Distance Education: Removing Barriers to Knowledge

by Daniel D. Barron

"School library media specialists and librarians are essential components to the success of distance education and must not be left out of the movement."

There are many people in the United States who are place bound—people whose jobs will not permit them to travel to schools of instruction, families with small children, those with physical disabilities. Many young people who live in small or rural communities where the financial base will not support a wide range of teachers are denied the promise of equal access to education. Constrained by the barrier of geography, these children, and the rest of the place bound, cannot attend traditional schools—teachers have to go to them.

Distance education, simply defined, is taking quality education to the people who need and want it. Distance education is to instruction what bookmobiles and branch libraries are to reading. We cannot guarantee that people who have books brought to their neighborhoods will read, but we know for sure that if these people do not have access to books they cannot choose to read. Likewise, if students don't have access to a physics teacher, if adults do not have access to basic literacy programs, or if those planning to become school library media specialists live too far away from institutions offering graduate courses in librarianship and information science, they cannot choose, at least formally, to prepare for this profession.

Basic television, cable TV, satellites, and computers are all being used by public and private institutions and agencies to provide more people with access to a greater number of educational programs than the world of institutionalized instruction has ever known. As it has evolved, the concept of distance education has been given a variety of different labels—correspondence study, extension teaching, open learning, and home study, to name a few. Distance education is best described by the subtitle of the Online Journal of Distance Education and Communication: "In the industrial age, we go to school. In the information age, school can come to us. This is the message implicit in the media and movement of distance education."

Background

Obviously, the concept of distance education is not new. Its roots can be traced back to the heroic efforts of educators who defied tradition and apathy to take education to those who were unable to participate in traditional schooling. Such crusaders took education into the slave cabins. In New England, Anna Eliot Ticknor used the mail to reach homebound women; she founded the Society to Encourage Studies at Home in 1873. In the 1920s, Ben Darrow pioneered the use of radio in "The Little Red School House of the Air" in Chicago, and in Iowa, J.L. Potter and E.B. Kurtz tested the power of television as an instructional delivery system during the early 1930's. William Harper, the first president of the University of Chicago, founded the first university-level correspondence teaching department in the late 1800's and is often referred to as the "Father of Correspondence Teaching." William Lighty and the University of Wisconsin are frequently cited for their commitment, in the early part of this century, to reach out to people whose formal education would not otherwise be available.

Distance education in contemporary society has taken a number of new and exciting turns. One of the most notable is a result of the advances in telecommunications technology—computers, cable television, and satellites. School administrators who once feared losing autonomy are now realizing that distance education can provide a host of resources to support the curriculum. Turf battles and bureaucratic stumbling blocks in top educational levels are being replaced by consensus and mutually beneficial agreements between and among institutions and agencies of...
education at all levels. As one educator said, “There is more than enough ignorance out there for all of us.” Distance education is a new force in the battle against ignorance, and library media specialists have a critical part to play in its success.

Star Schools

Implementation of the Star Schools program has given the concept of distance education greater visibility. The Star Schools program is federally funded, with approximately 25 percent of the operating costs coming from local funds. Now funded for a second year, the project serves as a model for using technology as a means of reaching small or disadvantaged schools in isolated areas. Its primary goal is to develop and deliver courses for students in specific areas of the curriculum that suffer, on the local level, from a lack of faculty expertise. During the first year these courses for students included an introduction to Japanese (originating from Nebraska), probability and statistics (Kentucky), and German (Oklahoma). For many schools selected as sites for the project, this has meant purchasing satellite dishes and accompanying technology. In addition to courses for students in these selected schools, the project is providing opportunities for staff development—which, in the first year, included a course to help teachers teach advanced calculus, as well as a number of non-credit teleconferences.

Interestingly enough, the Star Schools program uses the term “partnerships” to describe the network of participants who are developing and delivering the courses. These partnerships are structured in a variety of cooperatives comprised of the local schools, state departments of education, colleges and universities, public television affiliates, public and private telecommunications services, and other agencies from the private sector. The four partnerships are the Midlands Consortium, the Satellite Educational Resources Consortium (SERC), the Technical Education Research Centers (TERC), and the TI-IN Network, Inc (a private corporation).

