

Recent Trends in School Library Media Research

SLMQ Volume 21, Number 4, Summer 1993

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Note: This paper was prepared for presentation at Treasure Mountain Research Retreat III, October 19-20, 1992.

The purposes of this column are to summarize briefly the issues facing library and information studies (LIS) research; to provide an overview of recent research that has been conducted in the school library media field; to summarize trends in this research, focusing on methodologies and topics examined; and to address any gaps found and suggest further areas for study.

Background

Research in Library and Information Studies

LIS research has been characterized as fragmented, non-cumulative, pragmatic, methodologically unsophisticated, and contributing little either to the practice of the library and information profession or to the discipline of library and information studies.(1,2,3,4) The focus of LIS research often has been on the processes of the profession rather than on the clientele. While surveys and experiments on these professional processes constitute a substantial part of the research published, studies of the public are less frequent.(5,6) Furthermore, surveys and other descriptive research methods are dominant data-gathering techniques,(7,8) and there is a need for more theoretical studies using creative approaches to gathering data for the purpose of building theory.(9,10,11,12) Harris noted that "All too frequently the emphasis is on professionally palatable findings. Most of the work is quite expert, but it is also unwilling to challenge conventional wisdom."(13)

While these findings are little cause for celebration, there are favorable signs that LIS research is improving. McClure and Bishop found that leading researchers in library and information studies, while agreeing that LIS research is "mediocre," noted these promising trends:

- A small but growing number of LIS researchers are regularly contributing to the literature;
- The quantity of published research has increased since 1980;
- The general quality of research has improved since 1980; and
- Within the library and information profession, awareness and perceived importance of research has improved.(14)

Research in the School Library Media Field

Reviews of research in the school library media field have identified shortcomings in the research similar to the problems noted in LIS research generally. A synthesis of these reviews was completed by Fitzgibbons and Callison, who analyzed the major reviews of research in the library media field and searched all doctoral dissertations in the field for the period 1927-1989.(15) The major conclusions from that study are:

- Dissertations are the predominant form of research in the library media field. Reports of dissertations often are not disseminated through journal publications.
- Surveys are the predominant methodology. “Most research in the school librarianship area is survey-based and descriptive. Even though there are examples of different methodologies being used (citation analysis, content analysis, observation, and interviewing), over 90 percent of the studies employ some methodology other than experimental. Few studies propose hypotheses or explore cause-and-effect relationships.”(16)
- Existing research does not build on previous research in the field. Needed are reviews of research that synthesize findings and offer recommendations.
- During the last thirty years, the principal theme has been the attempt to “define the field,” i.e., to delineate the school library media program and the role of the school library media specialist by evaluating library media programs, surveying role perception, and exploring the characteristics of exemplary programs. According to Fitzgibbons and Callison, approximately one-third of the dissertations have attempted to describe the functions of the school library media center or the competencies of those who manage it. Before 1960, dissertation studies that defined elementary school library services and examined the use of resources and information books to enhance the secondary school curriculum accounted for approximately one-half of the dissertations. “There is evidence that new studies have explored the potential for technological applications, new budgeting approaches, and greater instructional involvement of school libraries.”(17)

Since 1980, 20 percent of the dissertations completed in school librarianship have concerned defining the competencies of the school library media specialist. Historical studies account for 11 percent of the school library dissertations in the 1970s and 8 percent of the dissertations in the 1980s.(18)

Clearly, this review indicates that a variety of methodologies are needed and that the research should be framed in terms of the roles of the library media specialist as educator, instead of studies that deal with the history of the field or perceived roles. Although we agree that surveys are overused as a research method, to replace them with experimental methods would not satisfactorily address this issue. Rather, researchers should be encouraged to use whatever methods are appropriate to the study at hand. It is our opinion that qualitative methods provide the means for examining critical issues in the school library media field.

During the last few years, researchers in library and information studies in general have recognized the value of qualitative or naturalistic methods of inquiry. What, then, has occurred in recent years? To what extent have school library media researchers employed multiple data-

gathering methods? What topics have been explored using multiple methods especially qualitative methods?

