This paper describes the findings of various researchers on the role of faculty, learners, administrators, and technology in the effectiveness of distance learners. New technology and learners' characteristics have contributed to the effectiveness of distance education. The planning and organizing of instructional materials for distance education have increased the effectiveness of the delivery process. Improved modern technology tools and software applications play a significant role in the effectiveness of distance education. Research suggests that there are no significant differences between distance and traditionally delivered instruction. Research also suggests that faculty development and variables such as student demographics, motivation, attrition, cognitive style, gender, and achievement play a significant role in distance learning. Distance education preparation should include faculty in-service training, course loads, staff support, and administrators. Distance learning can be an effective instructional academic delivery system for adult learners in schools and industries if all the key players are involved in the process. (Author/SWC)
Distance Learning: An Effective Educational Delivery System
by
Mike Omorogie

Abstract

This paper describes the researchers' findings and the role of faculty, learners, administrators, and technology in the effectiveness of distance learners. New technology and learners' characteristics have also contributed to the effectiveness of distance education.

Researchers found improved modern technology tools and Software application packages to have also played a significant role in the effectiveness of distance education. Research suggests that there are no significant differences between distance and traditionally delivered instruction. Research also suggests that variables such as student demographics, motivation, attrition, cognitive style, gender, and achievement play a significant role in distance learning. Finally, faculty development has an important role in the effectiveness of distance learning.
In recent years, researchers have studied the effectiveness of distance learning and its delivery methods. Willis (1993) contended that researchers have attempted to study distance learning effectiveness by exploring variables such as student demographics, motivation, attrition, cognitive style, gender, and achievement. Eiserman and Williams (1987) conducted a study exploring the comparative effectiveness of distance and traditionally delivered instruction which also agreed with Willis's variables. In the study, they concluded that distance-delivered instruction could be as effective as traditional instruction if the delivery methods were based on the background and experience level of the students. The content examples should be relevant to individual learners' experiential and cultural background. In a similar study by (Omoregie and Jackson, 1996), variables such as age, gender, environment, educational level, experience, computer usage, graphic presentations, and video presentations were used to determine the effectiveness of a distance learning course. The study revealed that learner environment and life time experience have an important role in the planning and organization of an effective distance learning delivery system.

Garrison, (1990) examined the impact to the learner in audio conferencing and found that dialogue, negotiation, and validation of knowledge must be used in order for distance education to be a successful educational delivery method. Willis
(1993) claimed that the success of distance learning relies on the key players - who are students, faculty, facilitators, support staff, and administration.

Finally, research suggests that the effectiveness of distance learning is based on preparation, educators' understanding the needs of learners, and instructors' understanding of the target population and their instructional needs rather than excessive attention to innovation and the delivery systems.

The Impact of Planning and Organizing Instructional Materials

The planning and organizing of instructional materials for distance education have increased the effectiveness of the delivery process. Instructors who are involved in distance education spend about a semester before the actual transmission to prepare instructional materials for their courses (Omoregie and Jackson, 1996). When an instructor spends this much time for researching, planning, and organizing instructional materials, the instructional process becomes strengthened. Some distance learning instructors use of graphics, video tapes, and printed materials during their lecture to illustrate content area. Distance learning can also utilize face-to-face instruction with technological tools such as compressed video and computer desktop video conferencing.

While some critics argue that face-to-face instructional process has more credibility than distance education, due to time students spend with instructors after
lecture, traditional classroom instructors sometimes deliver lectures without notes or instructional materials based strictly on the length of time allowed for teaching the course.

Impact of Technological Tools and Software Packages

The rapid growth of computer and fax machine usage in schools has increased long-distance communication between faculty and students (Mackwood, 1994). Students can now communicate with their instructors by the use of electronic mail and fax. New computers are manufactured to include audio/visual communication hardware and software packages. Mackwood also claimed that computers have become the preferred long-distance communication tool in distance education.

Audio/visual equipment and technology tools such as Multimedia computer, Television, VCR, Laser Disc Player, telephone, Graphic Camera, LCD panel, Color Quickcam, and PC/MAC Tv Converter have changed the instructional process in classrooms across the nation. Instructors and students who use these tools have better chances of teaching and learning effectively than those with less technology (Morse 1991).

Companies such as Microsoft, Corel, and Roger Wagner have revolutionized the software market to include incredible presentation packages with a variety of
functions for classroom instruction. Packages such as Powerpoint, Harvard Graphics, and COREL applications are used for creating innovative presentations for classroom instruction. HyperCard and Hyperstudio software packages allow the instructor to create their own multimedia projects and presentations which have added another dimension to the instructional process. Computer graphics, electronic print, multimedia software applications, presentation software applications, and electronic mail utilized in distance education make communications and learning easier (Verduim and Clark, 1991).

Finally, the declining cost of computing equipment, more available software applications, and telecommunications tools have allowed student access to college and university campuses for interactive conferences with their instructors. Computer networks on university campuses are making it possible for distance and traditional students to gain immediate access to the University's Resource Centers and the Libraries. The overall result from the rapid growth of various modern technological tools has increased the effectiveness of education.

The Impact of Faculty Development

The learner and instructor are the most important factors in distance learning. As the needs of the learner are considered in the planning and organizing stages, the faculty needs are also considered. Faculty development remains a critical issue for
distance learning to be a successful delivery method. Willis (1994) suggested that for the success of distance education, "Teachers and administrators must work together on identifying and resolving the issues, policies, and biases that inhabit systematic use of distance education in meeting academic goals" (p. 288).

Research suggests that distance education preparation should include faculty in-service training, course loads, staff support, and administrators. Faculty in-service training should include hands-on experience for preparing test, videos, and graphic instructional materials for the course. In-service training should include the use of technology in the classroom such as telecommunications, and computing equipment. Training should also include techniques for managing distance learning and understanding the unique need of learners.

Support staff also plays an important role in the success of distance learning. An office should be created to support the instructor in preparing instructional materials for the learner. A support staff can also play the role of a facilitator or a technical person who makes sure that the equipment is in working order. Finally, the administrator and instructor must actively work to ensure a quality distance learning program. In doing this, they must identify and resolve faculty development issues that might affect the success of the distance learning delivery process.

Conclusion
In conclusion, the study revealed that distance learning can be an effective instructional academic delivery system for adult learners in schools and industries if all the key players are involved in the process. Researchers found improved modern technology tools and Software application packages to have also played a significant role in the effectiveness of distance education. Research suggests that there are no significant differences between distance and traditionally delivered instruction. Research also suggests that variables such as student demographics, motivation, attrition, cognitive style, gender, and achievement play a significant role in distance learning. Finally, faculty development has an important role in the effectiveness of distance learning.

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