Three of these partnerships use both satellite and television communications for instructional delivery. Most delivery systems use a live, interactive format with one-way audio and video to the receive site, with two-way audio between that site and the teacher at the originating site. TERC, the fourth partnership, is different in that it is based on computer-assisted communications and involves the networking of schools with practicing scientists. This cooperative provides students with the opportunity to work directly with these professionals in developing experiments covering a wide variety of “real world” problems for discussion.

Program leaders identify and select exceptional teachers, who are asked to develop and deliver the courses. At the local level, a facilitator works directly with the students and a coordinator disseminates information about the courses as well as related materials. Since, in the pilot program stage, participation by schools is limited, each agency offers additional courses and services independent of the Star Schools effort.

Such careful planning and coordination among the partnerships has resulted in very successful models for instructional delivery. All reportedly have had excellent results; 97% of the principals involved in SERC, for example, indicated that they will continue as participants.

Beyond Star Schools

Distance education by no means ends with Star Schools. In fact, there are many distance education programs available. The Office of Technology Assessment is completing a study which will show that there are a tremendous number of distance education efforts going on, and that they involve all ages and categories of learners. Kindergarten through high school courses, adult basic education, basic literacy, undergraduate and graduate courses and programs, continuing education for business persons, engineers, teachers, lawyers, and other professionals, and a wide number of educational opportunities for the casual learner are available by way of television and other delivery systems.

In most states, the Public Broadcasting System (PBS) provides educational programming specifically for K-12 schools. Whether through a university or a state agency, local public television stations carry such classics as Sesame Street, The Electric Company, Reading Rainbow, and Think-About, as well as new programs like Dicho y Hecho and Mathnet. These programs are often accompanied with teachers’ guides and other informational materials. In addition, free and inexpensive support materials can be obtained from the national of-

RURAL EDUCATION
A Changing Landscape

GPO Materials: A booklet on one aspect of distance education is among the publications produced by the Government Printing Office.
fice of PBS, and from such organizations or agencies as the Children’s Television Workshop, the Corporation for Public Broadcasting, and the American Library Association.

Other distance education opportunities are available to cable subscribers and owners of satellite dishes. Most of these offer off-air taping rights, teacher guides, suggestions for program and curriculum integration, and access to a staff member who is responsible for assisting schools in the use of general and special programming. Among the stations available to cable subscribers is C-SPAN (the channel devoted to public-affairs), which has begun an educational program called “C-SPAN in the Classroom.” Also, “Cable News Network” (CNN) offers “News Access,” which provides materials created by instructional designers and offers taping rights to “The Week in Review.”

Whittle Communications’ controversial “Channel One” news program, with its commercial inserts geared to high-school students, is only one component of a much larger effort by Whittle to provide educational programming to schools. Whittle also airs “The Classroom Channel,” which runs commercial-free programs, and “The Educator’s Channel,” the offerings of which are specifically designed for staff development. Whittle provides free hardware and installation incentives for subscribers, but their methods—and especially, “Channel One”—continue to come under fire by local and state school boards.

The Discovery Channel, known for its excellent programs on nature, science, technology, and history, devotes an hour each day to help educators integrate their programs into their curriculum. The Learning Channel provides educational programming for children and adults. “The Electronic Library,” two hours devoted primarily to middle and secondary schools in the areas of math, language, science, and the performing arts, is the Learning Channel’s effort at making programs more useful in classroom instruction. The Mind Extension University, a 24-hour educational channel, also has a wide range of educational programming; plans are underway to provide schools with special materials and services.

In addition, a number of universities such as Oklahoma and Kentucky and private sector companies such as the TI-IN network contract for courses to be delivered directly to schools.

Computer Networks

One of the chief advantages of distance education is that it provides a real proving ground for converging technologies. Television, which has been greatly exploited in this area, quickly comes to mind, but computer networks play an ever-increasing and important role in distance education. Often used for electronic mail and other types of communication between instructors and class members, computers may prove to be not only a mean of access to educational programs, but rather a primary medium of delivery for some areas of study. While there are distance education opportunities such as MIX (McGraw-Hill Information Exchange), Nova University, and the Electronic University—all of which use computer networks—few are designed for K-12 education and few are offered in a course-related format. The National Geographic Society sponsors projects that involve schoolchildren performing real scientific experiments; Computer Pals provides a worldwide communications network for youngsters communicating with pen pals. A number of states, including New York, Georgia, Connecticut, Virginia, Pennsylvania, and West Virginia, are beginning to use computers in the curriculum for
purposes beyond simple communications and information transfer.

