An SLMQ Special Feature

RESEARCH AND SCHOOL LIBRARIANSHIP

PART II

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A REVIEW OF SELECTED DOCTORAL DISSERTATIONS ABOUT SCHOOL LIBRARY MEDIA PROGRAMS AND RESOURCES, JANUARY 1972–DECEMBER 1980

A critical analysis of doctoral research with recommendations for further study.

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During the past nine years interest in research in the school library media area, as well as in other parts of librarianship, has increased. This is evident from the attendance at national, state, and local research forums and conferences, the number of research articles being published in standard library journals, and other related research activities that have focused on library services to children and young people.[1] The 1980 *ALA Yearbook* provides further evidence of the increase in the quantity of research in librarianship while pointing out the reductions that are occurring in federal and private funding for library research.[2]

A number of factors appear to have influenced this growth. First, more practitioners are beginning to regard research as a systematic means for providing objective data to justify the need for their school library media program, and for developing effective ways of offering services to students and others in an educational setting. Other possible factors contributing to this emphasis on research include: (1) that library faculty members must publish scholarly works in order to maintain or improve their academic status, (2) that baseline data are badly needed in times of reduced budgets and increased inflation,[3] (3) that a number of federal fellowships have become available for advanced study in librarianship, and (4) that doctoral degrees are now being offered by many library education programs.

As more research is generated through these channels, one of the real problems, according to Boaz, is the lack of information about what research has already been done.[4] In an effort to provide some control of this literature, the present review of doctoral dissertations dealing with school library media programs and resources conducted between January 1972 and December 1980 has been written. It complements the surveys of research presented by Lowrie[5] and by Aaron.[6] The scope of this survey of dissertations has been limited to those doctoral studies dealing with programs and resources, but not personnel or library cooperation because of space limitations. A review of research relating to school library media personnel and to studies other than doctoral dissertations in school librarianship will be presented in the forthcoming publication entitled *School Library Media—Focus 82*, to be published by Libraries Unlimited. The decision to begin with the 1972 time period rather than in 1976 when Barron completed his review of school library media research[7] was made in order to analyze trends, issues, and problems for a longer time span to give a more accurate, less fragmented overview of the status of school library media research.

The studies included in this survey were discovered through a computer search of various databases, such as ERIC, LISA, Magazine Index, and Comprehensive Dissertation Abstracts. Further manual searching was done in *Library Literature* and *Library Science Dissertations: 1925–1972*[8] to identify studies that were not revealed through other means.

As was the case in the 1972 review of research, it is questionable that all available doctoral dissertations that fall within the confines of this review have been included because there is still a definite lack of bibliographic control of research literature relating to school librarianship. Nevertheless, an attempt has been made to be as comprehensive as possible in dealing with dissertations that focus on school library media programs and resources.

An examination of the doctoral dissertations in these two areas performed from January 1972 through December 1980 reveals that 151 studies have been completed. If these were equally divided on a yearly basis and compared with those completed from 1967 through 1971, figures would show that more than twice as many studies were conducted each year during the later time period. However, because different methods were used to generate the information contained in the later survey, these figures should be used only to suggest broad trends and directions rather than to make specific comparisons. Further examination of the dissertations in the present survey reveals that two out of three were done outside library and/or information science education programs, chiefly in schools of education.

SCHOOL LIBRARY MEDIA PROGRAMS

"School library media programs" is a category that focuses chiefly on the planning, organization, budgeting, operation, and evaluation of the program at the local, district, and state levels. An examination of studies in this category reveals that the major emphasis has been placed on studies evaluating the program and those concerned with the provision of library media services in the school. The study design most often used is the survey, with questionnaires being employed most frequently to gather data.

Development and Planning of the Program. Hellene's perception study[9] is the first of seven studies devoted to the development of school media programs. She sought to compare the perceptions of principals, teachers, and library media specialists about the behaviors of principals in schools with well-developed school library media programs versus those with inadequately developed programs. Data were gathered through a questionnaire administered to one-third of the elementary and high schools and all of the junior high schools in the state of Washington. Additional instruments were used to determine the level of development in schools and to measure the behavior of principals. Some of the major findings in this study were: (1) principals in well-developed-program schools rated higher in establishing evaluative procedures, integrating the program into the curriculum, encouraging use by both students and faculty, providing flexible scheduling, involving librarians in class activities, encouraging teachers to use media in individualizing the program, requiring all-day service, involving librarians in curriculum planning, expecting harmonious relationships, developing professional libraries, working for budgets, and specifying media program needs; (2) the behavior of principals seemed to be affected by grade level, size of school, funding, amount of autonomy, and community policies.

Investigations by Hardin[10] and by Eberhard[11] focused on district-level media programs. Hardin's study dealt with the establishment of guidelines to aid in the development of school district–level media centers. She used on-site visits to selected district media programs and interviews to gain information and develop tentative guidelines. The tentative guidelines were then submitted to a group of twenty experts in the field for validation. Seventy-one of the seventy-four statements in the guidelines reached or exceeded the predetermined .05 level of significance.

Eberhard's study was designed to provide a comparison of the development of school library media centers with and without district school media directors in Kansas from 1966 to 1972. She sent a questionnaire to principals, teachers, elementary school media librarians, and district media directors at selected sites. Major findings indicated that districts with media directors were found to offer more professional services to individual school centers and to have a greater number of centralized district services. Those without district media directors provided more books per pupil, more clerical contact hours, and more hours of accessibility to the center.

The next three studies investigated the development of various parts of the media program at the state level. Through a questionnaire, Taylor explored the progress that had been made since 1960 in providing instructional nonprint media programs in state education agencies.[12] He found that 96 percent of the states reported having an organizational unit concerned with nonprint media, and there was a doubling of personnel since 1960. In addition, most state agencies provided continuing education opportunities and did consulting in this area.

Hall[13] and Rankin[14] used the historical methodology in their studies to trace the development of educational media and school libraries in two states. In both investigations, factors encouraging growth were identified, and problems related to development were indicated.

The next two studies examined school media development in other countries. Haidar's study was intended to provide a design for the future development of school libraries in the state of Kuwait through a model based upon the needs of the state.[15] Jamin focused his investigation on the development of educational media services in Malaysia from 1957 through 1972 when there was a new educational policy and great strides were being made in educational progress in the country.[16] Through document analysis, he ascertained the factors that influenced the development of educational media services and then made recommendations for a higher level of development in this area.

Barron's dissertation is the only one that dealt with planning during the time period covered by this review.[17] He examined the status of planning for school library media programs in Florida during a three-year period by analyzing the District Comprehensive Educational Plans submitted during 1973–76 to the Florida Department of Education. Major findings indicated that, in most cases, systematic planning of programs had not been conducted by the school library media specialists in Florida. Further, the plans developed did not reflect any major attempts to follow directions outlined by the library or education professions. Nor did the plans indicate any fundamental changes in the role and purposes of library and media programs during the next five years.

Organization of the Program. Two aspects of organization are considered in this section. One deals with organization of programs at the local and district levels. The other focuses on organization of materials, especially through the examination of centralized processing.

Leeper[18] and Hayes[19] conducted comparative studies of the effects of traditional and open media centers in elementary schools. Leeper found that media programs in open-space schools provided more services, had a greater percentage of aide time than traditional centers, received higher per-pupil support, and had a more satisfactory facility as judged by media personnel. However, self-contained media centers had more books and were more likely to have state-certified media personnel.

Hayes was particularly interested in whether students in an open media center had greater research skills than students in a traditional media center. Through the use of a utilization questionnaire and a standardized test on basic skills, she found that students in traditional centers scored higher on the test, but students in the open centers utilized resources to a greater degree. Both groups demonstrated a positive attitude toward the media center. Nevertheless, media utilization in both groups was generally low.

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Other findings related to the influence of sex and race on the use of each type of center.

Miller studied another approach to the organization and design of instructional materials centers.[20] In her dissertation, she attempted to formulate criteria other than quantitative for the development of these centers. Gagne's learning principles were used to develop this model of organization and design. Media selection charts were developed from the model that could create learning prescriptions of some exactness and a checklist was devised that would determine if learners' needs were met by the instructional materials centers. The checklist was sent to librarians and curriculum directors of IMCs mentioned most frequently in the literature.

McAllister examined the adjustments administrators, teachers, and media specialists must make in planning the structural and operational changes necessary to convert a school library into an instructional media center.[21] Her data were gathered from a sampling of principals, librarians, audiovisual specialists, and teachers from seventy-three public senior high schools in Wisconsin who reacted to two instruments focusing on structural and operational pattern characteristics. From her findings, McAllister concluded that instructional media centers may be most successfully implemented when educators are aware of the perceptual adjustments required of all participants.

The next six studies investigate various aspects of organization of materials at the local, state, or national level. Williams' study addresses the feasibility of changing the classification of library materials in the Chicago public school libraries from the Dewey decimal classification system to the Library of Congress system, so that the school system would have the same system used by the Chicago Public Library.[22] The proposed plan developed as a result of this study considered the size, organizational pattern, and training to perform the new tasks for lay and professional personnel of the public schools, as well as the necessary finances.

Simone also conducted a feasibility study.[23] Her purposes were (1) to develop and test a research methodology for the analysis of centralized processing centers and (2) to identify the optimal characteristics of a centralized processing center. A total of 104 questionnaires were sent to participants in forty-two public school districts, some of whom had centralized processing centers and some who did not. The researcher's major conclusions stated that there were two distinct advantages in establishing a centralized processing center for Allegheny County Intermediate No.3 a savings of $6.52 per item and freeing librarians to work more with patrons.

In their studies, Swift[24] and Toms[25] examined organization of materials from a statewide point of view. Swift's purpose was to determine the role that economic factors (especially unit cost) played in the decision to centralize processing of media for public schools in Washington State. She utilized a posttest-only control-group design to collect data from twenty-four randomly selected school districts. The treatment, administered to the experimental group, involved in-depth reports to districts on the economic factors involved in centralized cataloging and processing of print and audiovisual media. Major findings indicated that commercial processing of print and audiovisual materials costs substantially less per item than centralized processing. However, library media directors and their supervisors believed that centralized processing was worthwhile and were willing to ignore the extra costs involved in providing the service.

Toms' investigation focused on practices followed in Wisconsin high school media centers in the organization of nonprint media. Her primary research tool was the survey questionnaire mailed to the director of every high school media center in the state of Wisconsin. She found that most high schools had separate media centers for print and nonprint materials, that different types of materials were integrated in the card catalog but not elsewhere. Other findings related to classification of materials, color-coding, circula-

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tion, and credentials of professional personnel.

Holland was also concerned about the control of nonprint information, but on a broader level.[26] She traced the development of mediagraphic control of nonprint information and analyzed two existing online systems (OCLC and NICEM) as well as a projected system (Project: Media Base) for mediagraphic control. Her data were gathered from reviewing retrospective and current literature, searching printed bibliographies and mediagraphies, and engaging in interviews and discussions with professionals in the field. This study revealed that, historically, media centers have established standards, procedures, and controls at the local level. There has been a lack of agreement about mediagraphic formats and control. In general, mediagraphic elements have not been used to form an information chain for access to print and nonprint media. At the conclusion of her study, Holland proposed a mediagraphic control model based on specific criteria.

The last study relating to organization of materials was conducted by Hart.[27] His investigation was designed to explore the current capabilities of school library media centers to process all types of media (either in-house or at a centralized processing unit), and to decide whether there are reasonable options available to the media center directors. Three questionnaires were used to gather information. Responses were analyzed using various statistical procedures, such as chi-square and analysis of variance. Major findings indicated that duplication was occurring between in-house processing and processing done by commercial firms; that commercial processing was replacing many local operations because of budgetary problems; that it is feasible to establish a national center to standardize, catalog, and coordinate the processing of multimedia materials, and that a need was shown to standardize procedures and to develop new multimedia systems.

Funding of the Program. Two dissertations concerned themselves with funding. The first, by White, was conducted to examine the impact of ESEA's Title II on Pennsylvania public school library media centers.[28] A stratified sample of twenty school districts was selected for study. Five data-gathering instruments including a questionnaire and interview schedules were used to collect information from library and education personnel. The data revealed that spending for library resources during the time period being examined increased proportionately faster than for salaries or teaching supplies. During the same period, the number of librarians, libraries, and items in the collections also increased. In addition, circulation policies were liberalized, and centralized cataloging and housing made audiovisual materials more accessible. Consequently, White concluded that ESEA Title II had a positive effect on public school media centers in Pennsylvania.

Little examined factors that might be related to expenditures for instructional materials (library books and audiovisual materials) in Wisconsin public schools.[29] He obtained his data from Wisconsin Department of Public Instruction figures gathered from all public school districts in the state for the 1967–68 school year. Correlation coefficients were run to examine relationships. Statistically significant correlations were found to exist between local, state, and federal expenditures for instructional materials and total expenditures for instructional materials. The greatest correlation was found between local expenditures and total expenditures. In addition, significant correlations were found between certain selected financial characteristics of public school districts and per-student expenditures for instructional materials.

Operation/Services of the Program. Twenty-one doctoral dissertations are included in this section. These studies deal chiefly with student and teacher utilization of school library media programs and with the development, teaching, and evaluation of library skills.

The first group of studies investigates services offered on a geographical basis. Henry conducted research to determine the status of unified media programs and personnel at the building level in public schools in Texas.[30] Baird did a similar study of public elementary schools in Oklahoma.[31] Both researchers found that over 70 percent of the schools sampled had centralized library services, although Baird qualified her findings by adding that only 41 percent had a unified media center administering both print and nonprint materials and services.

Griffin studied library instructional support services in elementary schools in the District of Columbia public school system.[32] She proposed to identify essential services, to determine the degree of utilization of services, and to ascertain the need for increasing, decreasing, or implementing services to meet curricular objectives. A research instrument was developed and administered to ninety-five teachers in six public school regions in the system. Chi-square, Pearson Product Moment Correlation, and percentage were treatments used to analyze the data. Major findings indicated that services needed to be increased to meet curricular requirements; that teachers with six or more hours in library science or audiovisual education tended to use more sophisticated services and to be more demanding of media program services; and that library instructional support services were used more in nongraded, informal settings than in structured, formal classroom settings.

Fitzsimmons investigated the status of library and information services in vocational-technical schools and through personal interviews conducted with thirteen school administrators.[33] It was found that sufficient guidance was not given by the Pennsylvania Department of Education to vocational-technical schools in regard to learning resource centers. Further, both financial help and commitment are necessary from state agencies to ensure development of such centers.

In her study Buckley focused on the status of library services for exceptional students enrolled in public schools of selected southern states; the perceptions of media professionals about factors pertaining to the education of media specialists working with exceptional children; and the relationship between selected characteristics of media specialists and schools and the adequacy of resources and frequency of services provided exceptional children.[34] A stratified random sample of media specialists was selected to participate in this study. These professionals were sent a questionnaire to obtain the information needed. Findings indicated that collections of resources were judged to be "moderately adequate." Policies that governed use and access to the media center applied to all students, and media specialists perceived a need for training in special education.

Wiedrick investigated student use of school libraries in Edmonton Area elementary schools.[35] Specifically, he proposed to collect information pertinent to the problem of maximizing the integration of the library with the instructional program in an elementary school. School library use data from students, personal data from a random sample of students, and a survey instrument completed by teachers, librarians, and principals provided basic information for this study. Responses to the survey instrument were compared with the opinions of a panel of experts regarding the role and function of the school library to determine the extent of agreement. Wiedrick discovered that leisure reading represented the greatest use of the library and its collection, that teachers, principals, and librarians held similar perceptions of the role and function of the school library, and that teachers, principals, and librarians favored regulations emphasizing preservation of materials, while the panel of experts emphasized maximum use of materials.

George analyzed the operation of selected instructional media centers in California in terms of curricular decisions which led to the formation of the centers and the effects of such a center on curriculum formation, interpretation, and responsibility.[36] Her data were gathered through a survey instrument and on-site visits. She found that student use of media centers and center directors' responsibilities were increasing. In addition, media directors were responsible for in-service training in equipment operation, media selection, utilization, and production.

Through a questionnaire administered to selected teachers and librarians, Johnson attempted to identify the factors affecting teacher utilization of libraries in the secondary schools in Tucson, Arizona.[37] Major findings indicated that the primary reason for nonuse of the library was that teachers saw no need for it; the greatest influences on teacher use of the library were informal conversations with the librarian, bibliographies, and involvement in selection of library materials; librarians were not involved to any significant degree in classroom planning; and the most preferred library service was the preparation of lists of new materials.

Ogman[38] and Hiland[39] also studied teachers. Ogman examined factors that deter utilization of media center services in the secondary schools of the San Diego school district. Through information gathered from teachers participating in media center in-service workshops, the investigator found that factors affecting use of the media center were personal and professional factors, instructional constraints, deficiencies in the media centers, and attendance at the workshops.

Hiland's study was designed to investigate the information needs of social studies teachers, to ascertain the channels and systems used to find the information, and to test the relationship of selected variables and the use of information systems by teachers. The investigator tested three personal variables of teachers, three school variables, and three media center variables (location, number of personnel, number of services) for relationship to use by teachers by conducting personal interviews with thirty-five social studies teachers. It was concluded that social studies teachers used a variety of information and a number of information channels and systems. The informal information system and document channels were the most frequently used. None of the variables alone had a significant bearing on the use of information systems by teachers.

Metoyer also did a needs study, but she focused her attention on student information needs.[40] She attempted to identify the information needs of elementary students (grades four through eight) living on the Akwesasne Mohawk Reservation and to determine if the resources and services of the Akwesasne Library and Cultural Center reflected the interests and needs of the Mohawk students. A combination of methods including a questionnaire, interviews, observation, and a library inventory checklist was used to obtain the necessary data. Metoyer found that the majority of students never or occasionally used the library and the center met their information needs only to a limited extent. The primary factor contributing to infrequent use was insufficient funding.

