The rapid development and decreasing costs of communications technologies, including microcomputers, the Internet, and the World Wide Web, are affecting the delivery of distance education (DE) and expanding its potential audience. The DE literature reflects the increasing interest in the potential of current technologies to alter traditional teacher-student relationships. Four possible scenarios of distance educators' response to the opportunities afforded by new communications technologies have been offered: the minimal change model (educators use technology as an instructional aid without making any fundamental changes in the delivery of DE); the marginal change model (the pedagogy and organization of education remain unchanged and students are added on to conventionally taught classes); the systemic change model (DE instruction is reorganized into a technology-driven system); and the virtual system (the formal organization of universities/schools either becomes minimal or disappears). Two issues associated with the recent changes in DE as a result of new technologies are the need to ensure learner access to the information highway and the need for more staff development to train teachers to adapt to DE's new emphasis on learner centeredness and interaction between/among learners. (Concluding this document is an annotated bibliography of 17 print and 4 organizational resources.) (MN)
Distance Education
Trends and Issues Alerts

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Distance Education

Online education through computer networking is creating a paradigm shift in education. The old models (one-to-one broadcast via television, radio, newspaper, and lecture) came from 19th Century technology and they're based on transmission models. New computer networking technology requires and enables a whole new way of teaching and learning. For the first time in human history we can have many-to-many communication across time and space. Never before have we been able to have group interaction that's time and space-independent—the framework for a learning society. (Linda Harasim quoted in "Shaping Cyberspace into Human Space" 1996)

Distance education, the delivery of instruction when teachers and learners are separated in place and or time, is currently being shaped by microcomputers, the World Wide Web (Kerka 1996), and increasing use of personal computers, teleconferencing, and the Internet. Decreasing costs of communication and the blurring of boundaries between the telephone, the television, and the computer ("The Revolution Begins At Last" 1995) mean that anyone is potentially a distance learner (Kerka 1996). Distance educators are faced with enormous challenges in responding to the rapid changes in technology and the growing audience for distance learning. Some of the trends and issues associated with distance education are highlighted in this publication. The discussion is followed by lists of print and organizational resources on distance education.

The potential of current technologies to change the traditional teaching-learning transaction is a theme appearing in the distance education literature. What Linda Harasim refers to as a "paradigm shift in education" ("Shaping Cyberspace into Human Space" 1996) is recognized by others (e.g., Davison 1996; Filipczak 1995; Kerka 1996; Moore 1995b). Moore (1995b) sketches four possible scenarios to describe how educators might respond to "the new opportunities" offered by changing technologies: the minimal change model in which institutions make no fundamental changes but merely use technology as an instructional aid; the marginal change model in which the pedagogy and organization of education remain unchanged and students are added on to conventionally taught classes (the most common application of distance education in North America); systemic change in which institutions change the fundamental organization of teaching by reorganizing it into a system driven by technology; and a virtual system in which universities and schools are "place-free, with little or no formal organization" (p. 3). Only the last acknowledges the existence of a paradigm shift.

A number of issues are affiliated with the potential to change teaching and learning via distance education. One that is mentioned frequently is the need for staff development (e.g., Davison 1996; Filipczak 1995; Thach and Murphy 1995; Warren 1995). Since distance education is now considered to be more than just connecting people in one classroom to a lecture in another, there is growing realization that traditional teaching techniques will not work in distance education settings (Thach and Murphy 1995). Greater emphasis is being placed on learner centeredness and creating interaction between and among learners and instructors. If distance education instructors do not receive training to facilitate greater student participation and interaction, they may simply use distance education "to imitate existing familiar teaching situations and strategies via a variety of technologies" (Davison 1996, p. 151).

Technology is not the main issue any more, but it is still an issue (Filipczak 1995). For many students, issues of access are very real due to the costs of equipment and the charges for accessing the information highway (Davison 1996). Other issues related to technology include a lack of standards ("Trouble in Paradise" 1996) and cost of state-of-the-art equipment (Filipczak 1995). For the most part, however, distance educators can turn their attention to solving questions related to teaching and learning. Questions that may lead to a genuine learning society.

Print Resources


Examines some of the foundational thinking about notions of community and interaction and cyberspace and considers the extent to which the process might be considered effective as a form of international community building.


