A Brief History of Distance Education

Distance education seems a new idea to most educators of today. However, the concepts that form the basis of distance education are more than a century old. Certainly there has been growth and change in distance education recently, but it is the long traditions of the field that continue to give it direction for the future. This section offers a brief history of distance education, from correspondence study, to electronic communications, to distance teaching by universities.

Correspondence Study

The roots of distance education are at least 160 years old. An advertisement in a Swedish newspaper in 1833 touted the opportunity to study "Composition through the medium of the Post." In 1840, England's newly established penny post allowed Isaac Pitman to offer shorthand instruction via correspondence. Three years later, instruction was formalized with the founding of the Phonographic Correspondence Society, precursor of Sir Isaac Pitman's Correspondence Colleges.

Distance education, in the form of correspondence study, was established in Germany by Charles Toussaint and Gustav Langenscheidt, who taught language in Berlin. Correspondence study crossed the Atlantic in 1873 when Anna Eliot Ticknor founded a Boston-based society to encourage study at home. The Society to Encourage Studies at Home attracted more than 10,000 students in 24 years. Students of the classical curriculum (mostly women) corresponded monthly with teachers, who offered guided readings and frequent tests.

From 1883 to 1891, academic degrees were authorized by the state of New York through the Chautauqua College of Liberal Arts to students who completed the required summer institutes and correspondence courses. William Rainey Harper, the Yale professor who headed the program, was effusive in his support of correspondence study, and confident in the future viability of the new educational form:

The student who has prepared a certain number of lessons in the correspondence school knows more of the subject treated in those lessons, and knows it better, than the student who has covered the same ground in the classroom.

The day is coming when the work done by correspondence will be greater in amount than that done in the classrooms of our academies and colleges, when the students who shall recite by correspondence will far outnumber those who make oral recitations.

In 1891, Thomas J. Foster, editor of the *Mining Herald*, a daily newspaper in eastern Pennsylvania, began offering a correspondence course in mining and the prevention of mine accidents. His business developed into the International Correspondence Schools, a commercial school whose enrollment exploded in the first two decades of the 20th century, from 225,000 in 1900 to more than 2 million in 1920.

In 1886, H. S. Hermod, of Sweden, began teaching English by correspondence. In 1898 he founded Hermod's, which would become one of the world's largest and most influential distance-teaching organizations.

Correspondence study continued to develop in Britain with the founding of a number of correspondence institutions, such as Skerry's College in Edinburgh in 1878 and University Correspondence College in London in 1887. At the same time, the university extension movement in the United States and England promoted the correspondence method. Among the pioneers in the field were Illinois Wesleyan in 1877 and the University Extension Department of the University of Chicago in 1892. Illinois Wesleyan offered bachelor's, master's, and doctoral degrees as part of a program modeled on the Oxford, Cambridge, and London model. Between 1881 and 1890, 750 students were enrolled. By 1900, nearly 500 students were seeking degrees. However, concerns about the quality of the program prompted a recommendation that it be terminated by 1906.

Correspondence study was integral to the University of Chicago. The school, founded in 1890, created a university extension as one of its five divisions, the first such division in an American university. The extension division was divided into five departments: lecture study, class study, correspondence teaching, library, and training.

The correspondence study department of the University of Chicago was successful, at least in terms of numbers. Each year, 125 instructors taught 3,000 students enrolled in 350 courses. Nevertheless, enthusiasm within the university for the program waned, partly for financial reasons.

At the University of Wisconsin, the development of the "short course" and farmers' institutes in 1885 formed the foundation for university extension. Six years later, the university announced a program of correspondence study led by the eminent historian, Frederick Jackson Turner. However, as at the University of Chicago, faculty interest waned. Further, public response was minimal, and the correspondence study program was discontinued in 1899. Correspondence study would have to wait another seven years to be reborn under a new stronger correspondence study department within the school's university extension division.

Moody Bible Institute, founded in 1886, formed a correspondence department in 1901 that continues today with a record of over one million enrollments from all over the world. Correspondence study/distance education has had a significant impact on religious education that emphasizes the social context within which a student lives. Distance education began to enrich the secondary school curriculum in the 1920s. Students in Benton Harbor, Michigan, were offered vocational courses in 1923, and six years later, the University of Nebraska began experimenting with correspondence courses in high schools.

In France, the Ministry of Education set up a government correspondence college in response to the impending Second World War. Although the Centre National d'Enseignement par Correspondences was established for the education of children, it has since become a huge distance teaching organization for adult education.

The original target groups of distance education efforts were adults with occupational, social, and family commitments. This remains the primary target group today. Distance education provided the opportunity to widen intellectual horizons, as well as the chance to improve and update professional knowledge. Further, it stressed individuality of learning and flexibility in both the time and place of study.

Two philosophies of distance education became identifiable. The full liberalism of programs offered by Hermod's in Sweden emphasized the free pacing of progress through the program by the student. Other programs, such as those offered by the University of Chicago, offered a more rigid schedule of weekly lessons.