The next group of studies in this category deals with library skills. Henslowe's study was designed to develop and validate a model of basic library locational skills for print sources.[41] The information base used to develop a model was drawn from a wide variety of sources and was validated by five librarians for quality. A group of judges representing department of education supervisors, university teaching positions, and school district supervisory positions evaluated the final model. It was concluded that the study resulted in a valid model of basic library locational skills for print sources.

Uyehara attempted to develop and evaluate a hypothetical learning hierarchy to provide instruction in locating information in the school library media center.[42] He designed the hierarchy, verified it through a panel of experts, pilot-tested it, and then used a group of 135 sixth-grade students as the experimental group to test the hierarchy. These students were divided into three groups according to their test scores on the Stanford Achievement Test. The findings indicated that the learning hierarchy was valid for those students who were reading at or above the level of the target population.

Studies by Barkholz,[43] Wilbert,[44] Brainard,[45] Smith,[46] Bobotis,[47] Sellmer,[48] and Fudge,[49] dealt with specific approaches to or techniques for teaching library skills. Barkholz' study involved developing a module to teach seventh-grade students selected skills in the use of the media center, and ascertaining if there was a differential effect on learning the skills because of differences in sex or reading level. Thirty-two seventh-grade classes in language arts took part in the study. They were randomly assigned to one of four groups, two of which were given the module. All groups were given the National Test of Library Skills at the conclusion of the module. Findings indicated that there was no difference noted for the main effect, sex. However, there were significant differences found for the reading level. The use of the module to teach library skills was found to be effective.

Wilbert compared competency-based instruction with traditional instructional techniques in teaching basic library skills to seventh-grade students. A short course in library skills was designed for seventh-grade students. The selected sample was divided into an experimental and a control group. Data were gathered from student records, a pretest, and a posttest. There was no statistically significant difference between the achievement of the two groups.

The relative effectiveness of seven different media formats in teaching library research skills was the subject of Brainard's study. One hundred fifty-eight sixth-grade students participated in the fifteen-week study involving the formats of print, picture, sound, print/picture, print/sound, picture/sound, and print/picture/sound. It was found that the treatment had relatively small and difficult-to-detect influence on the amount of learning of research skills. In addition, the attitude of the students toward the treatment may have been reflected in performance in the test.

Smith utilized an experimental design in selected elementary schools to measure the effectiveness of three different types of library skills programs—teacher-provided instruction integrated into the curriculum; library-provided instruction in weekly class sessions; and no formal instruction programs. Students instructed by the school librarians demonstrated a significantly better performance than the group with no formal instruction, but not better than the students who received the teacher-provided innovative treatment. The mean of the high socioeconomic student group was higher than that of the low socioeconomic group.

Bobotis studied the relative effectiveness of visual, oral, and performance-based modules in teaching library skills to Mexican American students and to Anglo-American students. Twenty-one seventh-grade classes, which were grouped by mode of instruction (transparencies, lecture, and the performance-based method) participated in this study. Use of the transparency approach was the most effective method. Anglo-Americans had significantly higher scores using all three methods of instruction. There was no significant difference between the Spanish-speaking Mexican Americans and the non-Spanish-speaking Mexican Americans in the results of the tests.

Sellmer and Fudge selected specific sets of library skills as the focus of their studies. In his experimental investigation, Sellmer attempted to identify a more effective way to teach elementary school students the card catalog. Fourth-grade students participating in the study were divided into two groups—the experimental group receiving instruction in card catalog use through a programmed learning text designed for the study; and the control group receiving traditional library instruction. The data were analyzed by a two-by-two analysis of covariance technique with three covariants. The investigator found method of instruction was a critical factor in determining group gains; sex and sex by method were not.

Fudge's study was designed (1) to prepare a multimedia package to be used in teaching the use of *Reader's Guide to Periodical Literature* to seventh-grade students, and (2) to validate the package's effectiveness. An experimental design was used to validate the multimedia package. Sixty seventh-grade students participated in the study. The experimental group was given two weeks to complete the individualized models in the school library, while the control group received instruction from the investigator. According to a report of the findings, most of the students enjoyed the experiment. The multimedia models were more popular than the programmed instruction modules. Nearly all students professed their interest in learning other information in this manner.

The study by Hyland sought to develop an instrument useful in the measurement of school library media ability in grades four through twelve.[50] As a basis for developing the test, Hyland examined and tallied research, standards, curriculum guides, and professional views. The instrument developed from these sources was sent to a panel of eighty-three experts and was administered to 135 students. The final modified Ohio School Library/Media Test was administered to 2,670 students in grades four through twelve. It was recommended that while the test was useful in grades four through twelve, the most meaningful use would be in grades five through eleven. The test should be given to many kinds of homogeneous groups in order to validate the norms.

The construction of a set of principles designed around an elementary school library media center and with the object of enhancing individualized instruction was the basic purpose of the study by Ginn.[51] Elements of individualized instruction programs were identified from published literature and then rated in importance by a group of faculty members of the College of Education of the University of Alabama. From these elements a number of principles were developed in the areas of programs, administrative practices and services, personnel policies, materials and equipment, and facilities. Thirty-eight of the forty-four suggested elements of individualized instruction were rated as important to such programs. Teacher behavior was rated as the most significant factor, and principles for administrative practices and services were related most often to elements of individualized instruction.

Evaluation of the Program. Twenty-seven studies evaluating different aspects of the school library media program have been conducted since 1972. The two most frequently

used methods of evaluation in these investigations were comparing the program with state, regional or national standards; and obtaining the perceptions of different groups about the program.

The first three studies, by Freese,[52] Khawaja,[53] and Shields,[54] pertain to evaluation instruments. Freese proposed to establish a program statement to be used to evaluate school media programs in elementary and secondary schools in South Dakota. After the instrument was developed from standards and related documents, a set of criteria evaluated by a rating scale was developed and tested. Expert juries were established from various professional groups for the purpose of instrument validation. The investigator recommended that there be additional research on the effect of standards on accountability and program change in regard to media programs in South Dakota.

Khawaja's study was designed to prepare standards for the evaluation of secondary school libraries in Pakistan. After a tentative statement of standards was produced from a review of the literature about Pakistani secondary school libraries, these standards were then sent to a group of Pakistani experts who rated the statements for their importance, and, finally, the standards were compared to categories of standards prepared by selected professional associations.

Shields attempted to determine the effectiveness of Fault Tree Analysis in isolating critical problems in school library media centers that were perceived as inadequately serving their clientele. It was found that Fault Tree Analysis was effective in quantifying the behavioral aspects of Cottonwood's media center and that additional administrative support was necessary to improve the center's effectiveness.

State, regional, or national standards were used as measures to evaluate programs in the next eleven studies.

Bantly,[55] Hutchison,[56] Martin,[57] and Mann[58] employed the 1969 *Standards for School Media Programs* as an assessment instrument to measure programs in various geographical areas. Bantly examined elementary and secondary schools in six New England states through a questionnaire based on the *Standards*. The study revealed that 75 percent of the elementary schools and 80 percent of the secondary schools had media centers. Media programs were totally unified in 22 percent of the elementary and 23 percent of the secondary schools. Only 5 percent of the elementary and 3 percent of the secondary schools met the staff-to-student ratio recommended by the *Standards*.

Martin investigated elementary school library media programs in Alabama. Her data were gathered on Title II programs of the Elementary and Secondary Education Act. Her major findings indicated insufficient local support; failure of school library media programs to meet the levels of the 1960 and 1969 programs; and that Alabama elementary school library media programs will continue to fall behind national standards if current spending levels persist.

Hutchison's study was intended as a companion to Martin's and examined the success of the library media programs in Alabama's secondary schools from 1967–1972 in meeting the 1969 American Library Association *Standards*. The methodology used was the same as Martin's. It was found that secondary schools also failed to meet the 1969 *Standards*.

The 1969 *Standards for School Media Programs* likewise served as an assessment instrument in Mann's study of school library media programs in 1,803 public schools of Florida during the 1969–70 school year. She attempted to evaluate the strengths and weaknesses of the library media centers as a basis for the future development of a statewide program in Florida. Data were secured from accreditation reports filed with the Florida Department of Education, compared to the *Standards*, and analyzed by chi-square, discriminant function, correlation, and analysis of variance. Major findings indicated that Florida's public schools generally did not meet *Standards for School Media Programs;* that the size of a school district and establishment of school library media supervision at the district school level were related to staff, financial support, and collections of materials and equipment; and that the schools generally reflected a unified concept of resources and services.

Brill used *Media Programs: District and School* to assess the level of development of library media centers in San Francisco area elementary schools in 1976–77.[59] Data gathered from principals of randomly selected districts revealed the deficiencies of the schools in meeting the *Standards*.

Regional accreditation standards played a

major role in the studies of Grinstead[60] and Woodington.[61] Grinstead examined the extent to which services in elementary school library media centers in Kentucky were affected by the accreditation of state and regional agencies, and the extent to which school library media centers accepted the concept of unified media services. She used Liesener's Inventory of School Library/Media Center Services when interviewing librarians of eighteen schools accredited by the Kentucky State Board of Education only, and eighteen accredited by both the state board and the Southern Association of Colleges and Schools. It was found that there was no significant difference in the services offered by the two groups of schools and that not all schools accepted the concept of unified media services.

Woodington also examined the effects of accreditation, but her study focused on a comparison of library-related skills of sixth-grade students in schools accredited by the Southern Association Accreditation Standards with students in unaccredited schools. The student sample in the study consisted of 104 sixth-grade students who scored in the upper quartile of the California Achievement Test. They were chosen from three schools that met *Southern Association Accreditation Standards for Elementary School Libraries* and from three schools that were not accredited in northern Mississippi. Twenty-nine sixth-grade teachers from the same schools also took part in the study. Data were supplied from a variety of tools, such as a library skills test and a reading-interest inventory. The findings revealed that there was no significant difference in knowledge of the library nor in the library-related skills of students in the two groups.

Through a questionnaire sent to institutions identified as public residential schools for the deaf, Opocensky attempted to determine the extent to which library media centers in these facilities met the *Standards for Library-Media Centers in Schools for the Deaf* published in 1967.[62] Schools participating in the study failed to meet the recommendations in four of the five sections of the study (programs/services was the exception).

The purposes of the study by Slick were (1) to measure the library/media programs in Pennsylvania vocational-technical schools against existing legislation, guidelines, and standards; and (2) to determine the relationship between major components of library programs and selected institutional characteristics.[63] Data were collected through questionnaires to area vocational-technical schools and interviews conducted with 12 percent of the schools' administrators. Findings indicated that not all Pennsylvania area vocational-technical schools had libraries and that few that did have libraries met the standards and guidelines used in the study.

The last study related to standards was conducted by Downes.[64] Her investigation was designed to examine the implication in standards for school library media programs that quantitative factors have primary cause-and-effect relationships on the quality of a media program. The author surveyed forty-six elementary schools, twenty-four secondary schools, and sixty-six unit school districts in Illinois, using two questionnaires developed by the Illinois Media and Library Services Section. This survey produced a profile and an evaluation of media services. Downes found little relationship between the quantitative variables assumed to be essential in the development of a quality media program and the quantitative aspects of a media program. Further, there was virtually no relationship between seven selected quantitative variables (size of staff, number of books per pupil, etc.) taken as a group and the four program criteria (selection of media collection, etc.) taken as a group.

The next twelve studies are perception studies. They generally deal with various groups' attitudes toward utilization, awareness, and/or adequacy of school library media services. Some of the studies identified in this section also examine other elements besides attitudes to evaluate the media program, but the determination of perceptions appears to be the major approach.

Studies by Crowther,[65] Rogers,[66] and Wood[67] surveyed teachers' perceptions to evaluate media services. Specifically, Crowther distributed a questionnaire to all teachers in public schools in Lawrence, Kansas, to conduct a needs assessment of the educational media program. Three major findings were: (1) teachers had a favorable attitude toward educational media; (2) factors facilitating the use of media were found to be availability, favorable attitudes, encouragement from principals, adequate facilities, ease in locating equipment, and financial allotments; and (3) factors hindering use of media were lack

of time to produce media and lack of competency to produce media.

Rogers' study attempted to determine if there was a relationship between teachers' media center competence and their attitudes toward media formats and if either attitudes or media competence could serve as predictors of print and nonprint resource usage. A sample of 477 teachers in fifty-one secondary schools in eight Appalachian states were sent a questionnaire to test their attitudes. In addition, data were collected on frequency of media use, and the School Media Center Fundamentals Test was used to measure media center competence. Significant relationships were found between teachers' understanding of media center fundamentals and (1) nonprint materials' use and (2) teachers' attitudes toward and use of all media formats. Media center competence was a predictor of nonprint formats' use only.

Wood's investigation was designed to determine expert opinion in regard to teacher use of library media centers through the Delphi technique and Fault Tree Analysis. The major stumbling blocks to increased and more efficient use of learning resources were judged to be the failure to utilize production specialists and library reference skills.

Allen's study[68] proposed to analyze and evaluate the staff, resources, facilities, and services of the public secondary school libraries/media centers in Mississippi. A secondary objective was to determine the extent to which the centers met state and national standards. A questionnaire measuring the librarians' perceptions of staff, resources, services, and facilities was sent to a random sampling of fifty secondary school libraries/media centers in Mississippi. Items in the questionnaire were based on the quantitative national guidelines. Major findings reported by the author indicated that Mississippi centers did not meet national guidelines, but they did meet state and regional guidelines for staff, expenditures, and collection.

The next eight studies examine the perceptions of at least two groups in measuring various aspects of the school library media program. Christison focused on evaluating the importance of variables previously assumed to have a relationship to the quality of service provided by instructional materials centers (IMC).[69] Teachers and fifth-grade students in a large midwestern school district evaluated the "quality of services" provided by their school IMC through instruments developed for the study. Four scores, each reflecting a construct identified through factor analysis, were used as the dependent variables of the study. Seven independent variables identified from a review of the literature and from an examination of national media standards were tested for their correlation with the dependent variables. Using multiple linear-regression analysis, the study attempted to better identify the relationships underlying the correlations by providing equations estimating the scores for the dependent variables. Christison concluded that there was no single independent variable found to have extremely high correlations with "quality of service" provided by the IMC. Further, there was cause to doubt that the principal was the instructional leader for at least this aspect of the school program.

Hodson also focused on identifying teacher and student attitudes and perceptions.[70] His purpose was to evaluate their feelings about the importance of the school media center. A survey questionnaire was administered to teachers and selected fourth- and sixth-grade students in Buffalo, New York, to obtain the necessary data. Findings indicate that the major variables affecting attitudes toward the media center were school settings and grade rather than sex or reading level.

The status, quality, and/or importance of media services as perceived by various groups were evaluated in studies by Jones,[71] Denman,[72] Loertscher,[73] Stroud,[74] and Burt.[75] Jones' investigation explored the development of school library media programs in Georgia between 1965 and 1975 to document the perceptions of others regarding the effectiveness of such programs. A questionnaire based on the *Georgia School Library Media Program Questionnaire* was used to obtain perceptions from principals, faculty, librarians, and students at thirty-three high schools in three areas of the state. Quantitative data on the schools were obtained through an updating of Hightower's 1965 study, *The Growth of Libraries in Public Schools of Georgia*. Based on these data, Jones found that the perceptions of principals and librarians were significantly different from the perceptions of teachers and students. However, principals, librarians, and students agreed that making materials, equipment, and personnel available was of primary importance.

The quality of audiovisual educational media programs at a selected group of high schools in Missouri during the 1977–78 school year was the focus of Denman's investigation. Three surveys were used to generate the data needed from principals, teachers, and media personnel. Major conclusions indicated: (1) all administrators were committed to at least an adequate educational media program; (2) one-half of the schools met the current educational media standards; (3) teachers tended to use a limited range of educational media; and (4) there was not a positive correlation between a well-established educational media program and use of educational media by the teachers.

Loertscher examined media center services to teachers in Indiana high schools in 1972–73. Forty senior high schools in Indiana served as the population for the study, which was conducted in two parts. In the first part, media staff members rated the importance and frequency of sixty-four services to the teaching staff. In the second part of the study, a sample of nine schools was selected for further research. A sampling of one-third of the teaching staff was also asked to rate the same sixty-four services. Findings indicated that: (1) a close partnership between media specialist and teacher had not developed; (2) the size of the media staff was significantly related to the number of services available to the teaching staff; (3) teachers and media staff did not agree on the frequency of media services; and (4) individual differences between teachers was as important a factor as membership in a subject department in the variation in usage patterns of media services.

Stroud developed a qualitative measurement instrument, the Purdue Self-Evaluation System (PSES) for School Media Centers, which she used to evaluate media center services in middle and junior high schools. The study's population was twenty-four randomly selected middle and junior high schools. In the first stage of the research, the media specialist from each school selected the items from the PSES on which he/she wished the media center to be evaluated. Then, these items were distributed through a questionnaire to selected administrative staff, teachers, and students. Major findings included: (1) the facilities, equipment, and materials of media centers were judged to be more teacher-oriented than student-oriented; (2) both media staff and teachers (but not students) viewed the frequency of media center use similarly; and (3) differences in media center use were related to sex, subject area taught, and years of experience.

Burt used a questionnaire based on Stroud's PSES to ascertain what media center services were perceived by students, principals, and library media specialists as being most supportive of the needs of students and faculty. A sample of each of the groups named above was selected from five high schools in Los Angeles County. The investigator also visited each school and library to obtain additional information. The most supportive activities were seen as easy access to facilities and opportunities to participate in library activities, evaluate materials, and receive help from the library staff. The least supportive activities were seen as production and acquisition services. Principals saw library services as more supportive than did other groups, and students saw library services as less supportive.

Palling evaluated the educational media programs in selected Mississippi public schools, and analyzed teacher utilization of selected components of these programs in her dissertation.[76] An inventory of audiovisual materials and equipment, a self-evaluation of education programs, and a survey of the utilization of selected components of audiovisual programs were conducted to collect data. The investigator found that with the exception of the use of records, most of the surveyed teachers and principals considered themselves weak users of audiovisual resources. None of the schools surveyed had an active media production program.