Another important development that should be considered in relation
to distance education is the availability of computer networks that provide
access to library resources and other online information. Many states have
multitype-library, computer-based networks in which school library
media programs participate or to which they have access. Commercial in-
f ormation services such as DIALOG, BRS, and EINSTEIN are available
to any school willing to make an investment in hardware which is simple and
relatively inexpensive.

Most of the reform literature encour ages educators to go beyond the
textbook—and even beyond the classroom—to use a wide variety of
resources to help children learn. All of us are constantly being told that
problem-solving and higher-order thinking skills require information
and resources for students to use. But here again, librarians are not di-
rectly named whenever suggestions and plans are made to help teachers
to achieve these vital skills. For this and other equally valid reasons, the
addition of new courses to the curricu-
ulum using television may be valuable; however, students and teachers
will still need access to library and information resources. For the most
advanced students, access to exter-
nal information which permits a more
detailed study of a research topic is
even more critical.

Specialists’ Current Role

Unfortunately, although all the
leaders of the Star Schools program
agreed that the library media special-
ist and the media program could play
a very positive role in the program, the
program has no specific guidelines for their involvement. Several
persons told of library media special-
ists being involved in Star Schools,
but none knew of any systematic ef-
fort to determine the overall partici-
pation of school library media spe-
cialists in the project. Unless the
library media specialists were facilitators (the local mentor or teacher for
the class) or coordinators (the con-
tact person for the school), their role
was not recorded in the official mon-
toring and evaluation of the pro-
gram’s first year of operation.

For example, Sherry Deaton, me-
dia specialist at Wathena (KS) High
School, had already latched onto the
telecommunications wave before her
school became a part of the Midlands
Consortium partnership in the Star
Schools program. Deaton’s leader-
ship, along with her principal’s sup-
port, has brought not only Star
Schools classes to her community
(which she describes as “beautiful,
but isolated”), but she also works
with her teachers to use C-SPAN I
and the Discovery Channel along
with teleconferences produced by the
nearby university. Despite some re-
strictions due to limited space, Dea-
ton says that both students and teach-
 ers have enjoyed the experience and
have learned from it. She has gotten
a fax machine and is planning to imple-
ment a computer communications
system. She urges other media spe-
cialists to take the lead “so that they
can extract the best use of the dis-
tance education offerings.”

In the small town of Tabor City in
eastern North Carolina, Steve
French, media coordinator at the lo-
al high school, has assumed a lead-
ership role as both a facilitator and
coordinator of the ‘TI-IN’ Network’s
Latin course. Working with the Star
Schools teacher, Cindy Pope, French
negotiated a class project for nine
students that culminated in the pro-
duction of a videotape instead of the
more traditional term paper. Com-
plete with commercials of the period,
the video (titled “Geraldo in Ruma”) is
a great example of the creativity and
communications skills that a me-
dia specialist can promote via TV in-
struction. French, who describes the
experience as both exciting and re-
warding, recognizes that the day-to-
day operation of the media center re-
quires some of the skills of the
“librarian of yesteryear,” combined
with an obligation to help bring mod-
ern technology and innovative teach-
ing methods into the school.

Star Schools and distance education
are often associated with small,
rural communities and rightly so, for
it has been rural educators who have
seen, firsthand, the consequences of
isolation, and have been willing to
break away from traditional class-
room instruction. Detroit, Michigan
is hardly rural, but that is where Paul
Weaver, media specialist at Mumford
High School, is assisting both stu-
dents and faculty who participate in
the Satellite Educational Resources
Consortium. Weaver serves as the
contact person, helping teachers in-
corporate technological resources in
the classroom. He believes that the
media specialist is the key contact
person to bring all of the available
technology to bear on educational
problems.

