

Chapter 1

THE CONCEPT OF DISTANCE EDUCATION

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Through Distance Education's short modern history, the combination of different theories has created a paradox. A few of its varied definitions are listed below.

In 1979, UNESCO defined distance education as

Education conducted through the postal services, radio, television, telephone or newspaper, without face-to-face contact between teacher and learner. Teaching is done by specially prepared material transmitted to individuals or learning groups. Learners' progress is monitored through written or taped exercises, sent to the teacher, who corrects them and returns to learners with criticism and advice (Keegan, 1990, p.44).

The term distance education was popularized in 1982 when the International Council for Correspondence Education changed its name to the International Council for Distance Education. This was a response to the many emerging teaching and learning patterns based on technology (Garrison, 1989). All of these new patterns of education shared the characteristics of separation of teacher and some or all of the students.

Grenville Rumble (1989) defined distance education as a process in which there must be a teacher, one or more students; a course or 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.

What Is Distance Education?

Keegan (1990) felt that this definition was overly restrictive and did not account for newer interactive systems. Keegan also felt that Shale's (1990) interpretation was too simplistic. To that end, Keegan synthesized the following characteristics of distance education:

- ⌘ the quasi-permanent separation of teacher and learner throughout the length of the learning process (this distinguishes it from conventional face-to-face education);
- ⌘ the influence of an educational organization both in the planning and preparation of learning materials and in the provision of student support services (this distinguishes it from private study and teach-yourself programs);
- ⌘ the use of technical media – print, audio, video or computer – to unite teacher and learner and carry the content of the course;
- ⌘ the provision of two-way communication so that the student may benefit from or initiate dialogue (this distinguishes it from other uses of technology in education); and
- ⌘ the quasi-permanent absence of the learning group throughout the length of the learning process so that people are usually taught as individuals and not in groups, with the possibility of occasional meetings for both didactic and socialization purposes. (p. 44).

The last component of Keegan's definition is no longer applicable to most two-way interactive situations. Group instruction in classrooms via distance education is a normal application of distance education.

The U.S. Department of Education's Office of Educational Research and Improvement (Bruder, 1989) defines distance education as "the application of telecommunications and electronic devices which enable students and learners to receive instruction that originates from some distant location."

Rudolf Manfred Delling (Keegan, 1986) speaks of distance education as a teaching process "which is achieved by bridging the physical distance between student and teacher by means of at least one appropriate technical medium."

In 1990, Moore proposed that the definition of distance education “consists of all arrangements for providing instruction through print or electronic communications media to persons engaged in planned learning in a place or time different from that of the instructor” (p. xv). Later this definition was modified to reflect a systems approach to distance education.

Distance education is planned learning that normally occurs in a different place from teaching and as a result requires special techniques of course design, special instructional techniques, special methods of communication by electronic and other technology, as well as special organizational and administrative arrangements. (Moore & Kearlsy, 1996, p. 2)

Peters (cited in Schlosser & Anderson, 1994) emphasized the role of technology, defining distance education as

... a method of imparting knowledge, skills and attitudes which is rationalized by the application of division of labor and organizational principles as well as by the extensive use of technical media, especially for the purpose of reproducing high quality teaching material which makes it possible to instruct great numbers of students at the same time wherever they live. It is an industrialized form of teaching and learning. (p. 2)

Peters’ definition de-emphasizes the role of group instruction and characterizes distance education as a tool for mass distribution of material regardless of setting.

Heinich, Molenda, Russell and Smaldino (1996) have taken Keegan’s (1990) definition and refined it to a form of education characterized by

- ⌘ physical separation of learners from teacher
- ⌘ an organized instructional program
- ⌘ technological media
- ⌘ two way communication

While not offering a definition of distance education, Garrison and Shale (1987) suggested three criteria for classifying distance education:

1. Distance education implies that the majority of educational communication between (among) teacher and student(s) occurs noncontiguously.
2. Distance education must involve two-way communication between (among) teacher and student(s) for the purpose of facilitating and supporting the educational process.
3. Distance education uses technology to mediate the necessary two-way communication (p. 11).