The last two studies in this section examined a different dimension of evaluation. Their concern was the impact that the school library media program has on the achievement of students. Through an experimental design, Becker investigated social studies achievement of pupils in schools with libraries as compared to that of pupils in schools without libraries.[77] It was found that the presence of a library and the guidance function of a librarian exerted significant influence on pupil achievement in information-gathering skills and in reading charts and graphs. No significant difference in the pupil skills in reading maps and globes and on the acquisition of social studies content was found.

Greve also explored the relationship be-

tween academic achievement and the level of library service.[78] Senior high school students in 232 Iowa high schools were administered the Iowa Tests of Educational Development. An index developed by Walker demonstrated the level of library service. The author states that there was a positive relationship between student achievement and level of library service.

SCHOOL LIBRARY MEDIA RESOURCES

The school library media resources category includes three broad sections—selection, access to, and utilization of resources. By far, though, the greatest number of studies examine the content of materials with similar characteristics in order to determine trends, gaps, and treatment of certain groups or areas.

Selection of Resources. The first four studies relating to selection of resources deal with selection and evaluation practices. Miller investigated the problems that accompany the evaluation and selection of nonprint instructional materials in Pennsylvania intermediate units through interviews conducted with the directors of instructional media services units.[79] He found that the state of selection and evaluation in the intermediate units was "loose and disjointed" and that there was a need for board-approved policies to direct the activities of the units.

Masters also focused on nonprint materials.[80] In her dissertation, she studied the processes for selection and evaluation of educational films in public schools (grades K–12) in the New York State Boards of Cooperative Educational Services (BOCES). Document analysis, a questionnaire, and interviews with selected directors of BOCES were used to generate data. The investigator found that five vendors sold more than half of the titles acquired during the period of the study. The decision to preview a film was based on two factors: the visibility of the film and, principally, the number of teacher requests for a type of film. The most important influence upon the purchasing decision was teacher evaluations. There was no defined process for training building-level evaluators among the BOCES. And finally, BOCES directors had similar education, experience, and background.

Billeter investigated examination of books as a method of selection.[81] Selection was studied under two conditions: when the books were available for examination at the Children's Book Review Centers in Illinois, and when books were not available for examination at the centers. A checklist of most highly and least highly recommended books published in 1971 and 1973 was developed using a consensus of reviewing media as the basis for inclusion on the checklist. The list of titles was checked against the library holdings of fifty-one school and public librarians who had used the Children's Book Review Centers in 1973. The education of librarians participating in the study varied from one who had not finished high school to eleven who had a professional degree in library science. Major findings indicated that a significantly larger percentage of the recommended books on the checklist were selected when available for examination than when not available. However, a significantly larger percentage of not-recommended books were selected when the books were available for examination than when they were not available. The selection of picture books was most affected by the opportunity to be examined.

Readability level of easy-to-read books was studied by Laughlin in order to provide this information to those responsible for purchasing books for beginning readers.[82] Seventy-nine easy-to-read books for the primary level were selected from the 1971 *Children's Catalog* and subjected to three readability formulas (the Spache, Fry, and Wheeler-Smith formulas). The formulas showed that one-third of the books had sections that would be difficult for second-grade children. There was a variance of at least one grade level in 35 percent of the books.

Dompa focused on designing and testing an instrument that could be utilized in identifying media most appropriate for transmitting knowledge in a representational form required by a particular learner to master a particular task.[83] A D-model was designed using a systems approach incorporating the three components of task, stimulus, and learner. Three experiments were then designed to test the effectiveness of stimulus choices identified by using the D-model. Dompa found that the stimulus choices identified by using the D-model were consistent with those identified by "experts" and they were significantly different than those identified in curriculum guides and textbooks. Further, the hypothesis that there would be no

significant difference between the stimulus/choices identified by novice librarians using the D-model and novice librarians using selection aids was rejected.

Studies by Biagini,[84] Clarke,[85] Stevens,[86] Grover,[87] and Lawson[88] dealt with one or more of the following topics: reading interests, reading preferences, and readability of print resources. Biagini attempted to develop a model instrument that would (1) measure the relationship between adolescents' reading orientation/interest and the four variables of sex, grade level, activity orientation (participation in noncurricular activities), and gregariousness (participation in activities performed with other people); and (2) predict adolescents' reading orientation/interests on the basis of the same four variables. The author concluded that activity orientation was the most valid predictor of reading orientation/interest, followed by gregariousness.

Clarke, Stevens, Grover, and Lawson dealt with reading preferences. Clarke focused on the identification of differences in reading interests and preferences of Indian, black, and white adolescents as they are related to educational background of the parent, availability of reading materials, and community size; and the extent to which these preferences were represented in the standard selection aids for secondary-school reading materials. A reading inventory was administered through English classes in twenty schools representing three levels of population concentration to gather the data needed for this study. Clarke concluded that reading interests of adolescents appeared to be changing, and reading lists should reflect interests in such aspects as black experiences, sports, cars, nonfiction, personal values, romance, and mysteries. The quantity of reading materials available had no effect on reading interests, but ethnic origin did have an influence. In addition, the standard selection aids used in the study did not adequately reflect reading preferences of adolescents.

Stevens examined current recreational-reading book choices of gifted students in grades four, five, and six in Dade County public schools. Students in eight centers for academically gifted students participated in this study. A number of the investigator's major findings were similar to previous findings about reading interests of students in general. In addition, the Newbery Award books rated highest in interest while the classics received the lowest rating. There was a close correlation between the books chosen by the students and those chosen by adults for students. Finally, books obtained from the school library had the highest interest rate.

Grover examined the variables that influenced the selection of library books by second-grade school children. His procedures for gathering data included interviews with selected second-grade students, analysis of circulation statistics, and the examination of groupings of books for criteria mentioned by students in their interviews. It was found that book selection by second-grade children was affected most by illustration quantity and style, categories of characters, number of pages, readability level, and certain theme categories. Sex of the child also played a role in book preference.

Lawson's study attempted to determine the reasons and motivations for the choice of favorite books made by fifth-grade children, and to ascertain whether teachers and librarians were able to identify the reasons influencing the children in this selection. Results of the data gathered showed that children in the study demonstrated essentially the same interests and motivations shown by similar populations in earlier studies.

The next group of studies investigated reviewing tools and/or indexes as aids to selection. Missavage sought to determine the extent to which it was possible to use critical reviews as aids in selecting audiovisual materials, and to define patterns of review coverage in the major reviewing journals from 1969 through 1972.[89] Content analysis and a questionnaire sent to review editors of journals generated the data for this study. The investigator found that 10 percent of the titles listed in the *Multi-Media Review Index* were not in the *NICEM Indexes*. Reviews were generally favorable, but tended to be uncoordinated and repetitive. Only two of the journals attempted to review all new audiovisual software. Reviewers were apparently carefully chosen, and usually were teachers or librarians.

Haith's study concentrated on reviews about educational filmstrips.[90] She attempted to identify and briefly describe periodicals that contained reviews of filmstrips, to ascertain the reviewing policies of the periodicals, and to analyze the quality and content of filmstrip reviews. Of the ninety-eight

periodicals reviewing filmstrips, thirty-nine were analyzed, and 64 percent of the editors sent letters of inquiry responded. The major findings of this study were: (1) only a few periodicals had comprehensive descriptive and critical information; (2) few periodicals had written reviewing policies; and (3) periodicals used a variety of reviewers and criteria for inclusion and exclusion of reviews in their departments.

Mahoney concentrated her attention on reviews in a particular magazine—*Horn Book*.[91] She attempted to investigate the way reviews in a professional journal approach the literary analysis of books for children. The author selected 221 reviews that appeared in 1975 issues of *Horn Book* magazine for analysis of content. *Horn Book* magazine was found to be more concerned with the literary content than the practical aspects of the book; consequently, Mahoney concluded that the fact that reviewers of this journal use literary criteria in evaluating the children's books demonstrates that literature in that field can withstand critical analysis and evaluation.

The purpose of Pool's study was to report the relationship of a local buying list to selection procedures by fourth-grade science teachers and librarians, and the resulting elementary-school library collections in astronomy and the earth sciences.[92] The data were collected in two cities, from six elementary schools in each city. Collections were compared in terms of selection criteria, aids and activities, and the quality and adequacy of collections. Pool concluded that there appear to be no basis for support of the hypothesis that autonomous selection by librarians and teachers is related to better selected and more recent library collections in elementary schools, because selectors who are given more freedom are more involved and adept at selection.

Sutton's study was designed (1) to identify a selection of conventions in juvenile fiction comparable to that found in contemporary adult fiction, and (2) to assess the usefulness of influential reviewing media and recent professional textbooks on juvenile literature for keeping readers informed of the innovations and diversity found in contemporary juvenile literature.[93] The instrument used to analyze the reviewing media and professional textbooks on children's literature was composed of conventions in juvenile literature comparable to those in adult fiction. The validated conventions were used to assess the value of reviewing media and textbooks in informing readers of the innovations and diversity found in juvenile literature. Sutton's chief finding was that neither textbook authors nor reviewers served as a particularly useful source of information about changes in juvenile literature because they appeared to lack knowledge about contemporary adult literature, had a narrow view of children's literature criteria, and tended to provide plot summaries rather than discussions of specific literary aspects.

The next seven studies examined various aspects of award-winning books. The first investigation, by Hill, used content analysis to examine the philosophical aspects of the Newbery Award winners during the first fifty years that the award was given.[94] It was found that Newbery Award winners reflected traditional American values, and that the books tended to be insular and failed to reflect the events shaping the times in which the Newbery Award was given.

Darkatsh attempted to analyze the content and form of fiction books that were popular with nine- to twelve-year-olds.[95] A secondary purpose was to replicate a similar study done by Rankin in 1944, to determine if findings were similar. The investigator analyzed selected Newbery Award books and a group of "most popular" books identified through circulation records, and conducted interviews with randomly selected fourth-, fifth-, and sixth-graders in two school systems to collect his data. "Most popular" books had contemporary settings, multiplicity of characters, reading ease, and desirable themes. Newbery Award winners have shown changes reflecting previous criticism. Contrary to the Rankin study, "most popular" books were no longer similar to adult books.

Through content analysis, Weller studied female main characters in seventeen works of fiction that won the Newbery Award.[96] She found that a majority of the books studied portrayed positive female characteristics in specifically female roles. Sexual stereotypes were as common in the more recently published as in earlier works.

Ryder's study was designed to ascertain whether the values of librarians and students were similar and whether these two groups could identify similar values when presented in a literary format.[97] Two value surveys were completed by children's librarians and selected seventh-grade students. These surveys provided data on personal values and how they applied to a selection of children's literature. Thirty-one of the thirty-six values identified in the second survey were viewed differently in terms of their importance by the two groups. Further, almost one-half of the values were recognized differently by the two groups in their reading of five Newbery Award books.

The investigation by Roberts was designed to ascertain the extent to which stereotyping of the female image has occurred in previous winners of the Caldecott Medal.[98] Content analysis was the primary research tool used, with a panel of sociologists serving to validate the definitions utilized in the study. The investigator's major finding was that stereotyping of the female image was present in some of the Caldecott Medal winners.

Content analysis was also used by Nist to ascertain common elements contained within the books nominated and selected for the Mildred L. Batchelder Award during its first ten years of existence.[99] It was found that no publisher has dominated the awards; books in Germanic languages predominated, as did books with European settings; contemporary settings have been preferred by authors; and progressive narrative has been the structural form used most frequently in the books.

Documentation of the history and development of the William Allen White Children's Book Award was the purpose of Herrin's study.[100] Oral-history techniques were used to interview people involved in the award's development. It was found that stories of realistic fiction most often won the award.

The next twenty-nine studies employ content analysis to study other materials in the children's and/or young adult field. A description of these studies will focus primarily on the major findings identified by the investigator conducting each study.

Minority groups are the subject of the first set of studies. Morgan attempted to delineate and evaluate the characterization of minorities in children's books.[101] She found that there had been an extensive expansion in the publishing of fiction dealing with minority groups, and that publishers issued far more work on American Indians and Afro-Americans than any other groups.

Offenberg studied the extent to which "prejudiced stereotypes" appeared in detective fiction purchased by high school libraries in New York City.[102] She found that heroes were white, Anglo-Saxon, and in good positions; minorities were subordinate to white characters; and Jews and blacks received the poorest characterizations and worst jobs.

Williams' purpose was to examine the extent to which black traditions have been portrayed in children's picture books and the impact the portrayal has on children who have been exposed to such books.[103] Racial pride and family traditions were the concepts most frequently portrayed, while music was the least frequently shown. Further, the investigator reported that black and nonblack self-concepts of children participating in the study did not change significantly after reading picture books with a high rating in black traditions.

Bazelak also concentrated on ascertaining racial attitudes and other related factors after students were exposed to literature written by black American writers.[104] He found that the readings did not have a significant effect on students' racial attitudes toward either black or white people.

Kiah proposed to examine how selected salient shared experiences of black people are portrayed in contemporary realistic fiction about black people in the United States for children twelve to fifteen years of age.[105] She found that the stories examined tended to reflect general experiences rather than salient shared experiences of black people.

The methods by which values of society concerning black and white people are transmitted to young children through books was the focus of Rosner's study.[106] According to the investigator, the absence of blacks from picture books by white artists and publishers is a reflection of a racist attitude still present in American society.

Posner conducted her study in order to determine the extent of Jewish content included in contemporary juvenile realistic fiction that contained Jewish characters.[107] It was found that many of the books studied had less than 5 percent Jewish content.

Hoilman's investigation focused on the stereotypes and inaccurate information about the American Indian presented in literature for young people.[108] The author reported a general picture of distorted and inaccurate information about the Indian, but with an improvement noted in the 1970s.

Brown also studied the characteristics and

concepts relative to the American Indian as portrayed in children's literature, but he was concerned with the decade of 1963 to 1973, and reported somewhat different findings than Hoilman.[109] He found that stereotypes remained during this time period but they tended to be positive and complimentary.

The next five studies deal with sex stereotyping. Smith's investigation assessed the degree to which sex-role stereotyping appeared in children's books published between 1950 and 1974.[110] She reported a general underrepresentation of female characters compared to the representation of male characters during the time period studied.

Sexism in children's books was also the subject of Koss's study.[111] She used the same general time period that Smith had investigated and arrived at similar conclusions, although she did state that male characters decreased and female characters increased during the seventies. Hendler's study of role models for boys and girls in contemporary picture books further documented the sexual stereotyping that has occurred;[112] however, the researcher pointed out that books published in 1975 showed both children and adults engaged in less-stereotyped behaviors than in 1973.

Nilsen investigated grammatical gender as it concerns children's books.[113] Students selected from the nursery school, first, third, fifth, and seventh grades of a laboratory school in Iowa, were participants in this study. They were shown slides, involved in writing situations, and interviewed to find out the pronouns they used to describe people, animals, and imagined contents of certain books whose titles included father and man in the generic sense. When all-male picture clues accompanied a title, a masculine interpretation was highly likely. Further, the older the children, the closer were their masculine or feminine responses to the predicted stereotypes of either boy or girl behavior.

The objective of Fisher's investigation was to test the commonly held belief that popular magazine fiction reflects basic societal beliefs and values.[114] He examined the portrayal of aggressive acts as a barometer of these beliefs and values and concluded that the portrayal of aggression in popular fiction did not approximate complete aggression as demonstrated in society.

Poston,[115] Searson,[116] and Chaudoir[117] examined family life as viewed in selected works in their dissertations. Poston found that while the children's family-life fiction works studied did provide some insight into preadolescents' problems and needs, the overall home environment and family relationships described did not accurately reflect contemporary situations. Searson reported similar findings. The novels she studied to determine the nature of adolescent culture did not accurately reflect typical American environments, family size, family composition, educational situations, or social relationships.

From her study of the treatment of single-parent families in contemporary realistic fiction for young people, Chaudoir found that single-parent families who were main characters in contemporary realistic fiction for adolescents were presented clearly enough to describe. Even though no identifiable prejudices related to this group were revealed, evidences of stereotyping were found throughout the sample.

Senior adults were the focus of Baggett's study.[118] Findings indicated that the majority of senior adults portrayed in the novels published for adolescents from 1960 to 1978 were depicted realistically in most of the categories studied.

The study by Locke was designed to investigate the way in which teachers are characterized in modern juvenile fiction.[119] He reported that most teacher characters were either neutrally or negatively presented in the sample of materials he examined.

Barr studied the extent to which the immigrant was included and how he/she was portrayed in children's books recommended for American libraries from 1883 to 1939.[120] The study produced the following major findings: (1) immigrants were not depicted to any great extent in the books recommended; and (2) immigrants as a group were pictured in a positive manner.

Colberg's purpose was to determine the extent to which moral and social values were presented in adventure stories for boys written between 1865 and 1900.[121] He concluded that boys' adventure novels published during this period contained a predominance of the same moral and social values found dominant in adult culture.

Moral values were also the topic of St. John's investigation.[122] She examined the extent to which the conflict between good and evil was present in children's books published between 1945 and 1972. Her major conclusion was that morality is still present in children's books.

Paris[123] and Darling[124] dealt with the way in which occupations are treated in children's materials. Paris concluded that children's realistic fiction presented an unrealistically limited view of the world of work, was not valuable as a source of accurate information about careers, viewed manual labor negatively, discriminated against women workers, perpetuated occupational stereotyping, did not keep pace with changes in the economic and social scene, and focused on middle-class workers. Darling's study revealed a major difference in the way important topics relevant to industry were shown in information books written for upper elementary students.

As a result of studying the presentation of characters in books set in the southern United States, Bellon found that there appeared to be a general stereotype of the southern child.[125] He further stated that characterization was such that there would probably not be strong identification by readers with southerners.