In Hampton, Virginia, the schools
are participating in the TERG part-
nership of Star Schools. Since the
project is just getting underway this
fall, there is little to report. The two
media professionals involved—Eliza-
abeth Green, director of Library Me-
dia and Records, and Ed Duckworth,
the ITV Coordinator—have, working
together at the district level, helped
coordinate an effort that has brought
CD-ROM, online searching, and a

Star Schools Partnerships

Midlands Consortium, Malcom
Phelps, 470 Student Union Building,
Oklahoma State University, Stillwa-
ter, OK 74078. Sites are in Alabama,
Kansas, Mississippi, Missouri and
Oklahoma.

Satellite Educational Resources
Consortium, Lee Monk, Southern
Educational Communications Asso-
ciation (SECA), POB 50008, Col-
lumbia, SC 29250. Sites in Alabama,
Arkansas, Florida, Georgia, Ken-
tucky, Louisiana, Mississippi, Ne-
braska, New Jersey, North Dakota,
Pennsylvania, South Carolina, Tex-
as, Wisconsin, and selected schools
in Cleveland, Ohio and Detroit,
Michigan.

Technical Education Research
Centers, Peggy Kapinosky, 1696
Massachusetts Ave., Cambridge,
MA 02138. Sites in Massachusetts,
Michigan, Minnesota, New York,
Virginia, and “adjacent states.”

TI-IN, Pamela Pease, 1000 Central
Parkway North, Suite 190, San Anto-
nio, TX 78232. Sites in Alabama, Ari-
 zona, California, Colorado, Illinois,
Montana, Mississippi, Minnesota,
Nebraska, North Carolina, North
Dakota, Nevada, Oregon, South Da-
kota, Texas and Washington.
full range of television access to the Hampton schools. Both Green and Duckworth said that the project could not be successful without the strong commitment and enthusiasm of the building-level media specialists who help teachers integrate technology into their classes and assist students in their daily activities.

Specialists' Future Roles

Local needs and the degree to which the library media specialist is committed to the program will determine her or his role in a distance education program. The least desirable is that of facilitator of classroom activities. Because library media specialists don’t have the responsibility for specific classes, they are often recruited to serve in this capacity. Unless it is specifically mandated by the administration, a specialist should not accept such a role without a great deal of thought.

Some of the possible—and obvious—roles are:

- A partnership role with the teachers who are using distance education programs to provide the same support and integration that the school library media program offers more traditional delivery systems.
- A contact and logistics role to interface between the originating or coordinating agency and the school to distribute information and materi-

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**Commercial Programs & Services**

**The Public Broadcasting System**


PBS Elementary/Secondary Service, 1320 Braddock Place, Alexandria, VA 22314-1698. Ask for information about “Learning File” and PBS Video News. The most important contact is the local PBS affiliate station. (800) 424-7963.

P/OPBS American Library Association, 50 E. Huron Street, Chicago, IL 60611. Ask to be put on the mailing list for PLS/Library Pipeline.

**Cable & Satellite Resources**

C-SPAN (C-SPAN in the Classroom): C-SPAN, POB 75298, Washington, DC 20013. (800) 523-7586.

CNN (Newsroom): Contact Ann Skinner, c/o Media Management Services, Inc., 10 North Main Street, Suite 301, Yardley, PA 19067-9986. (800) 344-6219.

The Discovery Channel (Assignment Discovery): The Discovery Channel, Box AD, 8201 Corporate Drive, Landover, MD 20785. Ask about the “Assignment Discovery Educator’s Kit.” (800) 321-1ITDC.

The Educational Network (Channel One, The Classroom Channel, and The Educators’ Channel): Whitte Communications, 505 Market St., Knoxville, TN 37902. (615) 595-5100.

Lamb, Brian. C-SPAN: America’s Town Hall. Acropolis Books, 1988. An excellent resource that describes the development and impact of C-SPAN’s access to political and other social affairs.


The Mind Extension University: Don Sutton, Executive Director, The Mind Extension University, 9697 E. Mineral Avenue, Englewood, CO 80112. (800) 777-MIND.

**Computer-Related Resources**


Computer Pals, 4974 SW Galen, Lake Oswego, OR 97035.

