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Bringing schools closer through distance learning

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Bringing schools closer through distance learning

Abstract

Distance education takes place when a teacher and student are separated by physical distance, and technology is used to bridge the instructional gap. It is definitely a plus in a world that is constantly changing. For those who have lifestyles different than the average traditional student, distance education is the way to go. It is the more time-efficient way to handle a post-secondary education. Currently, and in the future, more students in secondary and elementary schools will be using the distance education settings than using the traditional classroom.

Bringing Schools Closer Through Distance Learning

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Chapter 1

Introduction

Is distance learning bringing schools closer? When people stopped talking about videoconferencing and started talking about distance learning, the easy assumption was that this was just another whim to raise the excitement level. This assumption was not true. The term distance learning makes an important change in thinking about how people learn and, to be more accurate, how one can teach them things when everybody is not in the same room with them. So, does distance learning bring schools closer?

In the last 5-10 years distance education has become a highly effective means for people to obtain a degree or just pick up a few extra credits for educational enhancement purposes. Distance education takes place when a teacher and student are separated by physical distance, and technology is used to bridge the instructional gap.

Many of the distance education programs can provide adults with a second chance at a college education, reach those disadvantaged by limited time, distance or physical ability, and update the knowledge base of workers at their places of employment, (Willis, 1993, p. 2). Not that all of the excitement has gone away. Now,

everybody wants to market their most recent and newest training product under a label of distance learning. If a teacher orders a workbook and videotape from a supplier, this is considered distance learning. Plug a CD-ROM into your computer to learn how to use Oregon Trail, this is also considered distance learning. Answer an advertisement in the newspaper that teaches a person how to design their own pair of shoes in their home, once again, this is distance learning. The Count on Sesame Street teaching a child how to count, this is distance learning.

Growing numbers of institutions, organizations, and federal governments are integrating distant learning opportunities to meet the challenges of quality and effectiveness of educational programs. White (1995) suggests, "This concept is simply defined as...the educational activities which interactively link two or more people at two or more locations separated from one another by space and/or time"(p.1).

When people think of distance education, they wonder if distant students learn as much as students receiving traditional face-to-face instruction. Research comparing distance education to traditional face-to-face instruction indicates that teaching and studying at a distance can be as effective as traditional instruction, when the method and technologies used are appropriate to the instructional tasks, there is student-to-student

interaction, and when there is timely teacher-to-student feedback (Verduin & Clark, 1991). Effective distance education programs begin with careful planning and a focused understanding of course requirements and student needs. Appropriate technology can only be selected once these elements are understood in detail. There is no mystery to the way effective distance education programs develop. They don't happen spontaneously; they evolve through the hard work and dedicated efforts of many individuals and organizations. In fact, successful distance education programs rely on the consistent and integrated efforts of faculty, students, facilitators, support staff, and administrators.

In order for a distance education program to be successful, the teaching skills will be enhanced rather than developing new abilities. The teaching skills that need to be taken into consideration are to assess the content that can be delivered effectively in the course, be aware that the student participants will have different learning styles, humanize the course by focusing on the students and not the delivery system, be concise, and finally just plain relax. The students will grow comfortable with the process of distance education, which will develop a wonderful experience.

Along with effective teaching, comes effective interaction and feedback strategies that will allow the instructor to identify and meet individual student needs

while simultaneously providing an open discussion for suggested course improvements. A few things to consider when improving interaction and feedback are to arrange office hours using a toll-free number along with an email address. Personally, this researcher has found that e-mail worked wonders in communication at a distance. Another suggestion would be to have students keep a journal of their thoughts and ideas regarding the course content, as well as their individual progress and other concerns. Something that this researcher really agrees with, is having materials such as syllabi, texts, and notes prior to the actual start of the class. Effective teaching and effective interaction working together as a cohesive unit will provide an enjoyable learning experience for all parties involved.

Distance learning has grown tremendously since the early eighties in "availability and scope" (Jordahl, 1996, p. 204). Today, schools in just about every state have taken part in distant education projects that involve a variety of techniques used for cross-country student developed projects to inter-district teacher meetings. "Whether you are thinking of building an entire distance learning program from the ground up or hooking into existing systems, here are some examples of what's possible" (Jordahl, 1996, p.204). Bringing schools closer through distance learning is what the entire distance learning program is all about.

Chapter 2

Review of Literature

So, is distance education really bringing schools closer together? "When the U.S. Office of Education and Research and Improvement went looking for instructional telecommunications partnerships to fund as part of the federal Stars Schools Programs, one of the six it selected was the ambitious Pacific Northwest Partnership" (Jordahl, 1996, p. 205).

