# Distance Learning/ Education: An overview

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#### Introduction

In this paper I will briefly, and somewhat narrowly, present the history of distance learning/education primarily in the United States of America and then conclude with more or less where it is today. I say more or less because "today" refers to distance learning / education on the Internet. The Internet and distance learning/ education are changing quickly and will likely have taken a different shape before this paper has been published. We should not think of contemporary distance learning/ education in a traditional, linear form. The Internet is "global" and dynamic, and it, along with distance learning/ education, will not stand still or necessarily move in an unswerving path. Another point to remember is that the use of the Internet and distance learning/ education is likely to define itself more than we will define it. We may be able to look at patterns and view trends, but as of yet no one can be sure what exact form either shall take.

#### **Defining Distance Learning/Education**

Initially some fundamental framework needs to be put forward so we are able to understand what we are referring to when we use the terms distance learning or distance education. Dan Coldeway (1995) has presented a good design that will assist us in visualizing one way that education and distance learning/education in general may be organized.

Most education takes place at the same time, same place (ST-SP). This generally occurs in a classroom and is teacher fronted. Another form of education could be seen as different time, same place (DT-SP). This generally occurs in a media center or computer laboratory.

The next two, which are more relevant to this paper, address situations where the instructor and students are in different places. One is where the instructor is in one place and the student in another at the same time (ST-DP). This traditionally and still often occurs via television. The television may be in a classroom or in an individual's home, while the instructor is in another place.

The fourth method is learning at different times and in different places (DT-DP). In this design the learner chooses when or where to access the information presented by the instructor. The rapid growth of the Internet and the World Wide Web has popularized this form of distance learning/ education.

A four part view of distance education has been put forward by Grenville Rumble (1989, pp. 8-21):

(1) In any distance education process there must be: a teacher; one or more students; a course of curriculum that the teacher is capable of teaching and the student is trying to learn; and a contract, implicit or explicit, between the student and the teacher or the institution employing the teacher, which acknowledges their respective teaching-learning roles.

(2) Distance education is a method of education in which the learner is physically separate from the teacher. It may be used on its own, or in conjunction with other forms of education, including face-to-face. (3) In distance education learners are physically separated from the institution that sponsors the instruction.

(4) The teacher-learning contact requires that the student be taught, assessed, given guidance and, where appropriate, prepared for examinations that may or may not be conducted by the institution. This must be by two-way communication. Learning may be undertaken either individually or in groups; in either case it is accomplished in the physical absence of the teacher.

Likely the most straightforward way to view distance learning / education is where the teacher, instructor or institution is separated physically, or in time from the learner and some form of communication medium is used to connect the two.

#### A Brief History of Distance Learning/Education

#### **Pre-Distance Learning/Education**

Many people and especially those in their twenties or younger are likely to believe the Internet to be the first use of distance learning/education. Far from it. The use of distance learning/education other then the Internet has existed in various forms for a very long time. Students have studied and learned information and ideas in places separated by time and or space from their teachers for much longer then most people have ever considered.

For example we could say that rock carvings are a form of distance learning. They fit the SP-DT format presented above.

Information was left (by often unknown teachers) that gives us (the students) knowledge about what the culture, animals, and the topography in a far removed time period were like.

However, the written word was the means that made geo-

graphical distance learning/education truly possible and an actual concept. "The first significant use of the new technology to make course materials available to students came with Plato's publication of *"Socrates' Dialogues."* Socrates also foresaw saw difficulties with this sort of learning because words did not always convey the wisdom of the teacher (Klass, 2000, p. 1).

Saying that rock carvings and the printed word (books) are a form of distance learning/ education is a bit of a stretch, from what we are looking at in this paper, because the one factor that is missing from both of these forms of communication is an ongoing interaction between the teacher and the student. In rock carvings the student has no way of asking the teacher a question. As far as books go, it is possible for a reader of a book, in recent times, to send a letter to the author of the book, if he or she is still living, and the author may respond. However, the chances of the author opening a correspondence with the letter writer (student) would be relatively rare. Therefore, for the purposes of this paper we can say that distance learning/education began on a wide scale in the 1800's with the introduction of correspondence studies.

### **Correspondence Study**

Distance learning/education was originally known as correspondence study. In this stage of distance learning/education the teacher and pupil used pen and paper or a typewriter and they corresponded via the postal service. Correspondence studies grew rapidly in the United States as the ability to deliver mail improved (Postal Facts, 1996).