Moyer's study focused on books for children about Mexico and Mexican Americans.[126] Major findings revealed that in recent years there has been a significant increase in the number of books published on Mexico and its people. Further, the image of Mexican Americans appeared to be realistic and authentic when presented in children's books, but such presentations have been few in number.

Tajeran[127] and Samii[128] dealt with Iran in their studies. Tajeran's study was designed to explore the presence of Iranian middle-class values in story books for children. The investigator found that the values depicted most frequently were honesty, justice, and work. The least amount of attention was given to cleanliness.

Samii examined the extent to which children's books on Iran were available and the nature of the information provided in these books. Her major conclusion was that there is a wide variety of reading material on Iran available for children that can be used as supplementary resource materials.

Pettus proposed to investigate the coverage of ecology, air pollution, and water pollution in selected children's science books published between 1960 and 1975.[129] During the period studied, there was a definite trend toward the writing and publishing of interdisciplinary children's books on ecology and pollution.

Wehmeyer's study analyzed world-future images as they are depicted in children's literature.[130] The research concluded that the novels examined tend to come to hopeful rather than despairing conclusions; however, the author's view is as likely to be pessimistic as optimistic. Women novelists are neither more nor less optimistic than men and, finally, books for younger children are neither more nor less optimistic than those for seventh- and eighth-graders.

Discerning trends in illustrations for children as presented in three juvenile periodicals published during the last quarter of the nineteenth century was the purpose of Hunt's dissertation.[131] The changes that were noted in the illustrations were attributed, at least in part, to technological advances made during the time period under examination.

Access to Resources. The first four studies relating to access to resources dealt with the adequacy of resources in a certain geographical region or for a certain group of people. Veitch measured school library media programs in Kentucky against state and national standards to determine the degree to which these programs met standards.[132] Her data were collected from the Kentucky Department of Education reports and from questionnaires sent to public school media librarians and chief school administrators in Kentucky. Findings indicated that while one-half of the surveyed schools met the national standards for professional staff, a majority of the schools in Kentucky lacked adequate print and nonprint collections or budgets, number of clerical staff, physical facilities, and district-level media services.

Guise used the same types of measures to determine the adequacy of resources in Arkansas as compared to national standards.[133] Analysis of the data from questionnaires sent to selected elementary- and secondary-school libraries in the state revealed that none of the libraries met the 1969 national school library standards.

School library media resources for exceptional students in the public schools of Florida were the focus of Davie's study.[134] A questionnaire was used to obtain data from a random sample of public schools serving grades K–12 in Florida. A major finding of this study revealed that even though materials were available for exceptional students, additional quantities were needed. There

was also a need for increased publicity and awareness to stimulate use of resources.

Onadiran proposed to study existing secondary-school library resources in Nigeria as a step toward developing standards for these libraries.[135] Examination of information gathered from a questionnaire sent to selected secondary schools showed that secondary-school libraries were generally "accidents" and clearly inadequate.

Miller,[136] Geppert,[137] Moll,[138] and Flachman[139] examined student access to school library media resources. Questionnaires and interviews were used in Miller's study to ascertain the opinions of high school seniors in selected Michigan schools about the accessibility of school library media resources. Responses were examined to determine the relationship between selected student characteristics and student opinions about accessibility. The three variables that were found to be most related to the students' opinions about accessibility were status as media center user, size of school attended, and academic rank.

Geppert compared the information obtained from Miller's 1974 survey of high school seniors' views of access to center resources with the views expressed by media specialists in southwestern Michigan secondary schools about the same subject. A significant difference was demonstrated between the results shown in Miller's survey and the perceptions of the media specialists. Media specialists believed there was greater student access and greater student knowledge of sources.

Moll examined children's access to resources through the application of subject headings to children's books. Specifically, the purposes of the study were: (1) to analyze the vocabulary levels of four basic subject headings lists to identify which provided easiest (most readable) access; and (2) to compare MARC access to children's books through juvenile subject headings with the reading levels of the books they described. The vocabulary levels of the subject-headings lists were measured using methods developed by reading specialists. Subject headings of selected children's books whose subject headings corresponded to MARC juvenile headings were analyzed for grade-level readability. Statistical tests were employed where appropriate. The highest vocabulary level (grade 7.7) was found in the LC list, followed by Sears (grade 6.9), MARC (grade 6.4), and LC Jr. (grade 6.0). Some relationship was discovered between a lognormal frequency level and grade-level comprehension.

Flachman's intent was to investigate catalog use by high school students in school media centers, especially with potential automation or computerization of the catalog in mind. Interviews were used to determine the information-seeking behavior of public high school students using the card catalog. The investigator concluded that since the majority of searches by high school students were subject searches, a strict duplication of a computerized catalog designed for a college or university library did not appear to be justified for high school libraries.

The next eight studies deal with limitations placed on access to resources. Watson studied adults' reactions to contemporary junior novels.[140] The specific purposes of his investigation were: (1) to determine the extent to which adults felt responsible to judge and control the realistic-fiction selections accessible to children twelve through fifteen years of age, and (2) to ascertain the extent to which parents of adolescents, teachers working with adolescents, and librarians serving adolescents would react to the parental or professional control of literary selections considered objectionable for adolescent readers. Attitudinal questionnaires and content analysis were the methods used to collect data in this study. Findings indicated that there was a significant difference in the adult groups' attitudes concerning their right to control the reading selections of adolescents. The content analysis of the novels revealed that the most censored aspect was objectionable language, followed by references to sexuality; descriptions of antisocial behavior were viewed as least objectionable.

Through questionnaires sent to a random sample of librarians, Pope studied the opinions of school, college, and public librarians concerning certain categories of sexually oriented literature.[141] Librarians' responses to sexually oriented materials varied with the type of material. More restrictive librarians tended to be employed in school libraries, female, older, less experienced, less educated in librarianship, with backgrounds in the humanities or the sciences, and in administrative positions.

Wood also examined censorship in public libraries, schools, and academic institutions.[142] He found that the number of censorship attempts reported doubled in the 1970s compared to the 1960s. High schools were the most frequent targets of censorship and more than one-half of the attempts were successful.

Bump's investigation focused on the extent to which censorship attempts affect librarians in the book selection process.[143] A questionnaire was sent to public high school librarians to collect data for the study. This instrument contained a list of highly censored books from the *Newsletter on Intellectual Freedom*. Librarians were asked to state if the books were in their collection and, if not, whether they planned to purchase them at some point in the future. Findings indicated that librarians did not appear to be affected by how many times a book had been censored. However, librarians usually did not put in their collections books that they found to be personally offensive.

The study by Glover investigated the incidence of censorship in Indiana secondary-school media centers and attempted to determine if there were correlations between the number of censorship cases and variables relating to librarians, communities, and schools.[144] Through analysis of the data from a questionnaire, Glover found that 54 percent of the librarians reported that they had experienced at least one problem of censorship. Further, no relationship was revealed between the number of censorship cases and the variables examined.

The extent to which high school students in Colorado were being provided sex education books through public high school libraries was the focus of Torke's study.[145] On the basis of examination of reviewing sources, the offerings of selected book dealers, and high school card catalogs, the investigator concluded that censorship of sex education books did not occur at these three levels.

The last two studies in this section are by Douma[130] and Peterson.[147] They investigated censorship attempts upon English teachers. Douma concluded that censorship was more successfully inhibited when schools had selection and complaint policies that conformed to the guidelines recommended by the American Library Association and the National Council of Teachers of English. After analyzing censorship incidents involving English teachers during the period 1968–74, Peterson reported that censorship was found to be a major problem and is expected to continue to create problems in the English classroom.

Utilization of Resources. The first seven studies in this category deal with utilization of resources by teachers in the instructional process. Beilke investigated the problems of acquisition and use of instructional materials encountered by secondary-school teachers in Michigan in the subject areas of science, English, and social studies.[148] As a result of analysis of data collected from questionnaires, Beilke reached three major conclusions: (1) uses of media by teachers were related to curriculum need; (2) persistence and effort characterized teacher activities to obtain frequently used media; and (3) teacher contacts with nearby sources were greater than for types located far away.

Hinds used interviews and questionnaires to analyze the use of the library in New York's inner-city elementary schools.[149] Findings of primary importance included: (1) utilization of library resources by teachers was found to be positively related to the teachers' previous training in the use of the library; (2) teachers who made use of a variety of teaching resources made extensive use of the library; and (3) there was a strong relationship between a positive attitude of the administrator toward the librarian and that librarian being a professional person.

Corry's stated objective was to observe whether the concept of media integration into the curriculum had been provided by ideal library media services.[150] School library media programs identified as exemplary by the New York State Education Department were studied through surveys of librarians and English teachers in these programs to determine their perceptions of the quantity, variety, and appropriateness of educational media usage by the English teachers. Corry also designed a conceptual model for evaluation of library media services. It was found that (1) the exemplary library media programs were used more frequently, offered more education, and had more variety of media than the ordinary nongrant schools, and (2) the inability of exemplary library media programs to reach the expenditure levels recommended by the 1969 standards places the 1975 standards in doubt.

Fertik explored the use of literature and library resources in teaching creative dramatics.[151] The author illustrated how the teacher could use literature and nonprint media to involve students in satisfying dramatic

experiences that need not culminate in story dramatization. She also showed how different forms of literature and library resources can be incorporated into each stage of the creative-dramatics process to explore human concerns common to all children.

The use of children's nonfictional informational trade books in grades four through six in selected schools in Illinois was the focus of Robertson's study.[152] Questionnaires and interviews provided the data used in this investigation. It was found that teachers used the books in social studies more than any other area; teachers' manuals and school librarians were typical sources of information on these books; teachers said more use would be made of the books if there were less need to cover the textbooks, if classes were reduced in size, if more information on them were available, and if there were better library access; and teachers saw the books as supplemental, with first priority given to the textbooks.

Coughlin's study was designed to explore the utilization of children's literature in the instruction of critical reading as part of the teaching of literature.[153] Through a field test it was demonstrated that children's literature could be an effective instrument in the instruction of critical reading.

The last seven studies in this category deal with utilization of resources by students. The use of libraries and library resources by high school students for independent study projects was the focus of Mancall's study.[154] For the purposes of her research, Mancall defined "independent study projects" as papers, projects, or reports on individual topics, which students wrote using sources other than class texts, and for which there was a written record by the students of sources used. Data were gathered from bibliographies of student independent study projects, questionnaires, and interviews. Multivariate analysis was used to examine the data. Findings included: students sought information in more than one type of library, frequently using three to four; one-half of the students used their own home libraries; students cited monographs almost four times more frequently than journal articles or other types of materials and most citations were to older items; the *Readers' Guide to Periodical Literature* indexed most of the journals cited by the students participating in the study.

Roloff compiled a comprehensive annotated bibliography on the use of nonprint media in learning.[155] Based on her findings about relevant studies, the investigator concluded that there was a lack of scientific evidence to support the use of nonprint media. She stated that until more theoretical studies are completed, nonprint media should be used cautiously in the learning process.

Hemstead,[156] Seim,[157] Roosevelt,[158] and Brady[159] focused on the influence of different types of media on the learning process. Hemstead's study proposed to isolate those components that contribute to effective educational communication. Selected students were given three tests (recall and comprehension, media preference, and an attitude test) on the five media presentations. Students indicated a preference for print or pictures with sound. Student recall was best with pictures with verbal sound, or print with verbal sound. The latter two media resulted in the best student attitudes toward the learning experience.

The study by Seim was designed to ascertain the effects of specific learner characteristics on an individual's success in learning from either noncaptioned sound filmstrips or captioned silent filmstrips. A sample of students received both treatments. Findings indicated that field articulation and reading performance were correlated significantly with achievement as a result of viewing both types of filmstrips. Results were greater when captioned rather than noncaptioned filmstrips were used.

Through an experimental design, Roosevelt examined the effect of nonprint adaptations of books on motivation for volunteer reading. The major conclusion drawn from the findings was that the utilization of book-related media is a moderately effective strategy to promote volunteer reading of certain titles.

Brady's study was designed to evaluate the relative effectiveness of three different types of media—16mm film, slide-audio tape without a discussion component, and printed script alone. Six groups of students took part in the test. The investigator concluded that in the measures of concept acquisition and attitude toward mode of instruction, there was no statistically significant difference among the various media.

The final investigation pertaining to utilization of resources was conducted by O'Rourke.[160] This study was designed to ascertain the relationship between recreational reading habits of ninth-grade students and those of their parents. An inventory of reading experiences was used to measure the recreational reading habits of a sample consisting of 150 student-parent pairs. A significant relationship was found between student and parent reading habits in use of libraries, mechanics of reading, and books. The majority in both groups did not use a library card, did not think libraries should be open longer, nor did they use downtown libraries. Finally, there was a relationship between student and parent habits concerning the sharing of books with peers and the number of books purchased.

PROBLEMS RELATING TO RESEARCH IN SCHOOL LIBRARIANSHIP

The present review of dissertations on programs and resources, as well as other research activities in the field, suggests some basic problems that have hindered the effective practice and utilization of research in school librarianship. These problems relate to the quality of research, the development of a research framework and research priorities, the establishment of bibliographic control and dissemination of relevant research, and the coordination and support of research activities.

> . . . Some basic problems that have hindered the effective practice and utilization of research in school librarianship, . . . relate to the quality of research, the development of a research framework and research priorities, the establishment of bibliographic control and dissemination of relevant research, and the coordination and support of research activities.

The Quality of Research. Until quite recently, many school library media professionals exhibited little interest in using research findings to provide solutions to their problems. Now, as educators and others demand more objective data to demonstrate the worth of school library media programs, practitioners are turning to research in the field. Unfortunately, many lack the skills to evaluate the quality of research studies, so questionable findings generated through defective research designs are utilized to support inadequate practices. Often, research methodologies and techniques are not understood well enough to determine which findings can be applied to practice.

Lack of evaluative skills has tended to hamper improvement in the quality of research. There is little pressure to upgrade investigations, since scant criticism of weaknesses or praise of strengths can be found in the literature. Consequently, as one looks at doctoral dissertations completed between 1972 and 1980, the same design and related problems found in studies conducted in the 1960s and early 1970s are still occurring. A number of them use biased or nonrandom samples, attempt to generalize from a very limited situation, duplicate research that has been done in the past, use unrefined instruments to test complex aspects of a program, employ indistinct terminology, make unwarranted assumptions, or rely almost exclusively on survey methodology in their research. Compounding these problems are those that would inevitably occur any time human beings are involved in a research endeavor. Situations cannot be held static, nor will they be the same from place to place; and qualitative elements often central in this type of research are difficult to measure.

Two other important factors affecting the quality of research are the level of expertise of those conducting the major portion of research in the school library media field, and the degree of competence of those supervising doctoral studies. It is unrealistic to assume that most doctoral students completing their first research study will possess the skills necessary to produce an outstanding piece of research. Instead, they are in the process of acquiring the expertise that will enable them to deal effectively with major research problems in the future. Some students look upon the dissertation strictly as a requirement to be fulfilled. Consequently, the topic, the time frame, and the treatment are governed by what is manageable within a certain period of time rather than by which problems are most pressing.

Often, those supervising the research studies of doctoral students have conducted no research beyond their own dissertations, nor have they engaged in continuing education activities to sharpen their research skills. At times, they are unable to provide the guidance needed to develop a well-designed and executed research study. Another shortcoming of some doctoral supervisory committees is that none of the group has expertise in the school library media area.

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Additional problems are created for those supervising doctoral and other research, as well as for those conducting the studies, because of the broad area of concern to school library media professionals. The complementary role played by the library media program in each subject area in the school makes it necessary to be knowledgeable about the current developments and research findings if sound studies are to emerge. In an era of specialization and information explosion, it becomes harder to keep abreast of these developments and research findings, even though they directly impact upon the ability of library media specialists to offer more effective services.

Research Framework and Priorities. The second basic problem in the research area is the lack of an agreed-upon research framework and research priorities. Few attempts have been made to systematically delineate a unified framework into which each research study in the school media area can be placed. The establishment of a framework is a key to future progress since it will enable the profession to make more informed decisions about research priorities. Major research areas, problems, gaps, interrelationships, etc., will be specified in a logical way, and people will be aware of the status of research in the field. Consequently, decision makers will be starting with similar baseline data and overall views of the field as they plot future directions.

A further advantage of systematically establishing priorities is the identification of top priority areas, which should encourage researchers to make the best use of limited resources to deal with major problems in the school library media area. Those seeking researchable topics will be guided to areas of key importance and ideally will build upon what has already been done to create important new knowledge.

If a research framework and priorities are to become vehicles for indicating future directions, though, they must reflect the dynamic nature of the school library media field. The framework and priorities assume a neolithic character when there are no continuing means to evaluate and modify them for current needs and developments. They must be broad enough to recognize the connection with the larger frameworks of librarianship and education. Failure to identify these interrelationships will reinforce the insularity which has sometimes impeded progress.

Bibliographic Control and Dissemination. The lack of bibliographic control of research studies and the failure to disseminate research findings in an understandable way is a third critical problem that handicaps those who attempt to utilize and conduct research relevant to school librarianship. There is no central place in which one an locate a comprehensive listing of research studies that investigate various aspects of the school library media program. One reason some research studies dealing directly with the school library media program are not identified in library-related resources is because educators and others outside the library field use different vehicles for reporting the investigations completed under their aegis. Further, indexes supposedly designed to provide bibliographic control of research reports use subject headings that fragment rather than pull together research on a topic. There is no more than perfunctory provision for the bibliographic coupling of studies that constitute "clusters of research" of the type sponsored by several schools, as well as devices to relate papers that replicate or build on earlier studies.

Another area where many problems exist is the dissemination of research findings. Very little abstracting is done in the field of school library media research, except through ERIC, whose abstracts are limited in a number of instances, and *Dissertation Abstracts International*, which is confined to completed doctoral dissertations and generally is many months behind in its inclusion of current dissertations. ERIC is also constrained in its means of acquiring research reports not done under government auspices. These are usually submitted by researchers on a voluntary basis to be evaluated for inclusion in ERIC publications. The indexing systems used by ERIC and *Dissertation Abstracts International* sometimes make it difficult to retrieve all relevant documents.