This school district was located in Spokane, Washington in the Education Service District 101. This project received a two-year grant to help the Education Service Districts' Satellite Telecommunications Education Programming (STEP) network service to grow and stretch. The STEP has been delivering instruction over the satellite since 1986.

Similar to many distance education programs before this, the "Northwest Star Schools project was aimed at providing previously unavailable classes to participating schools" (Jordahl, 1996, p. 205). Many classes were offered from Japanese to marine science. This program was not a one-way interactive system, but rather a system with teacher interaction from hundred of miles away. The students use telephone connections to communicate with their teachers and there is also a toll-free homework hot line that is readily available 14 hours a day.

Another Star Schools project was in Indiana.

"Indiana...operated an interconnect system known as the Indiana Higher Educational Telecommunications System or IHETS" (White, 1995, p.2).

This interconnected system started as a microwave network and telephone system that served the main and regional campuses of all the major universities in Indiana. Recently, IHETS has purchased a transponder on a satellite that is capable of offering several signals at a time.

As one moves through the Midwest, Oklahoma City has a distance-learning program at the Federal Aviation Administrator's Academy. At the Academy, Filipczak (1995) notes that "distance learning is delivered via one-way videoconferencing but trainees are armed with electronic response pads"(p.2). There is an instructor in Oklahoma City who delivers technical training to most of the 10 sites. The students have an opportunity to react to questions or ask questions of their own by using the response pads. The Oklahoma Academy has a goal of "forty percent of all the training it currently does on-site by the year 2000"(Filipczak, 1995, p. 3).

Next door in Nebraska, satellite technology has been placed into use. Because Nebraska is so sparsely populated, transmitters had to be placed carefully to reach all parts. The force behind this program was the Nebraska Educational Television (NET) and Radio

networks. Along with the NET, the University of Nebraska has developed public television, radio distribution, and set up a series of signals known as "Neb*Sat 2 and Neb*Sat 3" (White, 1995, p.2).

Moving even further west, Oregon has established Oregon Ed-Net. "This system combined three primary networks which made use of ITFS, satellite, microwave, audio, computer, and cable systems" (White, 1995, p.3). All of these networks were combined into 3 networks and they were named respectively. The aforementioned networks demonstrate what is happening state-by-state nationally.

Iowa has been very fortunate to be part of the Star Schools program. This program is known as the Iowa Distance Education Alliance. This state-wide system has become one of the most extensive fiber optics systems in the United States and the world. Currently, there are between 400-420 sites and by the year 2000, the Iowa Communications Network hopes to have about 800 sites connected to the system. Today's students are the "pioneers of learning"

[T. McDonald personal communication, Spring, 1997] and they don't even realize it.

This statement is quite truthful in the Woodbine school system. Students are e-mailing, using the Web, working on Hyperstudio, Powerpoint, and graphing.

In February, the fifth, sixth, and seventh graders were invited to the capitol building in Des Moines to showcase their Iowa Sesquicentennial Project. Their project involved using the Internet to let other people know about Iowa's Sesquicentennial (Bloom, 1997). These students worked three to four days after school on various projects and a group of students worked before school because they were unable to stay after school.

Students used the "Internet to gather soil samples, air samples and other data from around the country to spread the word about Iowa's Loess Hills and efforts to control soil erosion there" (Smiley, 1997, p.2). Every time these students set foot into the lab, they are automatically logging in and printing out their e-mail messages. These students are lucky to be a part of the present technological age.

Another project that was part of the Iowa Stars Schools Program was the Showcase on Educational Technology. This project invites educators at all levels to submit their exemplary and innovative technology projects for state-wide recognition and awards (Hardman and Stillwell, 1995-96). There were approximately 300 projects submitted during the 1995-1996 school year. They ranged across all teaching levels and subject areas with a variety of media and grade levels.

Computer Development

It has been mentioned how rapidly the world of computer development has grown recently. In a sense, this is good but it also has its drawbacks. Let's start on the positive side, the advantages of computers. Computers are good for self-paced learning, they are a multimedia tool that can be integrated with graphic, print, audio, and visual capabilities. Computers are interactive, increase access, and it is a technology that is rapidly advancing.

On the other side of the coin, computer programs are costly to develop, technology is constantly changing, there is still widespread illiteracy, and students must be highly motivated and proficient in computer operation before they can successfully function in a computer-based distance learning environment. Researchers agree strongly with the main downfall of computers, being that they constantly need to be updated.

Distant Students

Now that we have discussed a little bit about distance education, let's discuss the distant learner. The main role of the student is to learn. Even when the best circumstances are considered, this challenging task requires motivation, planning, and the ability to analyze and apply the information that is being taught.

