

**Online Distance Education:
Historical Perspective and Practical Application**

by
Margaret Gorts Morabito

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Margaret Gorts Morabito

Dissertation Submitted as Partial Fulfillment of the
Requirements for the Degree of

Doctor of Philosophy
in
Distance Education and Technology

Graduate School of Community and Human Services
American Coastline University
Professional Development Institute
Metairie, Louisiana

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Margaret Gorts Morabito
November 1997

Many educators and the public are interested in online distance education, in particular Internet-based schooling. The underlying assumption is that this is a new and untested fad in education. This is due in part to a lack of documentation within academia of the early development of online distance education, and, in part, to a shortage of experienced, practicing online schools. On the Internet, one may become confused by the flurry of activity and by the various claims from organizations that they are providing a revolutionary method of instruction--online teaching. Furthermore, many people are unaware of the long and distinguished history of distance education itself that is the root of current day Internet-based schooling. Despite the uncertainty, the public is clearly demanding online distance education. This dissertation helps to resolve these problems.

This study fills various needs for the purpose of showing the effective application of online distance education. Educational administrators, teachers, and the public must be assured that online distance teaching is a valid and proven instructional method. Furthermore, administrators and teachers need to know what to expect when planning, operating, and teaching in an online school. Through historical analysis and the presentation of a practicing Internet-based school, this study fills these needs.

This dissertation results from fifteen years of independent study and research by the author, combined with professional experience in the field of online distance education, including Internet-based school design and operation. Conclusions result from published

studies in distance education; from research conducted in the 1980s concerning publicly available online distance education; and from experience in developing, administrating, and teaching in an international, Internet-based school that has been in continual operation online since 1986.

The author concludes that: (1) online distance education has a proven track record; (2) there is continual demand from the global community for Internet-based instruction, as well as a public demand for traditional institutions to accept this nontraditional method of study; and (3) administrators and teachers can economically create and operate an effective Internet-based school that is accessible to and affordable for individual learners using low-cost personal computers.

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Chapter I

Analysis

Statement of Problem

Many educators and the general public are interested in online distance education, in particular Internet-based schooling. They want to know what it is and how it works. The underlying assumption is that this is a new and untested fad. This is due, in part, to a lack of documentation of the early development of online distance education which occurred in the 1980s, and, in part, to a shortage of experienced, practicing online schools. On the Internet, one may easily become confused by the flurry of activity and by the various claims from educational institutions that they are providing a revolutionary method of instruction--virtual online teaching. Also, many people are unaware of the long history of distance education itself that is the root of current day Internet-based schooling. Despite the uncertainty, the public is clearly demanding online distance education. This dissertation helps to resolve these problems and helps to clarify the historical record. Much of the information provided is based upon proven practice and application from the author's developing, administrating, and teaching in an online school since 1986.

Need and Purpose

This dissertation fills various needs for the purpose of showing the effective application of online distance education. Educational administrators, teachers, and the public need to know that online distance teaching is a valid and proven instructional method and that there is a body of history that documents the origins and presence of

online distance education over a decade ago. Furthermore, administrators and teachers need to know what to expect when planning, operating, and teaching in an online school. Through careful planning and operation, combined with quality online teaching, educators and the public will know that they are participating in an effective method of instruction, one that will be accepted by both nontraditional and traditional educational establishments. This dissertation does not discuss the various experimental activities on the Internet in the late 1990s. It instead focuses on proven methods for online schooling that have been effectively used since the 1980s.

Chapter II, "Historical Development of Online Distance Education," investigates the history of online distance education, providing a focus on its developmental history and the underlying principles of distance education. It highlights the formative decade of the 1980s when online distance education was born and then shows the quick progression onto the Internet in the 1990s. A study of the history of distance education is needed so that administrators, teachers, and students can understand the reasons behind the development of current uses of Internet-based distance education, appreciate the rich heritage of distance education, and realize that they are participating in and helping to define an essential tool for learning, one that has been in use for many years. Through this study, one may see that online technology has made a significant impact on bringing the world's educational community together for educational purposes and that there is a blending of delivery systems within both traditional and nontraditional institutions.

Chapter III, "Planning and Operating an Internet-Based School," presents a model Internet-based school that has been in continual operation online since 1986. This serves two purposes. First, it provides a working model which other educators may examine and possibly utilize in their own online schools. Second, it provides a basis for a theoretical, philosophical, and practical discussion of the planning and operation of an online school which administrators should be aware of before they pursue their

own development of an online school or an online division of an offline school.

Within adult education, higher education, and secondary level institutions today, there is a growing demand to provide learning programs to students through the use of the personal computer via the Internet. This chapter provides educational administrators with a common sense approach to planning and operating an Internet-based school to fill this growing demand.