Few journals offer space to summaries of school library research; therefore, many reports are missed or treated incidentally in news notes. This is especially true of findings of research projects in related disciplines that have implications for the library media specialist. In addition, research findings relating to the library media program are rarely communicated to administrators and other school personnel on a continuing basis through their professional journals or by other means, unless the library is examined as a part of a larger project.

Coordination and Support. The last problems to be dealt with are coordination and support of research efforts. At this point school library media research is in large part noncumulative and fragmentary. National as well as state and local plans for coordination of research in the school library media field must be worked out if duplication of effort is to be avoided. This would also serve to utilize personnel more effectively and afford researchers a chance to focus on specific problems (using interdisciplinary research teams whenever possible) within a controlled situation.

Finally, the minimal level of monetary and other types of support promises to continue to greatly handicap research efforts in the school library media area. In the present fiscal climate there is little opportunity to obtain the funds necessary to address priority research areas adequately, or to build a much-needed cadre of outstanding researchers devoting their full attention to major areas of concern. However, until school library media professionals recognize the importance of these needs and acknowledge the central role that research must play in facilitating the operation of school library media programs, chances are slight that sufficient emphasis will be placed on developing objective answers to crucial issues confronting the field.

> . . . Future research will need to be concentrated on priority areas.

RECOMMENDATIONS FOR FUTURE RESEARCH STUDIES

The problems identified in the preceding section have prevented research from having any really lasting impact on school librarianship. This situation will have to be drastically altered in the near future as there is pressure from many different sectors to justify library media programs and their effects on the education of students. To this end, much future research will need to be concentrated on priority areas. A number of these areas are listed below with some broad questions that provide a more specific indication of the intended direction of needed research.

1. *User needs studies of those served by the library media program*
   a. What information do students, teachers and administrators need in order to complete educational tasks?
   b. How do they use the information?
   c. How do they obtain the information they need?
   d. What types of educational needs can best be met by the school library media program?
   e. How can the school library media staff most expeditiously and effectively meet these needs?
   f. What factors most facilitate/inhibit the ability of the library media program to meet user needs?
   g. How can materials be best organized to meet students' and teachers' educational needs?
2. *Theoretical studies developing and evaluating underlying principles of school librarianship*
   a. Should a school library media staff's primary services be offered to teachers or to students?
   b. To what degree should the recreational needs of students be served in the school library media program?
   c. Should all materials be available on the same basis to all people in the school?
   d. What principles of information science can be effectively applied to

school library media programs?

e. What educational and child-development theories provide the basis for library media skills programs and for the selection of media?

3. *Studies investigating the newer technologies*
   a. What are library media professionals' roles in planning, housing, utilizing, providing in-service training for, and evaluating the newer technologies?
   b. When and to what degree is automation justified in a school library media program? At the district level?
   c. How can newer technologies be used effectively in various types of media programs and at different levels?
   d. Are newer technologies more effective than more traditional methods in teaching certain types of children?
   e. What factors are most instrumental in promoting effective use of newer technologies in school library media programs?
   f. What role can/should district, state, and federal school media personnel play in promoting effective use of newer technologies?
4. *Studies of the role of the school library media program and staff in educational settings of the present and future*
   a. What contributions is the library media specialist best equipped to make in planning, implementing, and evaluating instruction?
   b. Through what means can professional library media personnel establish effective partnerships with teachers in planning, implementing, and evaluating instruction?
   c. What factors must be present for the library media specialist to function effectively as a member of the teaching team?
   d. How can the media professional continually promote intellectual freedom and a spirit of inquiry in the school?
   e. How can/should district personnel assist school library media professionals to function effectively in an instructional role?
   f. What are the most effective methods of teaching library media skills to students?
   g. What futures are possible for school library media programs? Which are probable? Which are most desirable? and, What issues must be addressed by the school library media profession to achieve the future it has chosen as most desirable?
   h. What types of systematic plans for change to ensure maximum diffusion and use of new services and innovation have been developed and implemented by school library media professionals?
   i. What importance do school library media professionals attach to diffusion of innovation activities?
   j. what major barriers must be overcome for diffusion of innovation to take place more rapidly in the school library media area?
   k. What factors promote diffusion of innovation in school librarianship?
5. *Studies of the effects of a school library media program on teaching and learning*
   a. What effect does a library media professional functioning in an instructional role have on a classroom environment?
   b. To what extent does increased individualization of instruction occur in classrooms using the library media specialist on the instructional team?
   c. To what extent do teachers receiving instructional assistance from the library media specialist become more effective presenters of instructional activities?
   d. Does the inclusion of the library media specialist in the instructional process lead to significant improvement in student self-concept?
6. *Studies promoting the school media program*
   a. What effects have state and federal school library media legislation had on school library media programs? On students and teachers in schools?
   b. What factors have led to strong legislative programs in the school library media area at national, state, and local levels?
   c. To what extent and in what ways do district and state level library media programs affect the development and support of local school library media services?
   d. What factors promote effective state and district school library media programs?
   e. What marketing techniques are most successful in selling school library media programs in various situations?
   f. To what degree are library media specialists knowledgeable about marketing techniques that can be used to promote school library media programs?
   g. What roles have state and national professional library media associations played in promoting positive developments in the school library media area?
   h. What factors inhibit/facilitate the ability of state and national associations to play a major role in advancing school library media programs and the profession?
   i. What methods can be used by library media professionals to become more effective in the collective-bargaining area?
7. *Studies concentrating on administering the school media program*
   a. What is the effect of various organizational patterns in the school district and in the school on funding for library media programs?
   b. To what extent does the use of different types of planning procedures contribute to the success of school library media programs?
   c. To what degree do professional personnel's amount and type of involvement in the budgeting process in the school and in the district affect the funds allocated to the library media program?
   d. To what extent are professional school library media standards a valid indicator of the quality of school library media programs?
   e. What means are used by library media professionals to evaluate their programs? Are those effective methods of assessment?
   f. To what extent do library media professionals use accepted personnel management techniques in dealing with personnel working in the library media center?
8. *Studies of cooperation among various types of libraries*
   a. What differences has participation in networking made in organizational structures of individual school library media programs?
   b. Do school library media programs receive equal treatment in and provide equal contributions to library networks?
   c. How can traditional barriers to cooperation be overcome in the school library media area?
9. *Studies on preservice and continuing education*
   a. To what degree are educators in preservice education programs equipped to educate school library media professionals for present and future positions?
   b. What type of educational experiences, techniques, etc., are most likely to foster a professional attitude among school library media specialists?
   c. What are the effects on teachers and administrators of pre-service and in-service training about the role of the school library media program in an educational setting?
   d. To what degree are continuing education activities presently meeting the needs of school library media professionals?

Immediate attention to these and other related areas through properly executed and designed research studies will result in objective data that could radically alter the practice of school librarianship and point school library media professionals toward a future filled with opportunities to greatly contribute to the education of students.

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57. Nina N. Martin, "A Longitudinal Study of Discrepancies between National Media Standards and Media Resources in Alabama Elementary Schools" (Ed.D. dissertation, Auburn Univ., 1974).
58. Elizabeth B. Mann, "The Florida Public School Library Media Program, 1969–70" (Ph.D. dissertation, Florida State University, 1972).
59. Jayne E. Brill, "San Francisco Bay Area Elementary School Library Media Centers, 1976–1977" (Ed.D. dissertation, Brigham Young Univ., 1977).
60. Vera M. Grinstead, "A Study of the Effects of Accreditation on the Services Offered by School Library Media Centers in Selected Elementary Schools of Kentucky" (Ed.D. dissertation, Univ. of Kentucky, 1973).
61. Cynthia C. Woodington, "The Effets of Elementary School Library Accreditation on the Development of Selected Library-Related Skills" (Ph.D. dissertation, Univ. of Mississippi, 1978).
62. Virginia L. Opocensky, "A Comparison of Library-Media Centers in Public Residential Schools for the Deaf with Standards for Library-Media Centers in Schools for the Deaf" (Ph.D. dissertation, Univ. of Nebraska, 1975).
63. Myrna H. Slick, "An Assessment of the Library Programs of the Area Vocational-Technical Schools in Pennsylvania" (Ph.D., dissertation, Univ. of Pittsburgh, 1977).
64. Valerie J. Downes, "A Study of Quantitative and Qualitative Factors in School Media Programs in 137 Selected School Districts in Illinois" (Ph.D. dissertation, Loyola Univ. of Chicago, 1975).
65. Sandra J. Crowther, "A Study of the Media Program of the Lawrence, Kansas, Public School System" (Ed.D. dissertation, Univ. of Kansas, 1977).
66. JoAnn V. Rogers, "Teachers and Media Resources in Selected Appalachian Secondary Schools: A Study of Attitudes, Usage, and Knowledge of Media Center Fundamentals" (Ph.D. dissertation, Univ. of Pittsburgh, 1977).
67. Rulon K. Wood, "Teacher Use of Library Media Centers in the Future: A National Needs Assessment by Use of Delphi with Fault Tree Analysis of This Assessment for Instructional Development" (Ed.D. dissertation, Brigham Young Univ., 1977).
68. Annette C. Allen, "An Evaluative Study of the Public Secondary School Libraries/Media Centers of Mississippi, 1976–1977" (Ed.D. dissertation, Univ. of Mississippi, 1977).
69. Milton R. Christison, "An Examination of Selected Variables Associated with Instructional Materials Centers" (Ph.D. dissertation, Univ. of Wisconsin, 1973).
70. Yvonne D. Hodson, "Value and Functions of the School Library Media Center as Perceived by Fourth and Sixth Graders and Their Teachers in Compared School Settings" (Ph.D. dissertation, State Univ. of New York at Buffalo, 1978).
71. Charles A. Jones, "The Georgia Public School Library Media Program, 1965–1975" (Ed. D. dissertation, Univ. of Georgia, 1977).
72. Margaret W. Denman, "An Evaluation of Audiovisual Educational Media Programs in Selected AAA High Schools in the State of Missouri, 1977–1978" (Ph.D. dissertation, Texas Woman's Univ., 1979).
73. David V. Loertscher, "Media Center Services to Teachers in Indiana Senior High Schools, 1972–1973" (Ph.D. dissertation, Indiana Univ., 1973).
74. Janet G. Stroud, "Evaluation of Media Center Services by Media Staff, Teachers, and Students in Indiana Middle and Junior High Schools" (Ph.D. dissertation, Purdue Univ., 1976).
75. Nancy W. Burt, "The School Library Media in an Era of Change: Programs/Services Seen as Supportive by Students, Teachers, Principals, and Library Media Specialists" (Ed.D. dissertation, Univ. of Southern California, 1980).
76. Barbara R. Palling, "An Evaluation of the Audiovisual (Educational Media) Agencies, Materials and Equipment in Selected Public Schools of the State of Mississippi" (Ph.D. dissertation, Texas Woman's Univ., 1979).
77. Dale E. Becker, "Social Studies Achievement of Pupils in Schools with Libraries and Schools without Libraries" (Ed.D. dissertation, Univ. of Pennsylvania, 1972).
78. Clyde L. Greve, "The Relationship of the Availability of Libraries to the Academic Achievement of Iowa High School Seniors" (Ph.D. dissertation, Univ. of Denver, 1974).
79. Rudolph P. Miller, Jr., "A Study of the Selection and Evaluation Practices of the Instructional Media Service Centers of the Pennsylvania Intermediate Units" (Ed.D. dissertation, Univ. of Pittsburgh, 1977).
80. Judith H. Masters, "Film Evaluation and Selection: A Study of Practices in the New York State BOCES" (D.L.S. dissertation, Columbia Univ., 1977).
81. Anna M. Billeter, "Selection of Children's Books for Public and School Libraries: Examination of the Books by the Local Librarian as a Method of Selection" (Ph.D. dissertation, Univ. of Illinois, 1979).
82. Mildred K. Laughlin, "The Readability of the Easy-to-Read Trade Books" (Ph.D. dissertation, Univ. of Oklahoma, 1973).
83. Barbara F. Dompa, "A System for Selecting Media for School Library Collections Based on the Matching of Task, Stimulus, and Learner Variables" (Ph.D. dissertation, Case Western Reserve Univ., 1975).
84. Mary K. Biagini, "Measuring and Predicting the Reading Orientation and Reading Interests of Adolescents: The Development and Testing of an Instrument" (Ph.D. dissertation, Univ. of Pittsburgh, 1980).
85. Polly S. Clarke, "Reading Interests and Preferences of Indian, Black, and White High School Students" (Ed.D. dissertation, North Texas State Univ., 1973).
86. Mary E. Stevens, "The Recreational Reading Book Choices of Gifted Children in Grades Four, Five, and Six in Dade County, Florida, Public Schools" (Ed.D. dissertation, Univ. of Miami, 1977).
87. Robert J. Grover, "The Relationship of Readability, Content, Illustrations, and Other Format Elements to the Library Book Preferences of Second Grade Children" (Ph.D. dissertation, Indiana Univ., 1976).
88. Cornelia V. Lawson, "Children's Reasons and Motivations for the Selection of Favorite Books" (Ed.D. dissertation, Univ. of Arkansas, 1972).
89. Leonard R. Missavage, "A Study of Selected Characteristics of Reviews and Indexes of Audiovisual Materials from 1969 through 1972" (Ph.D. dissertation, Florida State Univ., 1977).
90. Dorothy M. Haith, "A Content Analysis of Information about Educational Filmstrips in Selected Periodicals" (Ph.D. dissertation, Indiana Univ., 1972).
91. Ellen W. Mahoney, "A Content Analysis of Children's Book Reviews from *Horn Book* Magazine, 1975" (Ph.D. dissertation, Univ. of Illinois, 1979).
92. Jane Pool, "The Selection of Science Books for Elementary School Libraries: An Analysis of Selection from National Selection Sources and from a Local Buying List" (Ph.D. dissertation, Univ. of Illinois, 1972).
93. Wendy K. Sutton, "A Study of Selected Alternate Literary Conventions in Fiction for Children and Young Adults and an Examination of the Responses of Professionals Influencial in Juvenile Literature to the Presence of These Conventions" (Ph.D. dissertation, Michigan State Univ., 1978).
94. Myles E. Hill, "The Philosophical Aspects of the Newbery Medal Award Books, 1922–1971" (Ph.D. dissertation, Arizona State Univ., 1974).
95. Manuel Darkatsh, "An In-Depth Examination of the Distinguishing Characteristics of Newbery Award-Winning Books of Fiction versus Current Popular Books of Fiction for Children" (Ed.D. dissertation, Univ. of Pennsylvania, 1975).
96. Anna E. Weller, "The Portrayal of the Female Character in the Newbery Award Books" (Ph.D. dissertation, Indiana Univ., 1977).
97. Mary S. Ryder, "Personal Values and Values Identified in Newbery Medal Award Books by Students and Children's Librarians" (Ed.D. dissertation, Univ. of Denver, 1978).
98. Patricia B. Roberts, "The Female Image in the Caldecott Medal Award Books" (Ed.D. dissertation, Univ. of the Pacific, 1975).
99. Joan S. Nist, "The Mildred L. Batchelder Award Books, 1968–1977: A Decade of Honored Children's Literature in Translation" (Ed.D. dissertation, Auburn Univ., 1977).
100. Barbara R. Herrin, "A History and Analysis of the William Allen White Children's Book Award" (Ph.D. dissertation, Kanasa State Univ., 1979).
101. Betty M. Morgan, "An Investigation of Children's Books Containing Characters from Selected Minority Groups Based on Specified Criteria" (PhD. dissertation, Univ. of Illinois, 1973).
102. Miriam Offenberg, "Racial, Religious, and Ethnic Characterization in Detection Fiction Found in High School Libraries" (Ph.D. dissertation, New York Univ., 1974).
103. LilliAnn B. Williams, "Black Traditions in Children's Literature: A Content Analysis of the Text and Illustrations of Picture Story Books about Black People in the United States to Determine How Selected Black Traditions Have Been Portrayed and to Determine What Impact These Portrayals Have on the Self Concept of Children Who Are Exposed to the Books" (Ph.D. dissertation, Michigan State Univ., 1979).
104. Leonard P. Bazelak, "A Content Analysis of Tenth-Grade Students' Responses to Black Literature, Including the Effect of Reading This Literature on Attitudes towards Race" (Ed.D. dissertation, Syracuse Univ., 1973).
105. Rosalie B. Kiah, "A Content Analysis of Children's Contemporary Realistic Fiction about Black People in the United States to Determine If and How a Sampling of These Stories Portray Selected Salient Shared Experiences of Black People" (Ph.D. dissertation, Michigan State Univ., 1976).
106. Sophie P. Rosner, "A Descriptive Study to Identify Manifestations of Racist Ideology of Whites toward Blacks in Picture Books Published in the United States: 1959, 1964, 1969" (Ph.D. dissertation, New York Univ., 1975).
107. Marcia W. Posner, "A Search for Jewish Content in American Children's Fiction" (Ph.D. dissertation, New York Univ., 1980).
108. Grace G. Hoilman, "Voices and Images of the American Indian in Literature for Young People" (Ph.D. dissertation, Ball State Univ., 1980).
109. Richard W. Brown, "Characteristics and Concepts of American Indians in Children's Fictional Literature Published between 1963 and 1973" (Ed.D. dissertation, Temple Univ., 1978).
110. Rona Smith, "Sex-Role Stereotyping in Selected American Children's Fiction from 1950 to 1974" (Ph.D. dissertation, New York Univ., 1979).
111. Helen G. Koss, "A Comparison of Sexism in Trade Books for Primary Children, 1950–1953 and 1970–1973" (Ph.D. dissertation, Univ. of Connecticut, 1979).
112. Marjorie R. Hendler, "An Analysis of Sex Role Attributes, Behaviors, and Occupations in Contemporary Children's Picture Books" (Ph.D. dissertation, New York Univ., 1976).
113. Aileen P. Nilsen, "Grammatical Gender and Its Relationship to the Equal Treatment of Males and Females in Children's Books" (Ph.D. dissertation, Univ. of Iowa, 1973).
114. David E. Fisher, "Aggression as a Function of Sex and Socioeconomic Status in Popular Magazine Fiction in the School Library" (Ph.D. dissertation, Univ. of Missouri, 1978).
115. Teresa G. Poston, "Preadolescent Needs and Problems as Seen in Family Life Fiction Published between the Years 1965 and 1975: A Content Analysis" (Ph.D. dissertation, Florida State Univ., 1976).
116. Marilyn Sparson, "Adolescent Culture in Junior Novels: A Content Analysis of Selected Junior Novels Recommended in the 1972, 1973, and 1974 Supplements of the *Junior High School Library Catalog*" (Ph.D. dissertation, Florida State Univ., 1975).
117. Mary H. Chaudoir, "The Single Parent Family in Contemporary Realistic Fiction for Young People" (Ph.D. dissertation, Indiana Univ., 1979).
118. Mary C. Baggett, "A Study of the Image of the Senior Adult in Selected Recommended American Fiction Intended for Adolescents, 1960–1978" (Ed.D. dissertation, Mississippi State Univ., 1980).
119. Duncan A. Locke, "Teachers as Characterized in Contemporary Juvenile Fiction" (Ph.D. dissertation, Univ. of Oregon, 1979).
120. Janet C. Barr, "The Immigrant in Children's Fictional Books Recommended for American Libraries, 1883–1939" (Ph.D. dissertation, Indiana Univ., 1976).
121. Donald A. Colberg, "Moral and Social Values in American Adventure Novels for Boys" (Ph.D. dissertation, Univ. of Minnesota, 1973).
122. Barbara A. St. John, "The Portrayal of Evil in Selected Children's Books, 1945–1972" (Ed.D. dissertation, Univ. of Toledo, 1973).
123. Janelle A. Paris, "A Comparative Analysis of Occupations Presented in Children's Realistic Fiction" (Ph.D. dissertation, Texas Woman's Univ., 1977).
124. Dennis E. Darling, "The Classification and Analysis of Industrial Topics Represented in Juvenile Information Trade Books" (Ph.D. dissertation, Michigan State Univ., 1974).
125. Elmer C. Bellen, "A Content Analysis of Children's Books Set in the South" (Ed.D. dissertation, Univ. of Tennessee, 1973).
126. Dorothy C. Moyer, "The Growth and Development of Children's Books about Mexico and Mexican Americans" (Ed.D. dissertation, Lehigh Univ., 1974).
127. Zarintaj T. Tajeran, "A Content Analysis of Iranian Children's Story Books for the Presence of Social and Moral Values" (Ed.D. dissertation, Univ. of the Pacific, 1980).
128. Marilyn T. Samii, "An Assessment of Books on Iran for Children" (Ed.D. dissertation, Lehigh Univ., 1973).
129. Eloise S. Pettus, "A Study of Ecology, Air Pollution, and Water Pollution in Selected Recommended Books for Elementary Grades Published in the United States, 1960–1975" (Ph.D. dissertation, Florida State Univ., 1977).
130. Lillian M. Wehmeyer, "World-Future Images in Children's Literature" (Ph.D. dissertation, Univ. of California, Berkley, 1978).
131. Mary Alice Hunt, "Trends in Illustrations for Children as Seen in Selected Juvenile Periodicals, 1875–1900" (Ph.D. dissertation, Indiana Univ., 1973).
132. Carol J. Veitch, "An Analysis of School Library Media Resources in Kentucky as Compared with State and National Standards" (Ph.D. dissertation, Univ. of Pittsburgh, 1978).
133. Benjamin R. Guise, "A Survey of Public School Library Resources in Arkansas" (Ed.D. dissertation, North Texas State Univ., 1972).
134. Judith F. Davie, "A Survey of School Library Media Resources for Exceptional Students in Florida Public Schools" (Ph.D. dissertation, Florida State Univ., 1979).
135. Ganiyu T. Onadiran, "A Study of School Library Resources in Selected Secondary Schools in Nigeria" (Ed.D. dissertation, Boston Univ., 1977).
136. Marilyn L. Miller, "Student Access to School Library Media Center Resources as Viewed by High School Seniors in Southwestern Michigan Schools Accredited by the North Central Association of Colleges and Schools" (Ph.D. dissertation, Univ. of Michigan, 1976).
137. Alida L. Geppert, "Student Accessibility to School Library Media Center Resources as