Schuemer (1993) suggests, "In a distant education setting, the process of student learning is more complex for several reasons" (p. 1). Schuemer, goes one to suggest:

Many distance-education students are older, have jobs, and families; distant students have a variety of reasons for taking courses: in distance education, the learner is usually isolated; without face-to-face contact students may feel ill at ease with their teacher as an individual and uncomfortable with their learning situation; and in distance education settings, technology is typically the conduit through which information and communication flow. (p.2)

Some of the aforementioned can be disputed. The statement about "many...students are older, have jobs, and families," may be called into question. It is apparent, this becomes a common stereotype that is not entirely true. Also, Schuemer's comment about face-to-face contact and feeling at ease is another one to call into question. But on the other hand, if students do have trouble, Morgan (1991) suggests, "distant students need to become more selective and focused in their learning in order to master new information"(p.1).

Whether one is the teacher or the learner, you need to be prepared for any learning situation.

Brundage, Keane, and Mackneson(1993) suggest that adult students and their instructor must face and overcome a number of challenges before learning takes place including: "becoming and staying responsible for themselves; 'owning' their own strengths, desires, skills, and needs; maintaining and increasing self-esteem; relating to others; clarifying what is learned; redefining what legitimate knowledge is; and dealing with content"(p.1). Teaching and learning at a distance is demanding. If the students and their instructor share responsibility for developing learning goals and objectives, the learning will be more meaningful and deeper. All of the aforementioned are challenges and opportunities in distance education.

Once the students have overcome their challenges, they start to become successful. Some of the research suggests, "distant students bring basic characteristics to their learning experience which influence their success in course work"(Chute, Starin, & Thompson, 1994, p. 2). Distance education students are seeking further education voluntarily. Some typical stereotypes found among distant education learners are that they have post-secondary education goals with expectations for higher grades, are highly motivated and self-disciplined, and are older. Some other interesting things discovered were that students, who were successful in learning in either distant or traditional

settings, were willing to initiate calls to instructors for assistance, possessed a more serious attitude toward the courses. It was also noted that they tended to be employed in a field where career advances can be readily achieved through academic upgrading, and a distance education environment fostered this endeavor.

Chapter 3

Summary

Whether distance learning is a long distance or a short distance, there is a need for a comfortable environment. "Although distance learning generally involves connecting a large number of schools located over a wide area, the same technologies can be used for local 'distance' learning projects as well" (Jordahl, 1996, p. 205). With the big screen television monitors and a comfortable seating arrangement in some of the sites, the distance learning process is a much easier and a more positive environment for learning. With the presence of a lot of this equipment, this setup helps the students to feel more at ease and the students are not "on stage" in front of a group of people. So, the Iowa Communications Network (ICN) does try to simulate the ideal classroom to make the experience a more realistic experience.

In our community of about 1,500 people, students and teachers use the computer lab and the ICN for various projects in the school, but the school has yet to involve the rest of the community in the use of the ICN room and the computer lab. During the summer, a few teachers opened the computer lab open every Thursday evening from 7:00-9:00 for the community. But, it seemed only the same people appeared every time and the lab was never really utilized.

Various teachers would monitor the room use and the computer user closely. But somehow, someone accessed an improper area on the web and the school decided to close the lab on Thursday nights. Maybe, if the school had a technology coordinator, then the lab would get more use and would serve the general purpose for searching. But, until the school gets that person, utilizing the computer lab will be difficult for any of the community members.

Every state in the United States has some sort of networking system in place and for the most part, a majority of them are expanding and changing rapidly. The real challenge lies ahead in inclusion of a variety of areas such as local, regional, and state systems. Also, people are going to have to be willing to have to adapt their activities to these new distance education systems and the administrative barriers must be addressed and corrected.

The design and setup of educational activities will need to change. Teachers will have to engage in additional planning for a more effective quality product that relates to people's needs. Distance learning programs will take many new and powerful forms in the future. As the world continues to change, business, industry, education, and government alike are finding it difficult to keep their work forces competitive and current.

Overall, a conclusion would be that distance education is definitely a plus in a world that is constantly changing. For those who have lifestyles different than the average traditional student, distance education is the way to go. It is the more time efficient way to handle a post-secondary education. Currently, and in the future, more students in secondary and elementary schools will be using the distance education settings than using the traditional classroom.

A personal prediction would be that by the time current students have children in schools there would no longer be the traditional classroom and all learning will be done over a distance. If this would happen, those teachers who are computer illiterate will have a tough time keeping or finding a job. They will get lost in the shuffle.

In conclusion, the technology age is growing faster and faster everyday and if teachers don't get involved with what is happening, then they will get lost in the technology age.

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