In Chapter IV, "Theory and Methods for Online Distance Teachers," the author addresses teachers who are planning to do online teaching. This chapter discusses the philosophy and theory of teaching which is a foundation for current methods of online teaching. It also presents tested and proven methods, techniques, and strategies for planning and teaching an online course.

Chapter V, "The Students and Their Educational Goals," provides an informal overview of the different kinds of students who participate in online distance schooling and their goals for taking online courses.

Appendices A through D provide supplemental details about the author's design and operation of CALCampus. Appendix A provides the physical layout with screen shots depicting the technical features of CALCampus, Appendix B provides the CALCampus Student Manual, Appendix C provides the Course List, and Appendix D provides the Course Registration Form. These appendices should be useful as concrete models for educators who are in the preliminary stages of developing their own online school.

Methodology

This paper is a result of fifteen years of independent study and research into the field of online distance education, combined with over a decade of professional experience in online school design and operation. Conclusions result from a

combination of learning from current and past educational studies, as well as from firsthand experience in developing, administering, and teaching in an international, Internet-based school, CALCampus (<http://www.calcampus.com>). The author used the Internet to locate literature for this paper, including online library searches through the following sites: CARL System Library Catalogs (<telnet://192.54.81.76>) or (<http://www.carl.org>); the ERIC Digest (<gopher://gopher.ed.gov/11/programs/ERIC/searchs>); as well as Internet searches done through Yahoo (<http://www.yahoo.com>) and Infoseek (<http://www.infoseek.com>). CARL searches resulted in acquiring texts through traditional offline libraries, while ERIC searches resulted in accessing articles in electronic form that were then printed for research and reference. Results from Yahoo and Infoseek searches resulted in locating the World Wide Web home sites of various distance learning institutions for research and reference. The URLs for these sites are referenced within the text and in the Works Cited.

This dissertation is separated into three major components: analysis, critical evaluation, and synthesis. Chapter I provides an analysis, stating the problem under scrutiny, the relevance and need for this study, methodology used, and expected findings. Chapters II through V provide a critical evaluation of the topic based on a review of literature, along with practical and proven experience within the field of online distance education. Chapter VI provides a synthesis of this topic, including professional perspectives on recognizing the past, implications for the future, importance to the global community, and final conclusions.

This dissertation follows the guidelines presented in the American Coastline University Research and Writing Guide with source citations following the Modern Language Association guidelines as designated in the fourth edition, combined with current recommendations published on the Internet, which are not yet agreed upon at the time of writing this paper. This dissertation is designed to fulfill the requirement

for the doctoral dissertation as specified by the American Coastline University Professional Development Institute's Graduate School of Community and Human Services, in partial fulfillment of the Doctor of Philosophy degree in Distance Education and Technology. American Coastline University is an international, distance learning university with its headquarters in Metairie, Louisiana.

Definitions

There are various terms associated with online distance education. The following terms and phrases are defined here to familiarize readers with current terminology in the field of distance education and to clarify the author's use of certain terms that deal with online distance education as compared with traditional education.

Traditional education means enrollment and study within a physical building where students meet face-to-face with their teachers. Today, this definition is becoming outdated as nontraditional, distance education delivery systems start to infuse traditional institutions. A traditional educational institution is comprised of the buildings, study materials, and personnel associated with the education provided.

Nontraditional or alternative education has been defined simply as the "ways and means of getting an education or a degree without sitting in classrooms day after day, year after year" (Bear 9). A nontraditional or alternative educational institution is the central administrative location where communication and administration of programs are undertaken. This can be a physical building or a computer. Since the students do not physically place themselves at the institution, they are called non-resident students. The definition of the non-resident student is changing today as distance learning schools create real-time online campuses where students log in to receive instruction in a traditional way, yet using an electronic classroom, commonly called a virtual online classroom or chat room.

Correspondence instruction is a method of nontraditional education in which correspondence is the means of interactive communication between the student and the instructing institution. Methods of correspondence may range from surface mail to e-mail to facsimile, among others. There are five components: prepared materials, written in self-explanatory fashion and arranged in a series of lessons; supplementary printed and other materials; a series of exercises to be worked out by the student; the evaluation of these exercises by a competent instructor; and a final examination for the course (MacKenzie, Christensen, and Rigby 4). A correspondence school is the educational institution that provides correspondence instruction.

Distance education is a modern day term used to refer to correspondence instruction. It is enrollment and study with an educational institution which provides lesson materials prepared in a sequential and logical order for study by a remote student on his or her own. The student mails or otherwise makes available to the school the assigned work for immediate feedback by qualified teachers, thus providing a personalized student-teacher relationship. This is the definition provided by the Accrediting Commission of the Distance Education and Training Council's DETC Accrediting Overview (1). A second definition, which is more accurate in light of present day technology, states that distance education "takes place when a teacher and student(s) are separated by physical distance, and technology (i.e. voice, video, data, and print) is used to bridge the instructional gap" (Willis, Distance Education 4).