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AASL Notes

Prepared by Alice E. Fite, Executive Director, AASL, and Ruth E. Feathers, Program Officer, AASL

1982 AASL and ALA, Ballots Due to be Mailed by the End of April All AASL personal members who have paid their 1982 membership dues by March 31 of this year should receive a ballot for the 1982 election by mid-May. Ballots will be mailed third-class from ALA beginning April 10. *The deadline for the return of ballots is June 18.* It is important that all AASL members vote for the AASL officers as well as the ALA councilors. The election results are to be distributed by June 24. NOTE: If you have not received a ballot by May 30, please call the ALA Hotline (312) 944-2117.

AASL Nominating Committee Announces 1982–83 Nominees The AASL Board of Directors accepted the report of the AASL Nominating Committee presented at the ALA Midwinter Meeting. Marie V. Haley served as chairperson of the committee. The following names will be presented to the membership for offices to be filled:

Vice-President (President-Elect): GLENN E. ESTES, Professor, Graduate School of Library Science, University of Tennessee, Knoxville; JUDITH M. KING, Librarian, Montgomery Blair High School, Silver Spring, Maryland.

Recording Secretary: WINIFRED E. DUNCAN, Division of Librarianship, Chicago (Illinois) Public Schools; ELIZABETH ANN MARTIN, Associate Professor, Department of Library Science, University of Northern Iowa, Cedar Falls, Iowa.

Director, Region I: EDNA M. BAYLISS, Media Specialist, Marancook Community Schools, Readfield, Maine; PAULINE H. ANDERSON, Director, Andrew Mellon Library, Choate Rosemary Hall, Wallingford, Connecticut.

Director, Region IV: EDNA LOUISE DIAL, Coordinator of Library Services, Unified School District #260, Derby, Kansas; JILL M. SEINOLA, Librarian, Valley City State College, Valley City, North Dakota.

Director, Region VII: ELIZABETH B. DAY, Coordinator of Library Services, Santa Barbara (California) County Schools; PATSY M. IZUMO, Director, Multimedia Service Branch, Hawaii Department of Education.

AASL Division Councilor: PATRICIA POND, Associate Dean, School of Library and Information Sciences, University of Pittsburgh, Pittsburgh, Pennsylvania; JOAN E. GRIFFIS, Media Coordinator, Portland (Oregon) Public Schools.

Supervisors Section Announces Nominees The AASL Supervisors Section will submit the following names to its members for offices to be filled:

Vice-Chairperson (Chairperson-Elect): CONSTANCE J. CHAMPLIN, Media Specialist, Omaha (Nebraska) Public Schools: MARY S. DALBOTTEN, Specialist, Educational Media, State Department of Education, St. Paul, Minnesota.

Recording Secretary: BARBARA P. CARROON, Media Supervisor, Hinds County Public Schools, Raymond, Mississippi, CHRISTINA C. YOUNG, Washington, D.C.

Non-Public Schools Section Announces Nominees The ASSL Non-Public Schools Section will submit the following names to its members for offices to be filled:

Vice-Chairperson (Chairperson-Elect): JO ANN G. DAVISON, Librarian, Gilman School Library, Baltimore, Maryland; STEPHEN L. MATTHEWS, Foxcroft School, Middleburg, Virginia.

Recording Secretary: B. DIANE DAYTON, Head Librarian, Westminster Schools Carlyle,

AASL Brunch and Honors Program The AASL Brunch and Honors Program will be held on Monday, July 12, 1982, from 10:30 a.m. to 1:00 p.m. The program will include a notable speaker and the presentation of the President's Award, the AASL Distinguished Library Service Award for School Administrators, and the 1982 School Library Media Program of the Year Award.

Tickets are $16; by advance reservation not later than June 1; no refunds after June 15. Send check or money order, payable to American Library Association, to AASL Awards Brunch, 50 E. Huron St., Chicago, IL 60611.

"Glad to Media" T-Shirts and Totes Due to the overwhelming response of AASL members to the Presidential Hotline notice concerning "Glad to Media" T-shirts and tote bags, the AASL stock of "Glad to Media" tote bags has been depleted. There are no immediate plans for reissuing the tote bag.

"Glad to Media" T-shirts are still available in adult sizes. The T-shirts are made of cotton/polyester and depict "Glad to Media" people on a yellow, blue, and orange rainbow, which streams from an AASL pot of gold. Adult sizes small (34–36), medium (38–40), large (42–44), and extra large (46–48) are available for $5 each from AASL, 50 E. Huron St., Chicago, IL 60611. All orders under $10 must be prepaid.

CANDIDATES FOR ALA COUNCIL FROM THE AASL RANKS

AASL, as one of the largest divisions of ALA, can exert a major influence on the focus and direction of ALA by encouraging its members to exercise their right to vote for the AASL members who are nominees to ALA Council. As of February 8, nominees appearing on the 1982 ballot are: D. Phillip Baker, Mary Biblo, Elsie L. Brumback, Barbara C. Cade, Daniel W. Casey, Marilyn Goodrich, Gerald C. Hodges, Fred A. Krueger, Mildred Laughlin, Antoinette Negro, Elliott Shelkrot, Janice Smith, Jane C. Terwilliegar, Harry T. Uyehara, and Dianne T. Williams.

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Viewed by Media Specialists and Compared to Students in Southwestern Michigan Secondary Schools" (Ed.D. dissertation, Western Michigan Univ., 1975).

138. Kaiser J. Moll, "Children's Access to Information in Print: An Analysis of the Vocabulary (Reading) Levels of Subject Headings and Their Application to Children's Books" (Ph.D. dissertation, Rutgers Univ., 1975).
139. Marilyn R. Flachman, "A Study of Student Use of the Catalog in High School Library Media Centers (Grades 10–12)" (Ed.D. dissertation, Univ. of Colorado, 1978).
140. Jerry J. Watson, "A Study of Adults' Reactions to Contemporary Junior Novels Reflecting Adolescents' Interest in Reading About Aspects of Peer and Non-Peer Relationships" (Ph.D. dissertation, Michigan State Univ., 1974).
141. Michael J. Pope, "A Comparative Study of the Opinions of School, College, and Public Librarians, concerning Certain Categories of Sexually Oriented Literature" (Ph.D. dissertation, Rutgers Univ., 1973).
142. Lemuel B. Woods, "Censorship Involving Educational Institutions in the United States, 1966–75" (Ph.D. dissertation, Univ. of Texas, 1977).
143. Myrna M. Bump, "Censorship Practiced by High School Librarians Prior to (Actual) Book Selection" (Ph.D. dissertation, Kansas State Univ., 1980).
144. Virginia L. Glover, "Censorship in Indiana Public Secondary School Media Centers, 1970–1975" (Ph.D. dissertation, Purdue Univ., 1975).
145. Keith Torke, "Sex Education Books, Censorship, and Colorado High School Libraries: A Survey" (Ed.D. dissertation, Univ. of Northern Colorado, 1975).
146. Rollin G. Douma, "Book Selection Policies, Book Complaint Policies and Censorship in Selected Michigan Public High Schools" (Ph.D. dissertation, Univ. of Michigan, 1973).
147. Carolyn M. Peterson, "A Study of Censorship Affecting the Secondary School English Literature Teachers, 1968–1974" (Ed.D. dissertation, Temple Univ., 1976).
148. Patricia F. Beilke, "A Study of Acquisition and Usage of Instructional Media by Teachers in Selected Michigan Public High Schools" (Ed.D. dissertation, Western Michigan Univ., 1974).
149. Vira C. Hinds, "The Utilization of Library Resources by Teachers in Ten Inner-City Schools of New York" (Ed.D. dissertation, Columbia Univ. Teachers College, 1976).
150. Emmett O. Corry, "A Comparison of the Uses of Media by English Teachers in High Schools with Exemplary and Ordinary Library Media Programs" (Ph.D. dissertation, New York Univ., 1977).
151. Marian I. Fertik, "The Use of Literature and Library Resources in Creative Dramatics" (Ph.D. dissertation, Univ. of Illinois, 1980).
152. Ina H. Robertson, "An Investigation of the Use of Children's Nonfiction-Informational Trade Books in Selected Fourth-, Fifth-, and Sixth-Grade Classrooms in Illinois" (Ph.D. dissertation, Univ. of Illinois, 1980).
153. William F. Coughlin, "The Use of Children's Literature in the Teaching of Critical Reading" (Ed.D. dissertation, Univ. of Massachusetts, 1973).
154. Jacqueline C. Mancall, "Resources Used by High School Students in Preparing Independent Study Projects: A Bibliometric Approach" (Ph.D. dissertation, Drexel Univ., 1978).
155. Joan G. Roloff, "The Uses of Non-Print Media in the Learning Process: An Annotated Bibliography of Periodical Literature and Educational Documents from January, 1965, to December, 1970, with Conclusions" (Ph.D. dissertation, Northwestern Univ., 1974).
156. John O. Hempstead, "Media, and the Learner: The Influence of Media-Message Components on Students' Recall and Attitudes toward the Learning Experience" (Ph.D. dissertation, Univ. of Wisconsin, 1973).
157. Dianne L. Scim, "The Relationship between Selected Learner Characteristics and the Learner's Performance After Viewing Silent or Sound Filmstrips" (Ph.D. dissertation, Southern Illinois Univ., 1979).
158. Deborah H. Roosevelt, "An Investigation of the Effect of Book-Related Sound Filmstrip Viewing on the Voluntary Reading of Fourth, Fifth, and Sixth Grade Students" (Ed.D. dissertation, Columbia Univ. Teachers College, 1978).
159. Mary A. Brady, "An Investigation of Relative Effectiveness of Film, Slide-Audio-Tape, and Print Stimulus Media for Concept Acquisition" (Ph.D. dissertation, Michigan State Univ., 1976).
160. William J. O'Rourke, "A Comparison of the Recreational Reading Habits of Selected Ninth Graders and Their Parents" (Ed.D. dissertation, Univ. of Nebraska, 1977).

LOCALLY BASED RESEARCH AND THE SCHOOL LIBRARY MEDIA SPECIALIST

Guidelines and procedures to use in developing local research projects.

RICHARD M. ENGLERT

Most school library media specialists shy away from research. In their eyes, there is a mythology that the world of research is far removed. Research is for those few who are initiated into its arcane symbolism, while practitioners are on their own to muddle through the real world of seat-of-the-pants experience. Two myths have contributed to this distorted impression.

The first myth is that scientists exclusively can engage in research. While it is true that only experts can conduct certain types of specialized research, it is far more common that, as Einstein once said, "scientific research is nothing more than a refinement of everyday thinking." Its etymology indicates that "research" is simply an attempt to seek something out. As one writer put it, research has only two essential elements: hard thinking and careful data gathering.[1] Thus, when anyone tries to discover something by means of thoughtful analysis and systematic fact finding, that person is conducting research.

A second myth is that research has little to do with everyday problems. There are, to be sure, many research studies devoted to highly theoretical subjects. However, much research is also directed at solving existing problems. As a matter of fact, Lewin was of the opinion that social problems could only be solved by a blending of research, personnel training, and action.[2] Moreover, some researchers have proposed such approaches as action research,[3] humanistic research,[4] and policy research[5] as ways to solve social problems. When hard thinking and careful data gathering are applied to concrete situations, research is being used in a practical fashion.

A source of these two myths has been a mistaken notion that "research" is synonymous with laboratory experimentation. To avoid this misconception, Cronbach substituted the term *disciplined inquiry*.[6] By this he meant a combination of careful observation and systematic reasoning with the highest regard for objectivity and the accumulation of evidence. In Cronbach's view there are three kinds of disciplined inquiry: *conclusion-oriented investigations, decision-oriented investigations,* and *social accounting.* The first is more theoretical and is directed at relatively abstract theorizing and understanding of the phenomena under study. The second, decision-oriented inquiry, is more practical.

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It aims to provide a decision maker with information in a particular situation. The third, social accounting, is simply the routine collection of data that might eventually be useful for some purpose. In short, Cronbach's idea of disciplined inquiry (or research) is that some studies can be theoretical and others immediately practical. Thus, he deflates the two myths about research.

LOCALLY BASED RESEARCH

School library media specialists make decisions daily involving the choice of appropriate media, the evaluation of particular products, and the improvement of service delivery. All these decisions need to be made within a certain set of circumstances. To make such decisions, school library media specialists normally depend upon knowledge derived from personal experience, common sense, thoughtful speculation, casual analysis, and the opinion of authorities. Each of these is an important source of information, yet there is one more source that is commonly overlooked, namely, research.

School library media specialists can enhance their decision making by means of research. They can consult the research studies of others on similar issues. While this is a valuable undertaking, other studies are not always applicable to a particular school. However, school library media specialists can also conduct their own research studies aimed at gathering data and drawing conclusions that are immediately applicable to the decisions being made. When school library media specialists do this, they are engaged in locally based research.