Connected Education Inc., 92 Cortland Park South, No. 6F, Bronx, NY 10463. (212) 548-0435.


Einstein, Telebase, 763 Lancaster Ave., Bryn Mawr, PA 19010. (215) 526-2800.

Electronic University Network, 1150 Sansome St., San Francisco, CA 94111. (415) 866-7177.


**Additional Resources**

ALA Video, 50 E. Huron St., Chicago, IL 60611. Distributors of the AASL/ECT-produced Information Power and The School Adminis-

National Center for Small Schools, Box 4110 Texas Tech University, Lubbock, TX 79409. Send requests to Dr. Bruce Barker. (806) 742-2337.

National University Teleconference Network (NUTN), 332 Student Union, Oklahoma State University, Stillwater, OK 74078. A service for developing and promoting teleconferences, this group provides useful information for faculty development as well as teleconferences of interest to some students. (405) 624-5191.

New Technology Consultants. Satellite Programming Directory. Available for $65 from NTC, P.O. Box 27044, Minneapolis, MN 55427.

Ostendorf, Virginia. What Every Principal, Teacher and School Board Member Should Know About Distance Education (1989). Virginia A. Ostendorf, Inc. This important resource should be purchased by any school that is considering implementing or expanding distance education.

to the development and delivery of pre-service and continuing education courses using cable, computer, and other communications technologies. Following an organizational meeting with the Association for Library and Information Science Education (ALISE), the consortium will begin enrolling charter members and initiate formal operations during the 1990 Annual Conference in Chicago.

In the meantime, the College of Library and Information Science at the University of South Carolina will offer a graduate-level course in school library media program management during the spring 1990 semester. In the summer of 1990, the college will offer two courses intended for recertification credits; these courses will be developed for school library media specialists as well as librarians serving children and young adults in public libraries. One of the courses will be devoted to the design, development, and implementation of literacy programs in libraries and library media centers. Graduate credit and continuing education units will be available for a limited number of participants, but the courses can be leased by other institutions of higher education and state agencies. These are available through the Mind Extension University and can be accessed by Jones Intercable subscribers as well as by anyone with a satellite dish. For more information, contact Don Sutton, Director of Educational Services, The Mind Extension University, 9697 E. Mineral Avenue, Englewood, CO 80112 or call (800) 777-MIND.

Professional Development

School library media specialists and librarians are essential components to the success of distance education and must not be left out of the movement. Many librarians, as readers may well be aware, find themselves place bound when it comes to continuing their professional growth. A limited number of graduate programs and limited numbers of faculty in institutions offering courses in library science, media, communication, and information technology make access to formal education difficult for some and totally impossible for others. Efforts are under way to help ease this situation for those who have access to cable and satellite systems.

During a preconference at the last Annual Conference of the American Library Association, 19 of the 60 ALA-accredited graduate schools with library and information science education programs met to begin organizing a consortial effort to provide distance education courses in this field. The consortium will be devoted to distance education, Whether on cable, via satellite, or the community college, quality and access are the values that are emphasized. In this way, the needs of the community will be served. And while we are talking about quality, we should not overlook the role of library media specialists in the process. They are the ones who are most likely to be the ones who can provide access to the material and who can provide the support services necessary to make the process work.

Diminishing Barriers

Americans are justifiably proud of their efforts to ensure equal access to education for everyone. As we have progressed to better means of providing information, we have confronted many barriers to access such as race, gender, age, and physical disabilities. While we may not have completely overcome these barriers, they are diminishing. Today, distance education is being made possible through the availability of reasonably priced and more effective technology; both producers and distributors have worked together to bring attention to the concept of distance education as an educational innovation. Their efforts in publicizing the positive results of distance education have led to the allocation, by legislatures, of public funds for demonstration projects throughout the nation.

With the ever-increasing demands being placed on educators, we must use every resource at our disposal. School library media specialists and librarians can play a very important role in using and helping to shape distance education; they can serve as partners to others who are involved in it. Distance education also offers a new challenge to the leadership of our profession and allows everyone an opportunity to demonstrate how critical their involvement in formal and informal education is to every learner—no matter what barriers are imposed.

Bibliography

For a history or a more complete overview of distance education, see the following:


ERIC Documents