Overview of the Study

The researchers reviewed doctoral dissertations and journal literature published in the school library media field during a five-year period, 1987-1991. Dissertations were chosen because they represent the trends in research methods taught to new researchers entering the field and offer a comparison with previous doctoral studies. Journal literature was selected in an attempt to study research that is widely disseminated through professional journals and has been subjected to the screening process that occurs before publication. In addition, all "Current Research" columns in *School Library Media Quarterly* during the five-year period were examined, because this journal is the official publication of the American Association of School Librarians, the leading professional association for the field.

The Dissertations Abstracts International and Educational Resources Information Center (ERIC) databases were searched, using the descriptors *School Library** (truncated) and *Research*. Citations and abstracts were printed out and analyzed for research methodology, topic, and grade level of study. When the abstracts did not clearly state the methodologies used, the journal articles were consulted. In those few cases for which we were unable to locate a journal cited in an abstract, that research report was eliminated from the study. Five journal articles and one dissertation were eliminated from the study because the abstracts did not clearly describe data-gathering methods, and the corresponding journals or dissertations could not be located and examined by the researchers.

Articles were considered reports of research if they required systematic data collection using qualitative or quantitative methods. Also included were reviews of research, i.e., articles that analyzed and summarized previous research.

Both researchers participated in the analysis of abstracts and agreed on the categories of methodologies and topics of study. Topic analysis especially required consultation and discussion before consensus was achieved.

Findings

The database search revealed a total of 153 different reports of research conducted during the period 1987-1991. As indicated above, five were eliminated because the abstracts were unclear as to methodology. The average number of dissertations and journal articles published annually was 29.6. The results are reported in table 1.

Table 1. Research Methods Used in Dissertations and Journals, 1987-1991

Method	1987		1988		1989		1990		1991		Totals	
	D	J	D	J	D	J	D	J	D	J	No.	%
Questionnaires	4	13	3	3	-	10	2	11	4	10	60	40.5
Literature Review	-	7	-	3	-	8	-	4	-	3	25	16.9
Content Analysis	1	3	-	5	1	4	1	-	-	1	16	10.8
Experimental	-	-	2	3	1	-	1	1	-	2	10	6.7
Interviews	-	1	1	1	-	-	-	-	-	1	4	2.7
Two Methods	2	2	1	3	2	2	2	3	1	-	18	12.2
<i>Three or more methods:</i>												
Three methods	-	-	1	-	-	1	-	1	1	1	5	3.4
Four methods	-	-	-	1	1	-	1	1	1	-	5	3.4
Five methods	-	-	1	-	-	-	-	-	-	-	1	0.7
Six methods	-	-	-	2	-	-	1	-	-	-	3	2.0
Seven methods	-	-	-	-	-	-	-	-	-	-	-	-
Eight methods	-	-	-	-	-	1	-	-	-	-	1	0.7
Sub total											diss/journ	
	7	26	9	21	5	26	8	21	7	18	36/112	
Totals		33		30		31		29		25	148	100

Methodologies

More than three-fourths of the research during this five-year period relied upon one data-gathering method. Consistent with previous studies of research in the field, questionnaires were the predominant methodology—40.5 percent of all studies identified during the period. When a single methodology was used, the number of studies using questionnaires was more than double that of the next most frequently found method, literature reviews (16.9 percent); these research articles synthesized existing research literature and did not gather original data. The relative frequency of literature reviews would appear to be a positive development, given Fitzgibbons and Callison's exhortation that the researchers in school library media should attempt to synthesize research in the field.

Content analysis, which is the examination of records, literature, or other materials, represented 10.8 percent of the studies. As noted by Fitzgibbons and Callison, the use of experimental designs is quite rare, and interviews were seldom used as a single method for gathering data.

Another positive indication is the number of studies that use two or more methodologies. Approximately 12 percent of all studies used two methods, and a comparable number of studies

(10.2 percent) used three or more. Among the studies using two or more methods, the most common methods were combinations of questionnaires and content analysis (five studies) and observations and interviews (two studies). Two studies used the same four methods: questionnaires, interviews, observations, and content analysis. There has been no attempt to label studies as quantitative or qualitative, but the application of multiple methods in data gathering clearly suggests a shift toward use of qualitative methods.