Locally based research is normally a type of either decision-oriented inquiry or social accounting, as defined by Cronbach. The aim of locally based research is to provide a practitioner (i.e., the school library media specialist) the information needed to make a decision. Locally based research, particularly useful, has the following characteristics:

1. It addresses *real problems* confronting the decision maker. This is so simply because the practitioner has control over the choice of the focus of the research. No "ivory tower" researcher can concoct a theoretical study unrelated to actual concerns. Rather, the focus is pointedly on an existing problem needing to be resolved.
2. It is *situation specific.* The decision maker is concerned less directly with how the problem is affecting other localities and more directly with what is occurring in an immediate setting. Many times problems emerge that are unique to a given situation. Locally based research takes this uniqueness into account and attempts to develop usable conclusions.
3. Its purpose is to ameliorate a particular situation. *Improvement*, not mere understanding, is the ultimate goal. Locally based research is almost always change-oriented.
4. It involves either the school library media specialist alone or in collaboration with an outside researcher. If expertise is needed, it is brought in. But the *practitioner* is always involved. In this way, the practitioner's interests are represented. Furthermore, because of this active involvement, the practitioner develops greater personal skills in conducting locally based research studies.
5. It is *systematic.* Care is taken that the study is adequately designed, that any instruments used are precise and appropriate, that data are gathered in a methodical fashion, and that proper analyses are carried out. The practitioner knows the established methods or else will tap the necessary resources to ensure that objectivity and orderliness are maintained.
6. It usually involves *intact groups* or little randomization. Most frequently, the practitioner cannot upset an entire school's schedule in order to select students at random for an experimental study. Usually, existing groups of students in regular classrooms must be used in locally based research. Although randomization should be used whenever possible, regular classrooms or intact groups can be used imaginatively in quality studies.[7]
7. It normally produces results that are *not generalizable* beyond the local setting. If a study is to have generalizability, it usually should have complete randomization of subjects and a comparable control group. Yet both of these research techniques are often missing in real settings. At best, most researchers in local settings can manage only partial randomization (because regular

. . . Locally based research is selected by a competent practitioner who knows that it is the most appropriate approach in a given situation.

classrooms are never truly random) and a rough comparability of control and treatment groups (because one classroom is never truly comparable to another). Consequently, locally based research results have significance for the immediate setting in which they occurred. Nevertheless, this does not usually present a major problem for the practitioner, merely interested in making decisions about the immediate situation.

8. It often must be completed in a relatively *short time period*. Decisions frequently cannot be postponed: there are deadlines. The practitioner may well need information from a research study before every possible hypothesis can be generated or tested. For this reason, it is important that priority be placed upon hunches, and only the most plausible ones researched. It is also necessary to recognize that the practitioner will never have "all" the data for a decision. In the end, the decision has to be made on the basis of the data available. Locally based research is an important tool for providing the decision maker with available information within relatively short periods of time.

Locally based research is simply the application of accepted rules of scientific method to a concrete situation. The personal involvement of the practitioner ensures that the real problems are being addressed. In the end, the practitioner is able to generate usable knowledge upon which to base decisions and policies.

It would also be appropriate at this time to indicate what locally based research is *not*. It is not an excuse for poorly constructed research. Nor is it a rationalization for those who have not developed the basic competence in research methodology needed to engage in any disciplined inquiry. Rather, locally based research is selected by a competent practitioner who knows that it is the most appropriate approach in a given situation. It should be well designed and diligently carried out with attention to detail, logic, and the accepted canons of research methodology. Anything less is not research.

PHASES OF LOCALLY BASED RESEARCH

All research, including locally based research, has two general phases: discovery and verification.[8] During the first phase, the researcher explores the phenomena under study in order to generate hunches. For example, a school library media specialist may have noticed that a number of materials are missing from a school's collection and wants to find out why. During the discovery phase, the purpose is to sift through the various possible explanations to identify the most probable ones that can later be empirically tested.

In this phase, a premium is placed upon open-mindedness and incisive, divergent thinking. Leads are followed up, the experiences of others reviewed, and personal opinions tapped. Brainstorming is prevalent, and the researcher is flexible enough to modify research plans as needed to explore the phenomena more fully. This phase is completed when the researcher has pinpointed a small number of explanations or solutions. In the case mentioned above, the school library media specialist may have identified inadequate record keeping and colleagues' lack of knowledge of media policies as prime explanations for missing materials.

Whereas the discovery phase is relatively wide-ranging and unstructured, the verification phase is more focused and structured. In the former phase, the researcher is free to follow ideas as they occur. But verification involves careful, methodical analysis according to a set plan developed in accordance with conventional standards of research and scholarship.

The probable suggestions generated by the discovery phase are translated in the verification phase into precise hypotheses. A research plan is devised to test them empirically. Although the research plan in the discovery phase is merely a general guide to action that can be modified to accommodate new insights, the research design in the verification phase is constructed meticulously and followed closely lest any deviation endanger the validity of the study. Convergent thinking is brought to bear upon the best ways to gather and analyze data that either support or reject the hypotheses in question. The researcher constantly analyzes and reanalyzes every step to make certain that uncontrollable elements do not distort the findings.

To return to the example of the missing materials, in the verification phase the practitioner might test the hypothesis that lack of knowledge about policies is responsible. This could be done by means of a questionnaire to all colleagues. In discovery, the researcher looks for patterns to emerge from the data themselves; in verification, the researcher judges the data according to preestablished patterns. By means of verification research, a researcher is able to say how confident he or she is in the original hypotheses.

Discovery and verification are cyclical phases that occur continuously in research. A researcher first discovers possible hypotheses, then tests them rigorously, and then moves again into a discovery phase that builds upon the knowledge gained by the verification. As the researcher proceeds through progressive cycles of discovery and verification, he or she learns more and more about the phenomena in question. Thus locally based research, as all research, is developmental in nature, with new knowledge and information building upon the old.

At the same time, however, it is obvious that many school library media specialists are principally decision makers. There is not the luxury of an endless succession of studies. Sometimes a specific study will only consist of a single discovery phase and a single verification phase. The needs of the decision maker must determine the purpose of the study. The ultimate purpose of locally based research is to produce the information the decision maker requires; therefore, the type of research approach chosen depends upon the nature of the problem in question, the context of that problem, and the constraints upon the decision maker.

Although the research plan in the discovery phase is merely a general guide to action that can be modified to accommodate new insights, the research design in the verification phase is constructed meticulously and followed closely lest any deviation endanger the validity of the study.

STEPS OF LOCALLY BASED RESEARCH

Locally based research projects must be constructed to fit their unique situations. Still, there are a number of steps a researcher usually takes. The ones outlined below are based on Dewey's stages in reflective thinking.[9]

Step One: Recognizing a Problem. The school library media specialist recognizes a difficulty of some sort. This can occur in three ways. Urgent problems confront the decision maker, and action must be taken. In this case, there is no choice but to react and find some kind of solution. Or, the decision maker generally adopts a critical outlook in everything and is able to identify an emergent problem before it has become urgent. In this case, the decision maker anticipates developments and seeks a solution that will head off a major problem. And third, the decision maker actively seeks out potential difficulties by consciously evaluating the current state of things. In this case, the decision maker not only anticipates trends but brings them about according to a definite plan. In all three of these cases, the decision maker uses a recognized problem as a springboard to locally based research. Practically speaking, if an angry mob is outside the decision maker's office demanding an immediate answer, there is little time for thorough research. But if the decision maker anticipates the problem before anyone gets angry, there may be sufficient opportunity to design a thorough research project that can both generate possible solutions and test them.

Step Two: Exploring the Problem. The school library media specialist explores the nature of the problem. A plan of exploration is developed, then continuously modified along the way. The literature is reviewed to see what others have found. People may be interviewed or a survey of opinion may be conducted. The situation may be carefully observed and detailed notes taken. Data are classified and reclassified in various ways to try to determine emerging patterns and their

meaning.[10] Eventually, a number of possible solutions are identified.

Step Three: Narrowing the Range of Possibilities. The researcher logically analyzes the potential solutions by comparing them with each other, determining which have similar causes or effects, identifying those with the greatest policy impact, and establishing priorities among them. The aim at this stage is to narrow the range of potential solutions. For a study that is entirely exploratory in nature, this may be the end of the research process.

Step Four: Formulating Specific Questions or Hypotheses. The researcher constructs either specific hypotheses to be tested or research questions to be answered. To do this, the focus of the problem has to be narrow and researchable. Variables have to be labeled and terms given very precise definitions. Operational, i.e., measurable, definitions need to be developed.[11] A hypothesis is nothing more than a calculated guess about what will happen if certain conditions are set up. For example, a school library media specialist may believe that TV instruction motivates students better than a programmed math text. The hypothesis might be: "If my belief is correct, then I should be able to observe that group A does better than group B when both groups are given the same written test after group A has had TV instruction in math and group B has learned math by means of a programmed text." A statement such as this can be tested by a verification study.

Often no hypotheses are formulated; instead, the researcher poses research questions. This is the case when the researcher has no calculated guess beforehand or simply wants to gather data. For example, a school library media specialist interested in gauging teachers' reactions to various kinds of learning materials may set forth the research question, "Which of a given set of materials are preferred by teachers for children with learning disabilities?" A study that answers this question may generate ideas which can be tested as hypotheses in later studies.

Step Five: Designing a Research Plan. The researcher designs a research plan to test the hypotheses. A locally based research study may employ one of the following types of research: surveys, case studies, or quasi-experimental studies. A survey study gathers data from a relatively large number of individuals at more or less the same time. For example, a school library media specialist may use a questionnaire to determine teachers' assessments of the adequacy of a school's serial holdings. A case study, on the other hand, involves the gathering of data from a small number of cases over an extended period of time (usually a full cycle of an activity, such as a teaching unit). For example, the development of students' library skills could be studied by closely observing the behavior of a few students over an entire school year. A quasi-experimental study is one in which the researcher can determine certain aspects of the study (such as when the observation takes place) but cannot exercise full control over certain other aspects (such as who the subjects of the study will be). Generally, locally based research does not employ true experimental designs because of the inherent limitations of natural social settings.

Decisions have to be made about the use of a control group, sampling, data collection methods, and data analysis procedures. All activities have to be sequenced, and safeguards must be built in to ensure that unwanted occurrences do not jeopardize the study's integrity. A time line must be constructed, and necessary permissions or commitments to participate need to be secured. By means of a thorough plan, the researcher attempts to anticipate events and exercise as much control as possible over the conduct of the study. The locally based researcher has as potential resources a number of good reference works explaining in simple terms the methods of surveys, case studies, and quasi-experimental studies.[12]

Step Six: Employing Data Collection Instruments. Although ready-made instruments are available for use, often the researcher needs to construct data-gathering instruments such as questionnaires, interview schedules, observation recording devices, and tests.[13] Each instrument is appropriate for different purposes. The locally based researcher who wishes to gather factual information from a variety of persons at the same time would use a *questionnaire*. One who was attempting to measure individuals' attitudes or opinions might choose an *opinionnaire*. An *interview schedule* (i.e., a list of preestablished questions or statements) would be appropriate for gathering in-depth data from a small group of persons through personal interviews. Various kinds of achievement, aptitude, vocational, etc., *tests* may be necessary if the locally based research intends to measure the abilities or skills of individuals. And in the case of the researcher who wishes to derive other kinds of data from settings as they naturally occur, there are various *observation recording devices*.

The researcher must be satisfied that an instrument is appropriate for the purposes of the study, has validity (that is, is a consistent measuring device), and provides data that can be analyzed in a meaningful fashion. The importance of a well-constructed instrument cannot be overemphasized since the entire study depends upon the quality of the data collected. It is for this reason that the researcher will often submit the instrument to a panel of two or three experts before it is actually used. The experts can make constructive suggestions regarding the quality of the instrument. Often the instrument itself will be pilot-tested with a sample of individuals to make sure the instrument is understandable and to determine whether the data derived from the instrument are meaningful. Almost always an instrument must be revised several times and retested before it is used in a study.

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Step Seven: Collecting the Data. The researcher collects the data in accordance with the research plan. If experimental treatments are used, care must be taken to ensure that everyone participating in the experiment is exposed to similar conditions. In the case of a school library media specialist comparing the effects of two different media approaches, the research tries to make sure that all participants in the study receive the same kinds of instructions, procedures, etc., *except* for the two different media approaches. If assistants are used to help gather data, they must be trained so that they all operate in a standardized manner. For example, if an achievement test is being used, each assistant should give exactly the same instructions to students taking the test. To the extent possible, the research plan should be followed as prescribed. However, the nature of locally based research is that invariably the unpredictable will occur. If unexpected events (e.g., a fire alarm or a disruptive student) do occur that threaten to influence the results of the study, these events should be documented meticulously in writing so they can be analyzed later for possible clues about their influence. In addition, the researcher must do all that is possible to guarantee participants' rights to anonymity, privacy, and confidentiality during the collection of data (and throughout the entire study).

Step Eight: Analyzing the Data. The researcher analyzes the data in accordance with the research plan. Different kinds of analyses are appropriate for different studies. Most locally based research studies do not use highly sophisticated statistical analyses. Those that do are usually in collaboration with experienced researchers or statisticians. Locally based researchers often use such basic statistics as averages, percentages, frequencies, and percentile ranks to describe data in simple yet meaningful ways. Locally based researchers also sometimes use relatively uncomplicated analyses such as t-tests, chi-square, and correlation to analyze data. There are established procedures for most kinds of analysis performed by a researcher.[14] These procedures should be used in conjunction with common sense and hard thinking in order to analyze the data thoroughly.

Step Nine: Writing a Report. The researcher compiles a written report not only of the study's findings and conclusions but also of the methods used in the research. The length of the report will depend upon the situation and the uses to be made of it. Often, a locally based researcher will simply keep a written diary of research procedures, findings, etc., for personal use. However, a research report takes different forms for different purposes. If the intended audience for the report is a group of colleagues or a supervisor, the report should be more formal than a diary. If the report is for publication, then the report should conform to the publisher's standards. Even if a school library media specialist has

conducted the research for personal decision-making purposes and the report will never be seen by anyone else, it still should be put in writing. There are four main reasons for this. First, a researcher might reexamine the study later and discover a flaw overlooked at the time of the investigation. Such a finding might be useful in later decision-making situations. Second, research is cumulative. Two or three studies might be compared to yield valuable information for decision making. Third, the report is visible evidence of success in an undertaking. And finally, a written report can be shared eventually with colleagues, if the researcher so desires.

An adequate formal report normally contains many if not all of the following elements:

1. the purpose of the study
2. a definition of terms
3. hypotheses or research questions
4. research design
5. data collection procedures
6. a copy of any instrument
7. methods of analysis
8. results of the study
9. recommendations for other studies

RESOURCES FOR LOCALLY BASED RESEARCH

A school library media specialist should realize that there are numerous resources available for assistance in designing and carrying out an adequate project. Research and statistics experts are usually on the staffs of most school districts, state and federal agencies, professional associations, and institutions of higher education. Most of these organizations have a service function as part of their basic missions. Such experts are normally willing to provide technical assistance, and some may be interested in collaborative research. A second available resource can be found in professional literature. Some journals, e.g., the *School Library Media Quarterly*, have regular research features. In addition, a number of books are devoted specifically to research methodology. The books listed in this article's references are a starting point for school library media specialists interested in learning more about research. Formal course work in universities and in-service centers is another resource available, as are workshops and sessions associated with professional conferences and annual meetings of professional organizations. In the final analysis, however, the most useful resources are personal ones: the library media specialist's own abilities to think and to be disciplined and creative in carrying out research, as well as the firsthand experience that comes from attempting locally based research. There is no substitute for practice.

BENEFITS OF LOCALLY BASED RESEARCH

Three benefits accrue to the school library media specialist who directly participates in locally based research. First, such research can be a source of information for making decisions about educational media. Locally based research can provide data relevant to practical problems in a concrete setting. The research can be designed specifically to answer certain questions posed by the decision maker.

Second, locally based research can contribute to the personal development of the school library media specialists who engage in it. Not only are research skills developed by practice, but so are attitudes and habits of critical thinking, creativity, and disciplined inquiry. These by-products have become for many researchers the primary arguments in favor of locally based research.

Finally, locally based research can contribute to the overall development of the field of educational media. Much of library media practice greatly depends upon the unique characteristics of the media users and the immediate settings of use. Consequently, only by numerous small-scale projects in diverse circumstances can research truly contribute to an understanding of educational media. The words of Corey almost thirty years ago are still relevant to educators in general and to school library media specialists in particular:

> I have lost much of the faith I once had in the consequences of asking only the professional educational investigator to study the schools and to recommend what they should do. . . . Most of the study of what should go and what should be added must be done in thousands of classrooms and American communities. These studies must be undertaken by those who have to change the way they do things as a result of the studies. Our schools cannot keep up with the life they are supposed to sustain and improve unless teachers, pupils, supervisors, administrators, and school patrons continuously examine what they are doing. Singly and in groups, they must use their imaginations creatively and constructively to identify the practices that must be changed to meet the needs and demands of modern life, courageously try out those practices that give better promise, and methodically and systematically gather evidence to test their worth.[15]

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AVENUES OF DISSEMINATION: RESEARCHER TO PRACTITIONER

A look at the major channels of communications in education.

JACQUELINE C. MANCALL, DON FORK, AND MARINA STOCK McISAAC

Few would argue that the ultimate aim of educational research is to create new knowledge in order to improve educational practice. If this is indeed the case, then there is a need to clarify how that information is generated and disseminated in a timely manner to educational practitioners in the field. Since the school library media specialist acts as an information liaison person at the building level, there is a particular need for library media specialists to understand the communication and dissemination processes that currently exist within their schools and the field of education.

In schools, both formal and informal communication take place every day. In fact, many library media specialists engage in communication and dissemination activities with their faculty and students without ever fully understanding or appreciating their own role in the process. Familiarity with some of the more common modes of dissemination is clearly one of the responsibilities of school library media specialists that can greatly enhance their educational effectiveness. The process of dissemination is sufficiently complicated to preclude exhaustive treatment here. The intent, therefore, is to present a brief summary of the various points of view regarding the dissemination process and to point out representative examples of both formal and informal structures that exist.

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BACKGROUND

In the past two decades, a variety of approaches have been proposed to improve the research dissemination process. Some of these have resulted in the establishment of formal structures for organizing and disseminating the results of basic and developmental research.[1] The majority of these formal structures are based on the assumption that bringing educational researchers and practitioners together will inevitably improve educational practice.[1] While one might expect such assumptions to be noncontroversial, there is, in fact, a considerable amount of literature arguing for and against formal structures for the dissemination of research findings. Some authors argue that a systematic approach to dissemination is not a universal panacea.[2] Those who favor clearly defined mechanisms, such as information networks and clearinghouses, however, feel specific structures are essential to successful dissemination.

