Conclusions of a study of current use of technology in the administration of school library media programs and in school library/public library cooperation are summarized. Based on interviews with media specialists in nine states and an extensive literature review, 26 trends in technology utilization are listed for the administrative categories of technical services, scheduling, circulation, security systems, information retrieval, and other. Then, 23 recommendations are suggested for use in future planning by school administrators and library media specialists in initiating, increasing, and expanding their management functions in administering school library/media centers and programs. These recommendations also address the topic of budgeting and include one recommendation for state education agency personnel and professional associations. (LMM)
The Use of Technology in the Administration Function of School Library Media Programs

by

Blanche Woolls, Professor, University of Pittsburgh

David Loertscher, Program Coordinator
Instructional Resource Education
University of Arkansas

Marvin Davis, Director, Heartland Area Education Agency Media Center, Ankeny, Iowa

Ann Weeks, Doctoral Studies,
University of Pittsburgh

Executive Summary

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U.S. Department of Education
400 Maryland Ave., SW, ROB-3, Rm. 3622
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Attn: Frank A. Stevens

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EXECUTIVE SUMMARY

The use of technology in the administration of school library media programs and in school library/public library cooperation are topics which have been of interest to school administrators and library media specialists. The last ten years have been characterized by an expansion of technology and increased interest in shared resources for all types of libraries. Both topics have become even more critical with the recent decrease in funding. Technology may provide ways to decrease the costs of managing school media centers and resource sharing may provide access to many more resources for the users in schools: administrators, teachers, students and parents.

This study was designed to present a state-of-the-art report on the current use of technology in the administration of school library media programs and in school library/public library cooperation. An extensive literature search was conducted and an annotated bibliography was prepared.

Interviews with nine persons as well as the information found in the literature provided the basis for the determination of the trends in the use of technology and to assist in the development of recommendations for future planning by school administrators and library media specialists to initiate, increase, and expand their management functions.

Nine individuals were chosen for telephone interviews by project staff after consulting with media directors in nine State Education Agencies. The nine States were selected jointly by project staff and staff in the Office of Libraries and Learning Technologies in order to have a reasonably wide geographic distribution. These States were considered to have well-established programs utilizing technology for cooperative activities between schools and public libraries. From these nine states, eight individuals selected were located in school library media centers at the local or regional level; one was in a university setting. They were identified as being in the forefront of the utilization of technology in school media centers or represented a unique adaptation of technology in the administrative functions of school media centers.

The following trends in the use of technology in the administration of school library media centers and in the use of technology in school library/public library cooperation were identified:

GENERAL

1. There is a lack of printed information concerning the successes and failures of projects using technology in the management of school media centers.
2. Standardization of microcomputers within a school district will make it easier for local and regional media services to provide programming support, timely repair of equipment, and software development and acquisition.
3. Little commercial software exists for use with microcomputers for media center management.
4. The utilization of technology may result in savings which can be documented, thus providing media specialists with time for more curriculum involvement.
5. Lack of awareness may limit the potential utilization of technology in the management of school library media centers.

6. New technologies may require a very high cost initial investment and this investment may be difficult to justify to school administrators.

TECHNICAL SERVICES

7. Schools continue to use both mainframe and shared cataloging for technical services functions; however, widespread use of networks for bibliographic access appears to be in the formation stages.

8. The use of automation in cataloging and processing appears to be cost effective.

9. Districts not tied into OCLC often subscribe to commercial sources of MARC information, permitting standardization of records which makes transfer of records and generation of union lists easier.

10. Several districts have developed many useful spin-offs of their computer cataloging systems, e.g., generation of bibliographies, key word indexes to collections, and streamlined collection control.

11. Without the purchase of peripheral equipment, microcomputers do not have the storage capacity to handle technical services and provide the additional services needed by most library media specialists.

12. Very few school districts are using the commercial on-line acquisitions services; they will probably continue to rely on commercial jobbers until they can interconnect computers for less expensive cataloging.

13. Cataloging for selected segments of a collection rather than the total collection appears to be successful on the microcomputer.

SCHEDULING

14. The use of a mainframe or a microcomputer to schedule films for a district is very common.

15. Most scheduling applications for microcomputers are for equipment and special segments of a book or audiovisual collection.

CIRCULATION

16. Comprehensive circulation systems are generally too expensive for schools.

17. Using microcomputers for issuing overdue notices can be cost effective and can save 90 percent of the clerical time used in this task.

SECURITY SYSTEMS

18. Automated security systems appear to be successful in those schools which have installed them; however, there is a high initial cost and there is no data analyzing patron's feelings toward these systems.

INFORMATION RETRIEVAL

19. ERIC appears to be the most popular database for teachers, because of its accessibility and the awareness of educators to its use.

20. Access to dial-up systems is quite common from districts via State networks.

21. School collections are being added to state-wide data banks; access to collections through microfiche listings of holdings is also occurring.
22. Use of microcomputers for electronic mail is beginning.
23. The telephone remains the most popular technology for inter-
library loan from schools to other information agencies.