Topics

The array of topics studied appears to be more diverse than those reported by Fitzgibbons and Callison. During the analysis of topics, the researchers found that the research clustered around five areas of the school library media field: technology, clientele, information resources, the library media specialist, and managing the library media center. Following are definitions of these topics.

Technology. Concerned with the use and impact of information technology in a school library media setting, with little or no regard for the effect of technology on clientele.

Clientele. Concentrated on preferences or attitudes of library users, or the impact on clientele of library media services. Included are such topics as the search process, learning information skills, and using technology-based services.

Information Resources. Studies that focused on any aspect of a collection, including studies of youth literature, censorship, and use of a type of information resource, e.g., magazines.

Library Media Specialist. A study concerned with the preparation, role, activities, or professional status of a library media professional.

Library Media Center. Those studies that were concerned with the school library media center as a service organization or with management issues. Included were such studies as descriptions of the status of library media centers in selected states or countries, budget conditions, and use patterns.

Results of the topic analysis are found in [table 2](#) and [table 3](#). Following are generalizations based on an analysis of these data:

1. The questionnaire was the dominant methodology in the study of technology, the library media specialist, and the library media center.
2. In studying information resources, content analysis and the questionnaire were favored methods.
3. In studying clientele, experimental methods were favored for data gathering and literature reviews were used to gather information about issues. Experimental studies are still rare in the library media field.
4. Two or more methods were used most frequently in studying both clientele and the library media center. Multiple methods were often used in studying the search process. Five studies of library media centers in other countries used two or more methods.

5. The information search process was the dominant topic of research on clientele. Included are several qualitative studies.
6. This inquiry revealed twelve studies of the role of the library media specialist nearly one-third of all studies within this category. In addition to studies of the generalized role and perceived role, a few studies are concerned with the more specialized teaching and instructional consultant's role of the library media specialist.
7. Twelve (8.2 percent of the total) studies specifically addressed technology availability and use, without consideration for clientele. In addition, several studies of clientele were concerned with technology, including video, online, and CD-ROM issues.
8. As expected, content analysis was used primarily for analyzing children's and young adult literature.
9. Multiple methods were used more frequently in studying clientele and the library media center than in studying other topics. One-third of the clientele studies and one-third of the library media center studies used two or more methods.
10. Topics frequently investigated in the study of information resources were censorship, use of resources, and literature analysis.

Table 2. Frequency of Topics by Methodology

	Questionnaire		Literature Review		Content Analysis		Experimental		Interviews		Two Methods		Three or more Methods	
	issue	frequency	issue	frequency	issue	frequency	issue	frequency	issue	frequency	issue	frequency	issue	frequency
Technology	use availability	6 1	online retrieval Computer-assisted instruction (CAI)	1 1	use	1			online use	1	Computer-assisted instruction (CAI)	1		
Clientele	reading patterns attitudes toward LMC latchkey children catalog use	2 1 1 1	effect of viewing violence on videos critical thinking benefits to students of networking reading preferences information search process	1 3 1 1 1	public library children's services use of online catalog information skills	1 1 1	online search process CD-ROM search process search skills bibliotherapy programs for gifted	1 1 2 1 1	information retrieval process	1	use of CD-ROM information search process online search process search skills	1 1 1	library search process online search process information seeking student self-concept	1 3 2 1
Information Resources	use censorship holdings on controversial topics authors	5 1 1 1	censorship collection development collections	2 1 1 1	literature analysis use of children's books censorship	7 1 1	periodicals use	1			literature analysis collection development	1 2	children's literature in teaching	1
Library Media Specialist	professional education employment trends continuing education teaching role evaluation role perception stress & burnout collective bargaining role competencies teacher cooperation with administrative practices job satisfaction	6 1 2 2 2 3 1 1 2 1 1 1 1	teaching role role research methods teaching strategies superintendent's support	2 1 1 1 1	biographies	1	certification test cooperation with teachers curriculum integration	1 1 1	leadership role	1 1	instructional consultants role professional education	1 1 1	role teaching strategies to enhance children's interaction with literature curriculum integration	1 1 1
Library Media Center	accessibility status budget marketing status, international curriculum integration	1 9 3 1 1 1	teacher use service affect on learning academic/LMC cooperation museum/LMC cooperation identify information needs programs	1 1 1 1 1 1 1	usage patterns role	1 1					curriculum integration status, international use Impact of online access to academic libraries status facility impact on learning	1 2 1 2 1 1	status, international characteristics	3 1