Electronic Communications

In Europe, there was a steady expansion of distance education, without radical changes in structure, but with gradually more sophisticated methods and media employed. Audio recordings were used in instruction for the blind and in language teaching for all students. Laboratory kits were used in such subjects as electronics and radio engineering. Virtually all large-scale distance-teaching organizations were private correspondence schools. In the United States, advances in electronic communications technology helped determine the dominant medium of distance education. In the 1920s, at least 176 radio stations were constructed at educational institutions, although most were gone by the end of the decade. The surviving stations were mostly at land-grant colleges.

In the early 1930s, experimental television teaching programs were produced at the University of Iowa, Purdue University, and Kansas State College. However, it was not until the 1950s that college credit courses were offered via broadcast television. Western Reserve University was the first to offer a continuous series of such courses, beginning in 1951. Sunrise Semester was a well-known televised series of college courses offered by New York University on CBS from 1957 to 1982.

Satellite technology, developed in the 1960s and made costeffective in the 1980s, enabled the rapid spread of instructional television. Federally funded experiments in the United States and Canada, such as the Appalachian Education Satellite Project (1974–1975), demonstrated the feasibility of satellite-delivered instruction. However, these early experiments were loudly criticized for being poorly planned. Later attempts at satellitedelivered distance education have been more successful. The first state educational satellite system, Learn/Alaska, was created in 1980. It offered six hours of instructional television daily to 100 villages, some of them accessible only by air. The privately operated TI-IN Network, of San Antonio, Texas, has delivered a wide variety of courses via satellite to high schools across the United States since 1985.

In the late 1980s and early 1990s, the development of fiber-optic communication systems allowed for the expansion of live, twoway, high-quality audio and video systems in education. While the initial cost of fiber-optic systems may be high, the longterm savings and benefits of the technology outweigh the initial costs. Many now consider fiber-optic delivery systems as the least expensive option for the high quality, two-way audio and video required for live interactive distance education. The state of Iowa has the largest statewide fiber-optic system. Currently the Iowa Communications Network (ICN) provides fullmotion, two-way interactive video, data (Internet), and voice services to over 800 Iowa classrooms. In the near future, all school districts, area education agencies, and public libraries in Iowa will have classrooms connected to the fiber optics of the ICN. The ICN also serves as the backbone for computer telecommunications and carries asynchronous, Internet-based programs for distant learners. Over 100,000 hours of formal educational opportunities were offered during the first 18 months of the network's service. Recently, 100,000 hours were being offered every month.

Distance education opportunities are quickly growing through the use of computer-mediated communications. Tens of thousands of networks are connected to the Internet, with millions of people using the Internet worldwide (Ackermann, 1995). Both credit and noncredit courses have been offered over computer networks since the mid-1980s. In most cases, a teacher organizes the course materials, readings, and assignments. The students read the material, complete assignments, and participate in on-line discussions with other classmates. The advent of computer conferencing capabilities has had an impact on the traditional approach to the design of distance education instruction. Computer conferencing increases the potential for interaction and collaborative work among the students. This type of collaboration among students was difficult with previous forms of distance education.

In addition, computer networks are a convenient way to distribute course materials to students around the world. Many faculty members now use the convenient user interface of the World Wide Web to make course materials available to their students. The British Open University, Fern Universität of Germany, and the University of Twente in the Netherlands are some of the leading providers of on-line courses in Europe. In the United States, the American Open University, Nova Southeastern University, and the University of Phoenix have been traditional leaders in providing distance education. They, along with many other universities, are now offering hundreds of courses on-line.

Distance Teaching Universities

The 1962 decision that the University of South Africa would become a distance-teaching university brought about a fundamental change in the way distance education was practiced in much of the world. Another landmark was the founding, in 1971, of the Open University of the United Kingdom, a degreegiving distance-teaching university offering full degree programs, sophisticated courses, and the innovative use of media (Holmberg, 1986). The Open University brought heightened prestige to distance education and spurred the establishment of similar institutions in industrial nations such as West Germany, Japan, and Canada, as well as in such lesser-developed nations as Sri Lanka and Pakistan.

While the distance teaching universities shared numerous similarities, they were not identical in their mission or practice. Two of the largest and most influential, the Open University of the United Kingdom and the German Fern Universität, differ widely. The British school favors employed, part-time students of above normal study age; it allows them to enroll without formal entrance qualifications. By 1984, some 69,000 of its students had completed work for the Bachelor of Arts degree.

The German Fern Universität, founded in 1975, offers a more rigorous program than its British counterpart. Despite strict formal entrance requirements, it had 28,000 students in 1985. However, the dropout rate is very high: in its first decade, only 500 students completed the full curricula for a university degree.

Holmberg (1986) offers numerous political, economic, and educational reasons for the founding of distance teaching universities, including:

• The need felt in many countries to increase the offerings of university education generally

- A realization that adults with jobs, family responsibilities, and social commitments form a large group of prospective part-time university students
- A wish to serve both individuals and society by offering study opportunities to adults, among them disadvantaged groups
- The need found in many professions for further training at an advanced level
- A wish to support educational innovation
- A belief in the feasibility of an economical use of educational resources by mediated teaching