OTHER
24. Budgets for school library media centers are most often on
a school district mainframe, but detailed budget analysis is
rarely available.
25. Cable television has a great potential in management func-
tions. However, many schools do not have access to cable
lines and some school districts are served by more than one
cable company. It is possible that satellite transmission
may overcome some of these problems.
26. A number of State educational agencies and state profes-
sional associations are providing opportunities for school
library media specialists to become aware of newer technology
for management functions.

Recommendations for future planning for the use of technology in ad-
ministering school library media centers and programs are:

GENERAL
1. It is recommended that information concerning the use of
technology in school library media centers, both successes
and failures, be widely disseminated to school administra-
tors and school library media personnel.
2. It is recommended that journal editors and conference plan-
ners identify innovative users of technology for school li-
brary media programs who can communicate the long-term bene-
fits to educators.
3. It is recommended that school personnel examine the uses being
made of commercial microcomputer software designed for small
businesses for its potential use in school library media ad-
ministration.
4. It is recommended that the various uses of technology in ad-
ministering school library media programs be considered for
their potential in relieving professional staff of clerical
duties, allowing them more time to work with students and
teachers.
5. It is recommended that media specialists:
   • become aware of the potential of technology and be willing
to test methods over time to confirm or deny the degree of
   success and cost benefits.
   • become knowledgeable about computer technology.
   • be capable of managing the new technologies, including the
     ability to sell their potential to administrators, school
     library media specialists, teachers and the school community.
   • be willing to accept the responsibility for the selection
     of appropriate hardware and software, organization and re-
     trieval of programs, and maintenance of computer hardware.
   • be willing to plan and implement programs designed to de-
     velop computer literacy for both students and teachers.
   • be willing to develop or assist in the development of ap-
     propriate computer programming or software.
6. It is recommended that State education agency personnel assume
responsibility for encouraging the placement of new tech-
nologies in school library media centers and for encouraging the expenditure of funds for this purpose.

7. It is recommended that research be conducted prior to and after the adoption of technological systems to document the extent of success or failure and the actual savings in time or money.

TECHNICAL SERVICES

8. It is recommended that an indepth analysis be made of the relative cost of processing materials using such methods as:
   - OCLC
   - Commercial vendors
   - A district managed computer system
   - Traditional manual cataloging
   - Word processors

9. It is recommended that schools or districts begin to automate their catalogs by indexing parts of the collection, e.g., audiovisual materials.

10. It is recommended that clearinghouses be established to facilitate exchange of microfiche records of holdings of libraries in school districts not participating in on-line retrieval systems.

11. It is recommended that a list and description of the "spin-offs" from districts using computers to catalog materials be published to help other school library media specialists make more effective use of data bases.

12. It is recommended that a computer programmer position be assigned to district library media centers to assist in the development and use of software to meet needs relating to technical services.

SCHEDULING

13. It is recommended that microcomputers be tested as an effective aid to scheduling software and hardware.

CIRCULATION

14. It is recommended that microcomputers be used to generate overdue notices as an initial management function.

SECURITY SYSTEMS

15. It is recommended that districts investigate (1) the actual savings in book and other material loss as compared to the cost of the security equipment, (2) patrons' feelings toward these systems, and (3) the possible use of inservice with students and teachers to reduce losses.

INFORMATION RETRIEVAL

16. It is recommended that "stand-alone" on-line computer catalogs be investigated as one possible substitute for traditional card catalogs.

17. It is recommended that more information be collected on the use of data bases for bibliographic and information retrieval in school districts and States to determine:
   a. Which bibliographic data bases are most cost effective?
   b. Which data bases are needed and used by teachers and/or students and for what purposes?
   c. What types of students use data bases?
   d. Does inservice training contribute to the effective use of data bases?
e. Should users bear a portion of the costs of more expensive data bases?

18. It is recommended that administrators encourage the participation of school districts in resource sharing among schools within a district, among schools in other districts, and among other information agencies.

19. It is recommended that administrators be made aware of the potential benefits of joining networks.

BUDGETING

20. It is recommended that school library media specialists explore the potential uses of the computer for budgetary control.

OTHER FUNCTIONS

21. It is recommended that new and innovative uses of cable transmission be reported in the literature when such information becomes available.

22. It is recommended that satellite transmission be considered when cable links are not possible to provide equal services to all schools.

RECOMMENDATIONS FOR STATE EDUCATION AGENCY PERSONNEL AND PROFESSIONAL ASSOCIATIONS

23. It is recommended that the model for cooperation between the Florida State Department of Education and the Florida Association for Media Education be utilized by those who wish to increase the potential utilization of technology in school library media centers.

Creative school library media specialists and supervisors of media programs have been very imaginative in developing methods to use technology to its fullest potential. In some cases, they have exploited the technology and accomplished more than the equipment or the software was originally designed to accomplish. The desire, the ability, and the accomplishments of these persons have allowed school library media centers to enter the field of high technology.

The use of technology can provide school library media specialists time to assume a more active part in curriculum development. Technology may indeed be the best means to allow school library media specialists time to help teachers teach and students learn. The challenge is there for all.