The student who studies through distance education is a distance learner and uses distance learning as his method of receiving instruction. Often, the distance learner is an adult who for various reasons cannot or does not want to physically attend a local school. Today, however, there is a growth in the number of middle and secondary schools that are using distance education to expand their local curriculum. Distance education provides a way for the student to continue studying throughout life; thus, the

coined phrase, lifelong learning, which many institutions use in describing their schools.

Delivery systems are the tools used to provide communication and instruction to students, whether they be in a traditional classroom or in a distance learning institution. The earliest traditional delivery systems relied on live lectures and seminars between the teacher and students, and later were supplemented by print materials which were physically distributed to the students. Nontraditional delivery systems also include the use of print materials, but they are delivered through mail or by electronic means to students at a distance. Today, there are many tools that are used to provide instruction both within traditional and nontraditional schools. They may include a combination of e-mail, radio, television, telephone, modem, computer teleconferencing, the Internet, facsimile, among others.

An online distance delivery system, for the purposes of this study, is comprised of two or more personal computers connected via modem or other telecommunications method where the student and the teacher are located at different geographical locations and use their individual personal computers to communicate for instructional purposes. These come in many forms and can be either commercially available networks, such as CompuServe and America Online; localized institutional networks such as a university network; two single computers in different locations connected by modems; or a single computer running client/server software which is either accessed locally via modems and telephones or is connected to the Internet for incoming access.

Online distance education, online education, or online schooling are phrases used to describe the providing of instruction through the use of an online delivery system. The popular terminology for an online school is a virtual online school. An online school is a totally electronic school, which is located on a computer and provides all of its administrative and instructional services through the online medium. Today, many institutions use the online medium for certain functions, such as using e-mail or

registering students; however, these are not online schools. They simply provide some of their services online.

An Internet-based school, for the purposes of this study, is an online school connected to the Internet. Specifically, it is comprised of a self-contained, locally residing computer system with client/server software which is connected to an Internet provider, thus allowing people with personal computers and modems from remote locations to enter the online school via the Internet. The students and teachers are located at different geographical locations and use their individual personal computers to interact for instructional and administrative purposes. The Internet itself allows computer users from around the world to electronically travel from their remote locations to the online school. The server software resides on a single computer which provides for the creation of individual accounts, download libraries, message boards, e-mail, and teleconferencing; while the client software resides on the remote user's computer. When the server is connected to the Internet, the online school becomes an Internet-based school.

A Web site is a page or pages of information provided on the World Wide Web, which is one component of the Internet. Usually, a Web site is provided by a local Internet provider who will design and display pages according to information provided by a client. Most Web sites provide information about a school and allow one to send e-mail to an administrator of the site. The Internet provider holds all of the materials for the client and may or may not allow the client to individually modify existing pages.

A Web server is the software and computer used to provide a Web site. Web server software itself is software run on a computer which is physically connected to the Internet. A Web server may provide a Web site, and furthermore, may be expanded to allow for the creation of private, individual accounts which may then use e-mail, conference chat rooms, library uploads and downloads, as well as message board

usage on a self-contained computer system. The online school presented in Chapter III uses a configuration of a Web server combined with a client/server system, thus creating a totally Internet-based school.

Computer teleconferencing is the ability for two or more remote computerists to type to each other within an electronic classroom, chat room or virtual classroom while online. This is normally done in plain text mode; however, there are servers that will support the added ability of graphics and sound. Graphics allows for a teacher to use an electronic blackboard for instructional purposes within the teleconferencing room, a useful tool in online distance instruction. Teleconferencing options are growing today. They may be provided on the Internet through Internet Relay Chat (IRC) or through separate client/servers that may or may not be connected to the Internet.

Online network, online system, and telecommunications network are terms that are used to mean the same thing: a computerized system which houses message boards, libraries, teleconferencing rooms, and offers e-mail capabilities. These can be of varying sizes from the large commercial telecommunications networks down to a small client/server system, known in the past as a bulletin board system. An Internet-based client/server system may also provide various Internet tools to its members who are logging in locally instead of coming in through the Internet itself.

Educational objectives are intended outcomes of teaching stated in relation to the student's behavior after completion of a course of study, which can be observed, described, and classified according to different levels of understanding by the student (Bloom 1). A learning outcome statement is similar to an educational objective. It "specifies the knowledge, skill and/or attitude that a person is expected to acquire in a given curriculum framework, enabling both teacher and student to know in advance what it is that students are expected to know and be able to do" (Simosko 12-13). Administrators and teachers of educational programs must be clearly aware of the

educational objectives of the school in order to logically plan and operate the school, whether it be online or offline.