There is, in fact, a considerable amount of literature arguing for and against formal structures for the dissemination of research findings.

When these two seemingly contradictory positions are analyzed in more detail, one finds that the first approach attempts to examine the various dissemination mechanisms that exist and how they might be improved. The second considers dissemination as part of a more global knowledge transfer process that can solve informational needs only under certain specified circumstances.

The former can be considered a structuralist approach and looks to formal channels of dissemination to effectively deliver information to the field. Proponents of this approach view dissemination as an inadequately developed system for bringing the producers of research together with the ultimate users—practicing classroom educators. Followers of this point of view feel that it is possible to identify and describe the various types of dissemination networks that have been created and to make recommendations for their improvement. Examples of such an approach would include the formal structures established by educational associations, subject matter–oriented groups, and the nationwide dissemination networks that have been created to cover a broad range of academic subjects and pedagogical research. Among the remedies that have been offered to improve the functioning of these existing networks are: (1) More practitioner input for the setting of priorities for educational research, and (2) more effective communication among the networks already established.[3]

The latter approach to dissemination has its roots in the knowledge transfer process and takes quite a different conceptual approach to the problem by questioning whether or not formal dissemination is productive or counterproductive. Proponents of this approach attempt to determine if "the interests of senders (researchers) necessarily coincide with those of receivers (practitioners)."[4] If dissemination is viewed only as a means to make more data available, then such activity can be said to be "simultaneously successful and superfluous—there are already too many data."[5] In other words, dissemination, in this conceptual model, is conceived of in the following linkage process: (1) policy-relevant information can be traced from is reception (reading and digesting what has been received), through (2) making the effort to use what has been recommended (seeing the results in policy outcomes with policy then becoming practice), and (3) the resulting practice yielding tangible benefits. Such an approach raises doubts about the worth of active dissemination efforts, particularly if one realizes that many policymakers obtain information from their *informal* contacts (e.g., exchanges with peers at social and professional meetings). Some would even question the assumption that policymakers want knowledge but cannot get it. Perhaps policymakers receive too much information to absorb or utilize effectively.

Following this conceptual approach, a related problem exists: those best able to use research results, due to the large size of their staff, are least in need of the information since they are capable of getting it on their own; while those who have the most trouble getting research results are also the least capable of using it.[6] This conceptual model does offer, however, basic linkage strategies that could be substituted when natural dissemination fails. We can "move information" by establishing exchanges that match the information needs of policymakers. These links already exist in the form of information clearinghouses, newsletters, etc. Secondly, we can "move people," either the policymakers who need knowledge to places where it exists, or we could "lend" these people the staff of other knowledgeable policymakers or researchers who would bring them the needed knowledge.[7] Following this line of reasoning, advice offered to potential policymakers and investors in knowledge dissemination might include the following: (1) continue active support for the passive activities of information exchanges that already exist; (2) consider new approaches for reaching needy policymakers; (3) help natural dissemination by focusing on *emerging* policy issues; and (4)

stop wasting money on dissemination if the real problem is lack of policy knowledge.[8]

ORGANIZED EFFORTS: NETWORKS AND INFORMATION CLEARINGHOUSES

The ultimate focus on dissemination efforts is, of course, to improve educational effectiveness. The federal government has encouraged this through the funding and development of a variety of networks and information clearinghouse operations.[9] Two of the major dissemination networks and the primary information clearinghouse for education are: (1) the National Diffusion Network (NDN); (2) the Research and Development Exchange (RDx); and (3) the information clearinghouse operation known as ERIC.

National Diffusion Network (NDN). Following the structuralist approach, the National Diffusion Network was designed to help local school districts adopt innovative educational programs that have been validated by the U.S. Department of Education's Joint Dissemination Review Panel (JDRP). Established in 1974, the NDN has developed a comprehensive delivery system that is composed of two major types of programs. The first of these focuses on *Developer/Demonstrator Projects*, which were originally developed by local schools or school districts. According to the Council for Educational Development and Research, more than 280 exemplary programs have been judged worthy of national dissemination; and of these, 114 have been designated as "Developer/demonstrator" projects entitling them to receive funds to encourage adoption at other sites.[10] Projects included in this category range from teacher-developed curriculum materials to demonstrations of how teachers can better manage their classrooms and make better use of commercially produced instructional materials.

Part of the acceptance and success enjoyed by these projects is that they were developed by classroom teachers working with students in situations appropriate for the learning objectives and grade level. For example, Project MARC in Crawfordville, Florida, has developed a multisensory approach to reading readiness for grades K–1. Another project called "Metrics Made Easy" has been developed by the Ocean View School District in Huntington Beach, California, for grades 1–8.

The National Diffusion Network was designed to help local school districts adopt innovative educational programs.

These and other projects are made available to schools wishing to resolve similar problems or to encourage instructional improvements by adopting successful programs. In order to foster such sharing, each of the projects accepted for inclusion in the NDN receive development funds for up to ten years and can be of great assistance to any school interested in adopting the project.

The second major type of program that has been developed to support such endeavors in the NDN State Facilitator Program. Agencies or knowledgeable persons engage in the dissemination of exemplary programs within their respective states. Schools that wish to solve local educational problems that can be solved by adopting or adapting an NDN program may request technical assistance from their nearest NDN State Facilitator. In addition to providing funds for the State Facilitators to assist teachers and administrators in choosing the most appropriate exemplary program for their local needs, the NDN also provides financial assistance to help defray some of the costs of training, on-site visits, and implementation costs for installing one or more of the developer/demonstrator projects.

Thanks to the efforts of creative elementary through college teachers, numerous projects have been funded and successfully disseminated. While some were the result of applying research findings, many came about because a teacher could not find a solution to a problem but had an idea worth trying.[11]

Although there is every indication of continued funding for the NDN, the future is not so bright for certain types of categorical programs. For example, ESEA Title IV-C is to end September 30, 1982, but certain states such as Pennsylvania have elected to continue to recognize exemplary programs in local districts.

Research and Development Exchange (RDx). In 1976 the National Institute of Education (NIE) established a network of educational laboratories and university-based research and development centers to address the growing problems facing the nation's schools. It was generally agreed that although an extensive R & D (research-development) base did exist, a more effective use of research findings required heightened familiarity—knowing what existed, where the information was located, and how it could be acquired or accessed. The Research and Development Exchange was established to maximize the use of existing resources for school improvement by: (1) providing information, technical assistance, and/or training for school improvement efforts; (2) promoting R & D outcomes that support school improvement efforts through the development of a quality knowledge base; (3) promoting coordination of people already in place; and (4) increasing shared understanding and use about client needs to influence future R & D efforts (i.e., provide a structure for feedback).

The Research and Development Exchange was established to maximize the use of existing resources for school improvement.

In attempting to describe the RDx it is important to keep in mind the underlying principles that govern its operations. Primary to these operations is a belief that educational practice is by its nature diverse and changing; therefore specific *client* needs must define strategies and solutions to problems. Further, the efforts of change are seen as developmental, changing as need in the field changes, and responsive to current priorities as they evolve.

In practice, members of the exchange offer service to their regions in different ways. Some concentrate on technical assistance to staff of state education agencies that are responsible for dissemination and school improvement. Others conduct regional and state workshops on pertinent topics, such as the use of information systems, or school improvement strategies. Other forms of service may be identifying and preparing syntheses of current research in priority areas. In addition, the RDx has sponsored a quarterly publication called *The Educational R & D Report*, which summarizes the results of federally funded educational R & D. Minilists have also been compiled under RDx sponsorship on current educational topics, and some members of the exchange have developed depositories of R & D products that can be loaned to clients upon request.

There is no single model to describe each member of the exchange. Some members have the responsibility to relate to many states across vast areas. Others have more circumscribed territorial limits. This geographic diversity may be a governing factor in the way a particular exchange operates. In one model, an advisory group composed of representatives from each state comes together and negotiates the priorities to be addressed. Workshops and other programs are developed based on content areas agreed upon. An alternative model, selected by another exchange, is based on a conscious decision that limited resources make it impossible for the exchange to reach out to individual schools and priority is given to needs identified at the state level. Once needs are known, this exchange staff concentrates on pulling together a knowledge base and providing technical assistants who work with state and local educators. Together, they develop a process, instruments, and an approach. This concept of dissemination is based on the belief that a knowledge base grows and is disseminated through influential change agents—people in the field who can affect practice. The challenge to the disseminating agency in this model is to bring critical information to the attention of those who are already in a position to effect local change. In this way, a natural, evolutionary shift may occur. According to the research director of one of the exchanges, three critical ingredients must be present to offer districts a quality product and disseminate the results of research so that the practitioner's knowledge grows and practice is affected. First, a quality knowledge base must exist. Second, an agency must be available to assist districts to examine this base; and third, external agents must help districts plan an approach to a problem.[12] Such a communication process assumes that well-trained individuals are already in place in the field. It is these people that the linkers and technical assistants from the exchange hope to identify and work with. This model, although intellectually appealing and credible, is not the only model found in the RDx. Some exchanges tend to be more topical and may even develop "menus" of options on particular topics of current interest to educators.

Information Clearinghouses. Information clearinghouses are another vital link in the dissemination process; they respond to search requests with lists of resources that might contain answers to clients' questions. In essence, the information clearinghouse functions in at least four ways: (1) it builds a database of information or a collection of materials in defined subject areas; (2) it analyzes and synthesizes highly specialized information; (3) it disseminates new developments including findings of federally funded research to selected audiences; and (4) it develops and commissions information products in its specialty area.[13]

The information in a clearinghouse may include databases of bibliographic citations, abstracts of journal articles, reports of research, and other materials that the clearinghouse has judged within its subject scope. Users can gain access to subject bibliographies that have been prepared and deposited in the clearinghouse or search the database for citations to relevant research reports or journal articles. In many instances, the information in the clearinghouse collection comes from active solicitation of people and programs deemed pertinent to the clearinghouse's subject area.

Information analysis and the synthesizing of subject-relevant information for special audiences can take many forms, ranging from informal current awareness bulletins to state-of-the-art reports, reviews of research, bibliographies, directories, and catalogs. Outreach and dissemination involves responding to perceived needs of users from the field by answering questions or conducting specialized searches for qualified clients or primary user groups. Another response to perceived needs may be the commissioning and development of original information products that may or may not be based on information in the clearinghouse.

Perhaps the best known example of an information clearinghouse devoted to education is the nationwide network for dissemination of educational information known as ERIC (the Educational Resources Information Center). Although the major area covered by ERIC is described as "education," this term is used in its broadest sense to include career education, counseling and personnel services, urban education, early childhood education, educational management, handicapped and gifted children, higher education, information resources, junior colleges, languages and linguistics, reading and communication skills, rural education, science/mathematics/environment, social sciences, teacher education, and test/measurement/evaluation. ERIC's primary objectives include: providing access to English-language literature relevant to education; generating new information products on priority topics for purposes of review, summarizing and interpretation; and spreading information on education developments and research findings for educational planning. Although most major federal information agencies are based on the concept of a centralized information facility with staff working under one roof, so to speak, this model was not the one applied to ERIC. A decentralized structure of American education was adopted. Clearinghouses focusing on major educational topics were designated in different geographic locations to acquire documents and engage in dissemination activities.

The ERIC system is particularly pertinent to school media personnel since many studies relating to school library operations are included in the database and can be accessed using two ERIC publications: *Current Index to Journals in Education (CIJE)* and *Resources in Education (RIE)*. Library media specialists will find research reports, evaluation studies, curriculum guides, bibliographies, pamphlets, journal articles, and other "fugitive" material in the ERIC database. The clearinghouse responsible for collecting and disseminating data on studies with particular relevance to the use of information resources is currently located at Syracuse University.

UTILIZATION OF FORMAL AND INFORMAL COMMUNICATION CHANNELS

As pointed out earlier, dissemination of research occurs through both formal and informal channels. The information networks and clearinghouses discussed above are examples of such formal channels. Another obvious example is of course, publication. For the library media specialist *School Library Media Quarterly* is an example of such a formal publication channel, reporting research studies that focus on current issues and problems in providing library media services in schools. Typically, memberships in professional associations entitle members and other subscribers to receive research journals and newsletters. A number of school districts also have developed publications such as guides, reports, and memoranda for transmitting research findings and other useful information.

Identifying, collecting, and circulating appropriate research publications can be considered an important responsibility of the school library media specialist. Numerous and varied titles reporting research studies exist in the field of education. The specialist's role is to identify pertinent ones and establish a system that will disseminate these publications to local clientele. This means developing a list of appropriate titles, and then acquiring and organizing these titles for circulation. In initiating such a system, the following steps could be considered:

1. Prepare and circulate to teachers and administration a preliminary annotated list of key publications reporting the results of educational research. A good starting point would be a listing similar to the one appended to this article.
2. Ask teachers and administrators to suggest other titles that they feel are pertinent to your school's or community's interests.
3. Find out which titles are currently received by personnel in your school and whether or not they would allow the school library media center to circulate personal copies after they have read them. Many individuals might also be willing to donate publications they receive through memberships in professional societies. Although there may be sufficient funds to allow you to place subscriptions for wanted titles, shrinking budgets could be stretched by such donations of useful journals.

This type of activity would address one key problem in the dissemination process—making local persons aware of relevant research. Numerous journals exist in which investigators report the results of sophisticated studies, as well as research efforts at the local level. Developing a system that allows the library media center to acquire the technical documentation and literature is one approach to the problem of dissemination.

Examination of *informal* communication patterns can also help the dissemination process. This informal system is a social one in which ideas and information are communicated through interpersonal exchanges. These individuals exchange ideas, both verbally and in written communications. Often they attend the same meetings or conferences and are constantly informed about changing educational conditions and improved instructional strategies. This informal system operates for all professionals—from researchers to the administrators and other building level professionals who are responsible for introducing change at the local level.

Understanding how the informal exchange of ideas occurs may offer school library media specialists clues to improving their programs and bringing relevant information to their patrons. One key step is to identify local information gatekeepers, i.e., the small group of communication stars that exist within every organization. These people act as links both within their organizations and among their organizations and relevant outside groups. In technical organizations the term *gatekeeper* has been used to describe such individuals who are characterized by the following:

- They read more journals as well as the more sophisticated journals of their field;
- They translate what they read for their colleagues;
- They maintain a broad range of personal contacts within *and* outside their organizations; and
- They act as advisers to colleagues.[14]

Although the library media specialist may be one of these information gatekeepers, other gatekeepers at the building level should be identified and targeted for information dissemination efforts. These individuals should be consulted in determining which formal publications are to be made a part of the school collection and should have an active voice in determining how the key publications are to be routed. These gatekeepers can keep a school media specialist in contact with important events in the field of education.

Although the future of media services at the local building level is not clear, there will surely be a larger and larger segment devoted to information dissemination. As a potential linker in the information dissemination process, it becomes essential for the building level library media specialist to understand the basic structure of how educational research is disseminated and how information

Readers' Queries

ALICE PHOEBE NAYLOR
Associate Editor

Query:

Did not the advent of the theories of moral education develop simultaneously with the decline of morality among the young? I'm not suggesting a connection, but I would like to know what to do about discipline and vandalism in my library. Enough is enough.

Answer:

A search for a response to this thrice-asked question began with a recent issue of the University of Wisconsin alumni news. In an article by Professor Jon Moline, reprinted from a periodical called *Character*[1] (the content of which is related to public and private policies shaping American youth), Moline,[2] a classicist, recommends that we consider classical views of morality in our search for solutions. He says, ". . . when we are trying to teach students about moral issues—and much teaching involves such matters—we are troubled as to what tactic will insure they arrive at 'right' answers. But the approach suggested by Aristotle leads us to take a different tack. His prescription is: it is more important that we teach out students to be judicious—making allowance for their developmental limitations—than to be right. . . ."

Plato is concerned with creating a vital community that would "surround students with adults . . . who had learned worthwhile things themselves." Needless to say Plato also provides definition of the behaviors consistent with being "worthwhile."

Interestingly, both the premise of a vital community and of "worthwhile" adult role models are promulgated by modern theorists. Current research seems to go not much beyond the words of Plato. Both political and social environments and adult and peer influence on adolescents emerge as relevant in the shaping of adolescents, and in overcoming any antisocial behavior.

A study of factors vital to overcoming drug abuse, today often believed to be a major cause of violence and discipline problems, points to interesting relationships between "significant others" and adolescents. One such study[3] of 1,045 New York City junior high school students in 1976 resulted in "the recognition that we must cease regarding drug use as reflecting primarily personality and interpersonal problems." The report of this study lists the following significant factors that influence involvement with drugs:

1. the greater tendency to see his/her neighborhood as "tough";
2. the more esteemed people who are into drugs and gang members are perceived to be;
3. the greater the claimed participation in drug- and street-culture out-of-school activities; and
4. the less frequent the engagement in print-media/stay-at-home spare-time activities.[4]

These results strongly concur with the views of Plato that community standards provide the ideals by which the young live; that esteemed people are emulated; and involvement with others (socialization) provides strength to maintain ideals. In addition, this study identified a fourth significant factor—the engagement with print media. How to facilitate the connection between print media and students generally, let alone with those who have "problems," is of daily concern to librarians and a topic about which our profession needs to assume leadership and to provide research.

Fred Newmann, also of the University of Wisconsin, writing about moral education in the *Harvard Educational Review*[5] also agrees that labeling personality is not the only avenue for study in finding solutions to delinquency. "To gain a complete picture we need to step beyond feelings, to view human situations from more general perspectives that portray systems of political-economic control, the organization of work, and patterns of affiliation."

Newmann proposes guidelines for organizational (school) action that contain the following basic considerations: voluntary choice; clear and consistent goals; small size

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