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AUTHOR Ely, Donald P.  
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ABSTRACT

The role of educational media and technology personnel in the development of distance education curriculum is the focus of this fact sheet. The definition and background of distance education are briefly described as nontraditional education involving communication between teachers and learners by such means as correspondence, radio, and television. Major characteristics and assets of distance education include: (1) increased continuing education opportunities for those unable to attend conventional courses; (2) centrally coordinated information distribution and management; (3) a wide variety of faculty contributions such as assistance in the creation of materials and seminars; and (4) carefully designed and coordinated self-instructional materials and procedures. A variety of delivery systems are mentioned including newspapers, radio, television, course notebooks, textbooks, programmed instruction, pictures, audio cassettes, and lab kits and computers. Reference is made to popular publications used to design materials and procedures. The second part of the fact sheet lists relevant entries in the ERIC database followed by a general bibliography of relevant books and articles. (LH)

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EDUCATIONAL TECHNOLOGY AND DISTANCE EDUCATION  
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Donald P. Ely

ERIC Clearinghouse on Information Resources  
Syracuse, N.Y.

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## EDUCATIONAL TECHNOLOGY AND DISTANCE EDUCATION

--An ERIC Fact Sheet--

Interest in distance (or open) education among educational media and technology personnel has increased in recent years as instructional systems development processes have played a more active role in curriculum and course development. The purpose of this fact sheet is to describe those characteristics of distance (or open) education in which media and educational technology principles are used in course design.

### Definition and Background

Distance education is a term which originated in Europe and is currently embraced by many adult educators in various parts of the world. More popular terms in the U.S. are non-traditional education or open learning. The basic concepts are rooted in correspondence education which is thought to have begun in the early part of the 20th century (MacKenzie, et al., 1968) and in the Open University movement in England. A formal definition comes from the International Dictionary of Education (1977): "Where the teachers and taught are not in face-to-face contact but communicate with each other by such means as correspondence, radio and television" (p. 107).

### Characteristics

Distance education provides opportunities for continuing education, often by adults who are unable to attend conventional courses in formal educational institutions because of distance, cost, time, or physical incapacity. Learners are usually free to choose time, place, and pace of learning.

A central coordinating office is usually responsible for planning, producing, and distributing information to learners and for managing the details of enrollment, finance, recordkeeping, and testing.

Faculty members often help to create the materials used by the learners and later may participate by telephone and correspondence tutorials. They sometimes organize and lead occasional seminars for students who are pursuing the same course. Thus teachers are not essential for the delivery of information to students who are learning at a distance but they do contribute in many other ways.

One unique characteristic of most distance learning courses is the careful design of instructional materials and procedures which are used by all the students. Since these materials must contain the essence of the information to be learned, the design of all materials must be carefully planned and closely coordinated with every other aspect of the program. Kaye (1977) indicates that learning materials should be "... specifically designed for a self-instructional study mode (including clearly formulated learning objectives, self-assessment devices, and clear conceptual structuring) and containing features for the provision of feedback from students to learning system staff and vice versa." It is this aspect of distance education that requires the knowledge and skills of instructional development.

### Developing Materials and Procedures

Developing materials for distance learning is usually a cooperative effort among content specialists, instructional developers, and evaluators.

A variety of delivery systems are being used, but the course development procedures are more or less the same regardless of the media used. Besides mass audiences being reached by newspapers, radio, and television, distance education programs use course notebooks, textbooks, programmed instruction, pictures, audio cassettes, and sometimes, laboratory kits and computers. Some of the more popular publications used in designing materials are: Esseff and Esseff (1974), Kemp (1977), Davis, Alexander, and Yelon (1974), Johnson and Johnson (1970), Cavert (1974), and Gagne and Briggs (1974).

### More About Distance Education

Two recent publications provide a comprehensive overview of distance teaching and learning. Each includes the development of materials as one aspect of program development. See Holmberg (1977) and Kaye and Rumble (1980).

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- Bates, A. W., & Pugh, A. K. Designing multi-media courses for individualized study: The Open University model and its relevance to conventional universities. Walton, Bletchley, Bucks, England: Open University, Inst. of Educational Technology, 1975. (ERIC Document Reproduction Service No. 119 665; microfiche 91¢, paper copy \$2.00 plus postage)
- Bates, T., & Kern, L. Alternative media technologies for the Open University. A research report on costed alternatives to the direct transmission of audio-visual materials. Final report. Walton, Bletchley, Bucks, England: Open University, Inst. of Educational Technology, 1978. (ERIC Document Reproduction Service No. 184 522; microfiche 91¢, paper copy \$6.95 plus postage)
- Brown, S., & Nathenson, M. Designing instructional materials: Guesswork or facts? Walton, Bletchley, Bucks, England: Open University, Inst. of Educational Technology, 1978. (ERIC Document Reproduction Service No. 188 561; microfiche 91¢, paper copy \$3.65 plus postage)
- Distance education: Selected titles. The Hague: Netherlands, 1979. (ERIC Document Reproduction Service No. 192 548; microfiche 91¢, paper copy \$20.15 plus postage)
- McBride, J. A model regional open learning system. Final report. Lincoln, NE: University of Mid-America, 1978. (ERIC Document Reproduction Service No. 165 653; microfiche 91¢, paper copy \$5.30 plus postage)
- Sachsenmeier, P. Correspondence courses: A guide for authors of course units. A report of some experiences and practices at the Open University. Bonn, West Germany: German Foundation for International Development; Education, Science, and Documentation Division, 1978. (ERIC Document Reproduction Service No. 177 922; microfiche 91¢, paper copy \$2.00 plus postage)

#### BIBLIOGRAPHY

- Cavert, C. E. An approach to the design of mediated instruction. Washington, DC: Association for Educational Communications and Technology, 1974.
- Davis, R. H., Alexander, L. T., & Yelon, S. L. Learning system design: An approach to the improvement of instruction. New York: McGraw-Hill, 1974.
- Esseff, F. J., & Esseff, M. S. Instructional development learning system. Columbia, MD: Educational Systems for the Future, 1974. (7 manuals)
- Gagne, R. M., & Briggs, L. J. Principles of instructional design. New York: Holt, Rinehart, and Winston, 1974.
- Holmberg, B. Distance education: A survey and bibliography. New York: Nichols Publishing, 1977.
- Johnson, S. R., & Johnson, R. B. Developing individualized instructional material: A self-instructional material in itself. Palo Alto, CA: Westinghouse Learning Corp., 1970.
- Kaye, A. R. The Open University's developing role in international collaboration. Educational Broadcasting International, June 1977, 10, 98-100.
- Kaye, T., & Rumble, G. Distance teaching. London: Croom Helm, & Totowa, NJ: Biblio Distribution Centre, 1980.
- Kemp, J. E. Instructional design: A plan for unit and course development (2nd ed.). Belmont, CA: Fearon, 1977.
- MacKenzie, O., Christensen, E. L., & Rigby, P. H. Correspondence instruction in the United States. A study of what it is, how it functions, and what its potential might be. New York: McGraw-Hill, 1968.
- Page, G. T., & Thomas, J. B. International dictionary of education. New York: Nichols Publishing, 1977.

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Fact Sheet prepared by:

Donald P. Ely, Director, ERIC Clearinghouse on Information Resources; Professor, Department of Instructional Design, Development, and Evaluation, Syracuse University.