Expected Findings

The public has already learned that the Internet is able to bring people together and is capable of providing online distance instruction. In 1997, a situation exists in which the demand for Internet-based education precedes the availability of service within traditional institutions. Traditional educational institutions must acknowledge the validity of distance learning, in particular online distance learning, and take the steps needed to provide online distance programs for those students who cannot or prefer not to physically attend traditional schools. If they do not act, nontraditional schools will outpace traditional schools in providing this needed service to the public. All educational institutions must plan effectively to develop and operate their online distance learning programs, including preparing online administrators and online teachers for their new roles. It would be wise if this were done in cooperation with experienced online educators who have already learned effective methods of online administration and teaching, rather than starting from scratch.

Educational administrators must use common sense when planning and operating an Internet-based educational program, whether it be a totally online school or just an online instructional division of an offline school. While the technology associated with being online and the mystique surrounding the Internet itself are powerful diversions, the administrator must focus on the reality of the school's purpose and logically handle both long-term planning and day-to-day operations in an economical way. This medium of communication and interaction is new to many educators; however, the fundamental tasks are the same as in an offline school. An Internet-based school does not need to be highly expensive to develop and operate either, nor

does it require lots of money from federal and state sources (taxpayers). The Internet-based school that is presented in this dissertation is a small, private institution, which is financed through student enrollments. One may use this fundamental model online school as a base for designing and implementing a larger online school.

Teachers who are planning to move into online teaching will find that the methods used in online teaching have many similarities to those used in offline teaching. One may see that the basic educational theory and philosophy for online distance educators is similar to that of traditional offline teaching. While there are many similarities, there are differences in terms of the ways that methods and techniques may be applied with given technology. Teachers should use a combination of proven offline techniques and apply those, as technically allowed, to the online medium. Most important is the teacher's desire to teach online.

In the late 1990s, there is a demand from the global community for high quality, experienced Internet-based schools. This trend will continue into the future, and the public must be assured that they are participating in a form of education that is valid, proven, and is being made available by educators who know what they are doing. The public also expects Internet-based learning to be accepted by traditional schools so that students may combine nontraditional and traditional methods of learning to reach their overall learning goals.

Chapter II

Historical Development of Online Distance Education

This chapter provides an historical look at the birth and development of online distance education which occurred during the 1980s. Educators, researchers, and the public should be aware of the significant events dealing with online distance education that were happening in this important and formative decade. In 1997, there are claims on the Internet from educational organizations of their revolutionary new ways of teaching online; yet, from an historical perspective, these revolutionary new methods are really duplicating what was already developed and implemented online over a decade ago. Online distance education is a natural outgrowth of distance education and correspondence education, and, therefore, this chapter begins there.

Print-Based Instruction

The print-based method of instruction at a distance is basic to most educational institutions, both traditional and nontraditional. In "Telecommunications and Distance Education," Alexander Romiszowski categorizes distance education into four generations, the first being the print-based model (n.p.).

Contrary to popular assumption, distance education is not a new phenomenon in the educational world and it has been in existence for centuries. In fact, with regard to using printed materials for learning at a distance, one could say that as early as the days of Moses, this first generation of distance education was in use when Moses wrote down the ten commandments (in stone instead of on paper) for people at a distance to read and learn from. Stone was replaced in the 15th century by the printed word as known today, thanks to Gutenberg's printing press, and education through

printed materials became a major delivery system within educational institutions (Chasse).

Although one can see the seeds of distance education back in the early days of recorded civilization, they did not take root on a large level until the 1800s and early 1900s when adult education began to flourish throughout the world. This was a result of several factors. The growth of the Industrial Revolution created a situation where many adults were moving from the rural areas into the cities where jobs could be found. Also, there was a big influx of immigrants into the United States who needed education. These adults needed to learn new job skills and they needed to expand their learning to become informed voters (Compton's Interactive Encyclopedia). In the United States, between 1841 and 1851, the Westward Movement was underway, and as the settlers moved into the frontier, they needed a way to continue their education. New approaches were developed, and by the mid-1800s, a new educational system was growing, one which was based on nontraditional methods of learning.

Europe, too, was inventing new methods of providing education to those students who could not attend traditional schools. In 1850, William Sewell of Exeter College, discussed the new "extension system" in England which was basically a non-resident program of education. Several years later, a French teacher and a German writer started the Toussaint-Langenscheidt Correspondence School (MacKenzie, Christensen, and Rigby 24). These were the European roots of correspondence learning.

By 1873, Anna Eliot Ticknor, of Boston, Massachusetts, had developed the Society to Encourage Studies at Home, a private correspondence school based on mailing letters back and forth between the student and teacher every month, in combination with guided readings and frequent tests. This became a basic method for future correspondence instruction. In the same year, the first university in the United States to offer degrees through correspondence instruction began offering courses. This was Illinois Wesleyan University, a Methodist school that offered non-resident courses to