Explores the paradoxes and tensions that arise in using information technology to provide a caring environment and in creating the conditions for better access and success for adult learners studying at a distance.


This special section of the Economist describes what communication will be like when distance is no object. Although education is not mentioned directly, the discussion of how telecommunications technology will change have implications for the delivery of distance education.


Describes the shift from technology to learning when implementing distance learning. Includes information on distance educators in business, government, and higher education.

Jacques, Michele M. "How to Find World Wide Web Distance Education Resources." Distance Education Clearinghouse, University of Wisconsin-Extension, July 1996. <http://www.uwex.edu/disted/resources.html>

Provides tips for finding distance education resources on the World Wide Web and includes a list of selected distance education resources on the Web.

Kerka, Sandra. Distance Learning, the Internet, and the World Wide Web. ERIC Digest No. 162. Columbus: ERIC Clearinghouse on Adult, Career, and Vocational Education, Center on Education and Training for Employment, 1996.
Focuses on some of the newest methods of distance learning (DL) using the Internet and the Web and highlights some of the issues that could profoundly change the delivery of adult, career, and vocational education. Includes sections on DL processes, the social nature of DL, and strategies for DL.


In this editorial, Moore reports the results of discussions during the Third Distance Education Research Symposium Conference. Questions, issues, and needs are listed for four research areas: course design, instruction, policy and administration, and learners and learning.


Moore's editorial outlines four possible responses of teachers and educational organizations to the new opportunities offered by changing technologies: the minimal change model, the marginal change model, systemic change, and a virtual system.


This brief review research findings on student attitudes toward distance learning. Findings are grouped into four categories: attitude toward the technology, attitude toward distance education teaching methods, attitude toward students and teacher interaction, and attitude toward being a remote student.


Introduction to "The Death of Distance," the issue's special supplement on telecommunications.


This edited volume features eight chapters that present a variety of perspectives regarding the impact of distance education on the field of adult and continuing education. It is designed to provide an understanding of how to facilitate distance education.


This article from *Update*, produced by Simon Fraser University's (SFU) Centre for Systems Science, features the ideas of Linda Hurasm, an SFU communication professor. Hurasm suggests that the new technology requires new learning models that are more collaborative.

Stammen, Ronald M. *Using Multimedia for Distance Learning in Adult, Career, and Vocational Education*. IN362. Columbus: ERIC Clearinghouse on Adult, Career, and Vocational Education, Center on Education and Training for Employment, The Ohio State University, 1995. (ED 384 828)

Exposes how educators are using multimedia for distance learning with telecommunications technology. Examines problems and issues involved, including barriers raised by resistance to technological developments.


Reports on the results of a study designed to identify the roles and competencies of distance education professionals within the United States and Canada. The top 10 competencies illustrate the dual importance of both communication and technical skills in distance education. Includes lists of outputs and competencies for distance learning roles.


This brief article lists and describes the following five problems that arise when using telelearning: trouble with text, no physicality, vulnerability, information overload, and lack of tools and standards.


Reviews professional development for distance educators, stating that the research centers on the classroom instructor's ability to use and teach with technology.


Reviews training opportunities that are available over the Internet, including delivery methods, and internal training networks. Also lists advantages and disadvantages of using the Internet for training. Two sidebars provide relevant liases and Internet sites.

Organizational Resources

American Center for the Study of Distance Education, College of Education, The Pennsylvania State University, 110 Racket Building, University Park, PA 16802-3202; (814) 865-3764; fax: (814) 865-3878. Internet: <http://www.cde.psu.edu/ACDE/>

Distance Education Clearinghouse, University of Wisconsin, 975 Observatory Drive, Madison, WI 53706-1391; (608) 265-6178. Internet: <http://www.uwex.edu/disted/dhome.html>

ERIC Clearinghouse on Adult, Career, and Vocational Education, 1900 Kenny Road, Columbus, OH 43210-1090; (614) 292-4155 or (800) 444-4815, ext. 4-7686; fax: (614) 292-1260. Internet: wagner.6@osu.edu; <http://www.osu.edu/units/education/ede/eric6vac/index.html>

International Centre for Distance Learning, The Open University, Walton Hall, Milton Keynes, MK7 6AA, United Kingdom; +44-1908-654-537; fax: +44-1908-654-173. Internet: icdl-enquiries@open.ac.uk; <http://acac/n.open.ac.uk/>

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