity to teach through IV. They also wanted to increase their skills in using the system to enhance their teaching technique.

Student Perceptions of IVN

There were 48 Interactive Video (IV) classes offered in 1996 (20 in spring, 10 in summer and 18 in fall). This included 23 (9 in spring, 5 in summer, 9 in fall) business courses. Comparisons of grades showed no signifi-

cant differences between students at the transmitting sites and students at the receiving sites, neither before nor after grades were adjusted for differences in GPA (using analysis of variance and covariance). The proportion of negative/positive scores was fairly consistent across most ways of analyzing student data (campus, location: transmitting vs. receiving, classification, sex, and required vs. elective). For grade expectations, those who expected a "C" or "D" had a higher proportion of negative scores.

In response to open-ended questions, positive comments from students were primarily about the convenience of having the class available locally, a large number and variety of classes being available, and positive interactions with students at other sites. The biggest concern among students was the limited access that they had to instructors. On the "other comments" category, students expressed appreciation for courses being made available, noted that improvements have been made from the previous years, and requested that additional courses be made available.

Conclusions

The legendary visionary Alvin Toffler predicted that telecommunication technology will have a significant impact on the way organizations will conduct their business. The exchange and flow of information has been profoundly altered both within and between organizations. Distance learning is now recognized as one of the most important breakthroughs in information technology. As academicians, we are in a unique situation. There are many benefits that are bound to accrue through distance learning technology. By supporting student-teacher and student-student information exchanges, learning through IVN has the potential to greatly enhance classroom communications and enrich the learning process. The one result worthy of special comment is that the most frequent response to being asked about the likelihood of developing a positive relationship with other students was an indication that it was more likely to occur in the interactive video setting provided by the IVN's fiber optics.

A recent increase in non-traditional students has increased pressure on educators and administrators to identify efficient methods for delivering quality education to geographically dispersed population. Students desiring to improve their knowledge through higher education must often travel long distance to take classes or suffer without the benefits of continued education. The IVN system provides distance learning programs for students who would otherwise have to travel significant distance or bypass an educational opportunity. Distance travel for willing participants may also become a problem when time frames between work and education are in conflict. Even if a student is willing to travel some distance for a class, often work schedules do not allow enough time for travel.

In any case, this technology has come to stay. It is our responsibility to take advantage of this technology and reap benefits in the future. Perhaps it is safe to assume that faculty who have been prepared for the interactive video classroom are able to provide a positive experience for most students while they also develop an important skill in using a system to enhance their teaching technique. ■

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