This expansion of the postal delivery system allowed students and instructors to keep in touch on a regular basis relatively quickly through some form of written contact. The United States was not the only country involved with correspondence courses. Many European countries offered language learning via correspondence studies as early as 1873 (Butler, 2002).

By 1883, the Chautauqua Institute was accredited by New York State to confer Sunday school teachers' degrees through correspondence studies (Chautauqua Institution, 2002). Part of the training was accomplished on campus and then completed through the mail.

The Colliery Engineer School of Mines was started in 1890. Later this school developed into the International Correspondence Schools (ICS) which are still active today and have enrolled over 12,000,000 students (Thomas Education, 2002).

There are many correspondence study programs that could be mentioned; however one person that I believe should not be overlooked is Anna Eliot Ticknor, an American, who in 1873 established a primarily volunteer correspondence program in Boston to assist women to receive an education. She is often called "the mother of American correspondence study." Later she also founded the Society to Encourage Study at Home (Arcabascio, 2001).

Another program that is of some interest was started by the United States Marine Corps. The Marine Corps Institute opened around 1920 to improve the level of general education and provide technical training for the enlisted personnel. This program is still in operation today, offering over 150 courses at both the vocational training and bachelor's degree levels (Marine Corps Institute, 2002).

## Radio and Television are Incorporated Into Distance Learning/ Education

Radio arrived before television and therefore to the distance

learning/educational scene also. Radio based distance learning/ education gained popularity between 1910 and 1920. Radio brought the instructor's voice into the student's home. This added intimacy and reintroduced into distance learning/education a portion of traditional teacher fronted education. From 1918 to 1946 the United States Government granted over 202 radio broadcasting licenses to educational institutions. Before the medium ever attracted a large audience the then new medium of television came to the scene, and by 1940, only one college-level credit course was available via the radio (Nasseh, 1997).

Educational television started as early as 1934 and was used in both secondary and higher education. After World War II, educational television was discontinued on commercial stations and was carried through the Public Broadcasting System (Gearhart, 2000).

In general, there were several drawbacks with radio and television. First, the learner had to be available at the time the broadcast was on. Also, the number of televisions grew slowly, and the commercial side of television heavily outweighed the educational potential. In other words, people viewed radio and television as forms of entertainment and not education. As videotapes, CD and DVD ROMs became more available they often were used as substitutes for broadcast television distance learning/education. In the late 1970s and early 1980s, cable and satellite television came into use on a limited basis.

What is most interesting about the radio and television era of distance learning/education is the relatively small impact it had (Mayer, 2001, p. 9). One possibility that may be put forward to explain this is that it appeared before there were means of recording television programs. The learner had to be available to watch the

class or course. Another, more harsh, suggestion was put forward by Newton Minnow the former FCC chairman in his 1961 "vast wasteland" speech (Chicago Tribune, 2001).

#### The Internet and The World Wide Web.

The move to discussing distance learning/education on the Internet raises a number of problems. First, the Internet is unlike anything used before it. If we were to ask most people who use the Internet what it is and how it works, we would likely get no answer or a number of different answers. There are various ways to describe the Internet depending on the observer's point of view. These portrayals can be very simplistic, and they can be long, minute, and largely impossible to understand.

One definition of the Internet is, "A meganetwork of interconnected networks that share a common language" (Simonson, Smaldino, Albright, Zvacek, 2000, p. 178). The simplest way to think of the Internet is as a very large number of computers that are connected to each other. We also need to specify that these computers are all over the world. How these computers communicate with each other is another topic that is interesting, but beyond the scope of what this paper is looking at.

However, we do need to look at the ways people are able to communicate using the Internet. One way that teachers and students or students and students may communicate is described as "asynchronous." In general, this indicates something not occurring at the same time. On the Internet this relates to a person sending a message, but the recipient need not be around to receive it. Electronic mail is one of the most popular forms of distance learning/ education used over the Internet. It is not the only one though.

### Electronic Mail and Distance Learning/Education

The use of electronic mail (e-mail) for distance learning/education is, in some ways, analogous to the correspondence studies of the 1870s. However, there are also some significant differences. Obviously the most visible similarity between the two is that teacher and student interact using a "mail" system. Conventional correspondence studies use the "traditional mail" mode (often referred to these days as "snail mail") while e-mail uses the Internet.