Some definitions specifically mention lack of eye contact, but as two-way video approaches maturity, eye contact and observation of body language can be maintained even over distances. A time element is included in some definitions which consider prerecorded presentations as a form of distance education. Many modern definitions refer to some kind of technical bridge between teacher and students. But in its broader (and earlier) context, distance education can be considered to include traditional correspondence courses.

Current application of the term distance education tends to refer to real-time interactive systems. Recently, approaches such as telecourses (e.g. delivered by television) and correspondence courses tend to be referred to by those names. That is, the delivery system is being used to define the type of distance education. This also seems to be the case as Internet distribution increases. It is common to hear them referred to as "Internet courses" (Mortensen, 1995).

Before leaving this introduction, a distinction should be made between "distance education" and "distance learning." The two terms are frequently used synonymously. However, there should be a distinction which becomes clear when a third term is introduced. We propose to use the term "distance teaching" to refer to that which emanates from an instructor, and "distance learning" to

refer to that which is received by the student. "Distance education," then, becomes an overall term referring to the entire process. Ultimately, distance education can be seen as a subset of the larger field of telecommunications.

Although some definitions, as observed above, specify electronic transmission between teacher and student, the roots of pure distance education go back at least 160 years to the beginning of correspondence study. An advertisement in an 1833 Swedish newspaper touted the opportunity to study "Composition through the medium of the Post" (Holmberg, 1986). In 1840, Isaac Pittman used England's newly established penny post to offer shorthand instruction via correspondence. Pittman went on to establish the Phonographic Correspondence Society, precursor of the Sir Isaac Pittman Correspondence Colleges (Holmberg, 1986). In this same time period, Toussaint and Langenscheidt introduced correspondence study in Germany by teaching languages by correspondence from Berlin.

Correspondence study crossed the Atlantic in 1873 with Eliot Ticknor's founding of the Society to Encourage Studies at Home. In its 24 year existence, this Boston-based society attracted more than 10,000 students who corresponded monthly with teachers offering guided readings and frequent tests. The popularity of correspondence study in America grew rapidly. New York's Chautauqua College of Liberal Arts and Illinois Wesleyan offered academic degrees via correspondence in the late 1800s. Watkins (1991) quotes Yale's William Rainey Harper, who headed Chautauqua's program, as saying:

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.

**A Brief History of
Distance Education**

When the University of Chicago opened its doors in 1892, Harper instituted a correspondence division as one of the university's five divisions. The University of Wisconsin had led the way by developing a "short course" along with farmers' institutes in 1885. These two programs, however, were eventually dropped.

The Europeans remained leaders in correspondence courses. They pioneered such innovations as audio tapes for the blind and laboratory kits for subjects such as electronics and radio engineering.

The modern age of distance education began in the 1930s with experimental television programs produced at the University of Iowa, Purdue University, and Kansas State College. Television broadcasts of college credit courses were first offered in 1951 by Western Reserve University, and New York University ran its Sunrise Semester from 1957 to 1982.

Satellite technology, which became cost effective in the 1980s, enabled the rapid spread of instructional television. Federally funded experiments, such as the Appalachian Education Satellite Project (1974-75), while criticized by some, demonstrated the feasibility of satellite-delivered instruction. More recent attempts are the Learn/Alaska system created in 1980 and the privately operated TI-IN Network that has delivered a wide variety of courses via satellite to high schools across the United States since 1985.

In the United Kingdom, the Open University is a leading example of a degree granting distance education program. Germany, with its Fern Universitat, also offers degree granting programs. Japan, Canada and even Sri Lanka and Pakistan, have established similar institutions.

There are many ways of categorizing types of distance education. One way is interactive vs. non-interactive; another is electronic vs. non-electronic. Non-electronic transmission includes correspondence by mail and sending films and tapes by mail.

Electronic transmission is generally understood to mean instant transmission, either by wire or wireless. The main characteristic of non-electronic transmission is that it rules out real-time interaction between student and teacher. But these categories are over-simplifications. The traditional correspondence course can be considered interactive if one considers the student's opportunity to mail questions to the instructor and receive responses by return mail.

Without belaboring the classification issue, we simply state that the scope of this publication is distance education via electronic means. The material herein will focus on instant transmission and real-time interaction over distance education systems featuring two-way audio and two-way video. Anything short of this, while still quite useful in today's environment, is not breaking new ground.

**The Scope of
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