Table 3. Methods and Topics Researched—Percentages of Total

	Question- naire	Literature Review	Content Analysis	Experi- mental	Interviews	Two Methods	Three or More Methods	Totals
Technology	4.7	1.4	0.7	0	0.7	0.7	0	8.2
Clientele	3.4	4.7	2.0	4.0	0.7	2.7	4.7	22.2
Information resources	5.4	2.7	6.0	0.7	0	2.0	0.7	17.5
Library media specialist	16.2	4.0	0.7	2.0	1.4	1.4	2.0	27.7
Library media center	10.8	4.0	1.4	0	0	5.4	2.7	24.3
Total n=128	40.5	16.8	10.8	6.7	2.8	12.2	10.1	100

Grade Levels Studied

Results of the analysis of grade levels appear in table 4. Research in this study often did not specify grade level. When grade level was specified, dispersion among grade levels was reasonably uniform. Secondary and high school studies together are more plentiful than elementary. Studies of K–12 and middle schools are rare.

Table 4. Grade Levels Reported in Research

Level	Number	Percent
Elementary	25	16.9
Middle school only (5-8)	4	2.7
High school only (9-12)	18	12.1
Secondary (5-12)	16	10.8
K-12	6	4.0
Unspecified	79	53.4
Total	148	100.0

In summary, use of single data-gathering methods dominated research in the school library media field during the last five years. Questionnaires continue to be the favored methodology, but the use of multiple methods and qualitative methods is appearing with more frequency. While research is still attempting to define the role of the library media specialist and describe

existing services and attributes of the library media center, a substantial number of studies have addressed the needs of clientele.

Gaps in Coverage

In assessing recent research in the library media field, topics that appear to need additional research, especially in the use of qualitative methods, are suggested below. These suggestions are extracted from the display of topics in tables 2 and 3.

Technology. More research on technology is needed, especially studies that analyze client-use patterns and preferences, using multiple methods for gathering data. Many studies of technology, as noted above, examine technology in isolation; technology is a tool in the information storage and retrieval process and should be examined as such. Recent research includes studies of online and CD-ROM systems, but no studies of avant-garde technologies such as hypermedia, artificial intelligence, or virtual reality were found. Few studies of computer-assisted instruction in the teaching/learning process were discovered. Studies of technology applications to learning are needed; how can technology redefine schools and the teaching/learning process?

Clientele. Few studies have investigated the information needs of clientele by groups, e.g., teachers by grade or subject area, or students by age group. Teachers' information needs would appear to be a neglected component of client research. The teaching/learning process and implications for library media specialists and programs could be studied.

Information Resources. Current research on information resources is dominated by single-method studies using questionnaires, literature reviews, or content analysis to describe collections, use of resources, censorship attempts, or contents of youth literature. Qualitative studies of users' perspectives and preferences for various information resources are needed. Such issues as collection development based on assessed needs, organization and storage of information sources to facilitate retrieval and use, effective repackaging of information, and dissemination issues are not found in current research literature.

Library Media Specialist. Questionnaires and single-method studies dominate descriptive investigations of the library media specialist. More investigative studies of leadership and the library media specialist's roles, especially the teaching and instructional consultant roles, using appropriate research methods are desperately needed. We agree with Aaron's (1992) call for research that investigates professionals who model the roles of library media specialists described in *Information Power*.(19,20) Research could address such questions as: How do successful innovators share their vision? How can a library media specialist lead change? How can library media specialists facilitate learning?

Library Media Center. Management issues related to the library media center have been studied primarily through questionnaires and literature reviews. Descriptive studies of the status of library media centers (i.e., resources, staffing, and services available) dominate. There is little evidence of case studies for the management and evaluation of effective library media programs as these programs affect a school and the learning environment. Although a few studies have investigated the concept of curriculum integration, an immense need exists for additional studies

on this topic. Evaluation of curriculum-integrated programs through assessment of student learning is a critical need. Such management issues as planning, policy development and implementation, and program evaluation are seldom the subject of school library media research. Scenarios for the future are not found in the research literature.