Perhaps the biggest advantage of e-mail is the speed at which the information is sent. Electronic mail has the potential of reaching the recipient in seconds. Also, with e-mail it is just as easy to send a message to a group of people as it is to one person. This is called a mailing list. Responding is also easy because e-mail software has a function called "reply." All one needs to do is click on this button when you wish to reply to the e-mail you have received.

On the flip side of these positive aspects, we have more then a few negative ones. If the person receiving e-mail doesn't check their mail it makes no difference if it arrived in a few seconds. There is virtually no security with e-mail. Many people have the opportunity of intercepting your e-mail and reading it. If the company providing the internet conection you are sending an e-mail to goes down, the message you send may come back or just be lost in "cyberspace." In general, people do not like to read long messages on their monitors, so they may be forced to print out what you send them. Occasionally, the receiver of e-mail is not using the same font as the sender and this causes problems. The Internet is unforgiving if the receiver's address is incorrect. If there is any mistake in the e-mail address you send it will be returned to you. The Community College program of Sophia Junior College in Hadano has offered writing classes via e-mail, and they have worked out well, though they are more time consuming then the same class taught in a classroom. In reality, they are a hybrid of correspondence studies and an e-mail course. The teachers sent out a work packet via "snail mail" and then the students interacted with her by e-mail.

### The World Wide Web and Distance Learning/Education

The introduction of the World Wide Web (WWW) brought "point and click" technology and the virtual classroom to the Internet. The World Wide Web was first envisioned by Tim Berners-Lee and then actually launched in 1989 (Connoly, 2000). Although it has been around a relatively short time, the WWW has literally created a whole new world in distance learning/education. There are various ways to create a general overview of distance learning/education in relation to the WWW. Here is one way.

#### Facilities

1. Programs offered via the WWW that are part of a school, college or university that has a campus and also offers traditional "face to face" (F2F) education.

2. A program that is completely "online" and offers no "face to face" classes.

### Location of the virtual classroom

1. Many schools use various services provided online, like Blackbord.com to base their virtual classrooms in.

2. Other schools have their virtual classrooms on computers

they own and maintain.

#### The Beginnings of the Virtual Classroom

"I would ask you to remember that what I will say today about a California Virtual University is only accurate as of today" (Thompson, 1996, p. 1). Although this quotation will soon be ten years old, in general it still applies to the virtual classroom.

Although colleges and universities have, in some form, been offering online classes since the early 1980s, the big jump came when thirteen states in the western part of the United States joined together in 1995 to create a virtual university. The California Virtual University is part of this group. In this system students can apply for admission, register for courses, purchase books, "attend" classes and receive grades without ever going to the campus itself.

There is a growing market for education that has no physical campus. They are purely cyberspace universities. Several of the well known ones are The University of Phoenix On Line and Jones University. These universities often cater to the working adult and are sometimes called "proprietary (for profit) institutions" (Simonson, Smaldino, Albright, Zvacek, 2000, p. 177). Jones University became the first online credited university in 1999 (Jones International University, 2002).

As one would expect, there is some tension between traditional universities and the all online universities. The traditional universities look down on these so called "for profit institutions" because they are "different." Traditional universities point out that some online universities have no permanent faculty or a limited one at best. On the other hand, the all online universities believe the "older" traditional universities have fallen out of step with what students want and need today. For the point of view of the all online campus see the video Jones University presents on its site (Jones International University, 2002).

At this time the future of online classes and campuses is unknown. However, for the time being, the trend is that they are going to continue to grow. All one needs to do is look at the number of classes offered online. Also, the controversy that classes and the offering of degrees has brought to the foreground indicates something is happening.

#### Conclusion

This paper has not covered a number of forms of distance learning/education. For example, audio recordings, facsimiles, and telephone communications were not discussed, but, like correspondence studies, radio, television, video, and CDs, they are all still used today.

The present issue is how distance learning/education and the Internet will interface. Of course, they already have, as it has been pointed out, but it would be naive to believe the end has been met or is even in sight. The technology is still defining itself, and, as it does so, distance learning/education will also.

As far as what the Internet holds for education in the future, I will end with a quote from Richard E. Mayer: "Although different technologies underlie film, radio, television and computer-assisted instruction, they all produced the same cycle. First, they began with grand promises about how the technology would revolutionize education. Second, there was an initial rush to implement the cutting-edge technology in schools. Third, from the perspective of a few decades later it became clear that the hopes and expectations were largely unmet" (2001, pp. 9-10).

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 $^{\ast}$  All of the Internet sites cited above were accessed on 12/1/02.