Discussion

What does this study say about the current quality of research in school library media? Because more than three-fourths of the studies use a single method for data gathering, quality of research remains a serious concern. While several of the studies identified for this project creatively used qualitative methods, these studies account for a small sample of research at a time when creative research is needed to resolve professional concerns in an increasingly complex world.

The issue of quality was addressed by Van House, who stated that quality of research in the social sciences is based on two sets of criteria:

One has to do with the conduct of research: its underlying logic and methodology, and the validity and robustness of its conclusions. The other has to do with the topic of the research: does it address questions that are useful, interesting, or important?(21)

Framing the problem to be studied and posing appropriate questions are central to the design of quality research. To do so requires a perspective of our world generally and the place of the school library media field within it. We must conceptualize a problem within a theoretical framework, then translate it into a professional setting that can be studied thoroughly, using the principal of triangulation(22) to gather data using varied techniques from small but representative samples. We must “think big” and apply appropriate research methods when designing conceptually sound research.

In thinking big, we must realize that we are living and working in a society that may be characterized by complexity and rapid change and propelled by new technologies. Society demands new approaches to solve new problems. Capra pointed out that the crises in our society (e.g., pollution, chemical contamination of our food supply, nutritional and infectious diseases, and the energy crisis) cannot be addressed by academics who “. . . subscribe to narrow perceptions of reality that are inadequate for dealing with the major problems of our time.”(23) An example of the need for new solutions was the situation in Eastern Europe during the latter part of 1989? a complete surprise to every element of our political, academic, and communication communities. The fact that existing theories, research, and forecasts failed to predict the cascade of political upheavals among the nations of the Warsaw Pact is perhaps the most visible evidence that researchers must ascribe to a broader view of today’s reality.

Harris suggested that, to be meaningful to the profession, researchers should investigate problems in library and information studies by basing the research on social science theory and relating the problems being addressed to their broader social context. Researchers should recognize that the goal of objectivism supported by positivists is not possible, and it should be recognized that the researcher shares the world of the subjects being studied. The intent is not to slide back into a nonscientific subjective appraisal of a problem, but to attempt to synthesize both

empiricism and reflection in research. Researchers should recognize the subjectivity inherent in social science research, and they should recognize change and instability in the library and information profession and in society.(24)

Our study suggests that many researchers in the school library media field are not heeding Harris' suggestions; they are not conceptualizing the problem at hand, and they are skimming across the surface of problems by gathering quantities of data using surveys or other single-method devices.

The large number of descriptive studies that use questionnaires alone to gather data suggest that the question frequently asked by researchers is "What is the current practice?" or "What is the current situation?" or "What do we know about _____?" While it is helpful to address these questions, it is important to go beyond this surface description to ask more probing questions, such as "How do we solve this problem?" "How should we use this new technology to help teachers teach?" "How can we better help children learn?" "How can this theory apply to the school library media field?" Or, perhaps the best question of all, "Why?"

Research in the school library media field must address the roles of the library media professional and the library media program as outlined in *Information Power* (1988). In addition, research is needed that investigates in general the roles of information professionals.(25) Those responsibilities, outlined by Grover and Greer, are for the following:

- the design and management of an information base, whether packaged (books, serials, software, etc.) or unpackaged (electronically stored, locally produced database in a variety of formats);
- the design and management of an information organization consisting of staff, an information system, equipment, space, and financial resources that enable delivery of information from the information base to clientele;
- identifying and accommodating the information needs and unique cognitive and behavioral styles of individuals among the information system's clientele; and
- identifying the information needs of client groups and facilitating the information transfer process to those groups.(26)

Because these characteristics are applicable to school library media programs, these roles can serve as a framework for conceptualizing research questions and planning research projects.

With the LIS researchers queried by McClure and Bishop who expressed an optimism for research, we share that optimism for the school library media field. The research is improving. More researchers are asking questions beyond what is being done and how. We hope to see this trend continue.

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