

# A Review of the Research Related to School Library Media Collections: Part I

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The literature base for this review is composed of the published research studies in the school library media literature over the past thirty years. Emphasis, however, is on research completed since 1975. Over 170 journal articles, textbooks, government documents, and unpublished dissertations were examined to identify the studies included in this review. Additional statistical information concerning budgets and collections for school library media programs that does not appear in the report of the Treasure Mountain Research Retreat is added here.<sup>(1)</sup> In addition, new information has come to the author's attention over the nine months following the retreat that necessitate some revisions to the earlier reported data.

## Budgets and Collection Size

### Budgets and Inflation

The national surveys directed by Miller <sup>(2)</sup> since 1982 provide much of the recent baseline data for long-range comparisons and against which local school library media specialists can compare their budget and collection figures. Data from *The 1989 Bowker Annual* provide price increase information for the same time frame as the Miller surveys. <sup>(3)</sup>

The average per pupil expenditures for books was equal to or slightly greater than the price increase index reported by Bowker for elementary and secondary schools books since fiscal 1982–83. The price increase for all books (hardback and paperback, elementary and secondary) was 41 percent matched to the seven-year period of the Miller instruments. Over this period, the increase in the average per pupil expenditure for library books in the public schools was 51 percent (44 percent if one uses the median figures reported by Miller), from \$4.59 in 1982–83 to \$6.95 in 1988–89.

Additionally, the average per pupil expenditures from the reporting schools in Miller's surveys seemed to keep pace with the increase in prices for periodicals and audiovisual materials (1982 to 1988). The gross price increase for annual periodical subscriptions (elementary and secondary) was 45 percent while Miller reports an average increase per student in expenditures for periodicals of 54 percent. The gross price increase for audiovisual items (film, filmstrips, video programs) was 50 percent while the average per student expenditure increased 80 percent.

Keep in mind, however, that reporting averages is often misleading. Hundreds of school library media specialists can clearly show that the local budget for school library media materials did not grow over the past decade. Miller reports, for example, that schools with large enrollments

(2,000 or more) had an actual decline over the past seven years in per pupil expenditures for books and periodicals. Also, while there may be some increases in budgets, one should not assume that the original baseline for such budgets was ever adequate.

In addition, school library media programs expanded over the past twenty years to include a greater variety of software and equipment and a greater portion of the growing number of quality instructional materials added to the market. Such demands reflect the growth in technology used in school library media centers, the major shifts in establishing new curricular requirements, and the expectations that a wider diversity of students should be served in order to meet their special academic and information needs. Aging school media collections will not meet such demands, and budgets that reflect “no growth” will not allow for infusion of the wide variety of materials now in demand.

The 1987 Williams report, (4) which analyzed statistics gathered nationally during the 1985–86 school year, found that “Library media center mean per year school expenditures (excluding salaries and wages), when adjusted for inflation, declined by 16 percent in public and 14 percent in private schools since the last surveys in 1978 and 1979.”

Williams reported that “Collection items in public schools declined from 71 percent of the total expenditures in 1978 to 62 percent in 1985. Equipment expenditures (including computers) increased from 18 percent in 1978 to 28 percent [of the total nonsalary media center budget] in 1985.” Dollars are being shifted from one part of the budget to another, as opposed to new dollars being added, and the overall library media collection suffers. The 1987 U.S. Department of Education report also stated, “The number of books added to collections has been declining. For example, public schools averaged 502 new books in 1974 compare to 315 in 1985.”

Loertscher, Ho, and Bowie (5) concluded in their study of media programs on exemplary elementary schools that “While many library media specialists are proud of their collections of materials, the majority realize that it is time for a massive effort to renew the collections. . . The major spending of the 1960s coupled with the inflation and declining budgets of the 1970s, has created a problem for supplying materials for budding readers and researchers.”(5)

## **Collection Size**

Williams reported the following conclusions from the 1987 U.S. Department of Education national survey:

- Mean book collections in public schools increased from 2,972 in 1958 to 8,446 in 1985.
- However, in 1985 over half of public school book collections were smaller than the lowest level (8,000) recommended by the 1975 standards.
- In 1985 the median [number of] books per pupil held in public schools was 17 and in private schools [the median number] was 20.

According to the Miller surveys, 1982–1988, there were some shifts in the average number of books and audiovisual items per pupil although the changes are slight and are probably more a

reflection of the different samples taken for each survey as opposed to any substantial changes in the number of items held in the local school media collection. (See table 1)

**TABLE 1**

**Average Number of Books and AV Items Per Pupil  
in School Library Media Centers, by Level,  
as Reported by Miller, et al, 1982-1988**

Materials	Level	Average Number of Items Per Pupil			
		1982-83	1983-84	1985-86	1988-89
Books	Elementary	20.4	19.4	17.0	19.0
	Jr. High/Middle	16.3	15.4	18.0	21.0
	Senior High	17.0	16.2	16.2	18.0
AV Items	Elementary	3.7	3.7	3.3	2.7
	Jr. High/Middle	1.3	2.8	2.4	1.7
	Senior High	1.4	2.4	2.7	1.9

The average number of books in the elementary schools decreased slightly, while the average numbers of books in secondary schools increased slightly. The 1985 Miller survey stated that in most senior high school library media programs, expenditures do not allow for the addition of one new book per year per student. This seems to continue to hold true today.

The average number of audiovisual items per student declined slightly in elementary schools and remained the same in secondary school collections. The data also indicated essentially no growth in the collection size throughout various levels of schools, elementary through senior high, and no substantial changes over the seven years of the national surveys.

**Qualitative Measures**

The data from the 1987 U.S. Department of Education report (referred to above as the Williams report) were used as the national statistical base for identification of public schools that provide high service library media programs. A subsample of 571 schools met the established standards for high service by including such services as a sequential program of library skills, in-service education for teachers for selection and use of media, an active role for library media specialists on curriculum committees, interlibrary loan services, encouraging parents to support reading skills, and facilities and staff for in-school production of materials required for instructional use.

Do these high-service school library media programs also provide a substantially higher investment per student in library materials, facilities, and staff? In most cases, the answer is yes. School library media center programs that provide a high level of information access, instruction,

and reading advisory service have media collection budgets and holdings more than *double* the budgets and holdings of programs that provide few or no such services.

A comparison of data sets shows more substantial investment and collection holdings in schools with high-level service than the national average (see table 2). The Miller figures are based on the results from a questionnaire mailed to 1,500 school library media centers in fifty states, chosen by systematic random sampling from 33,000 school libraries that subscribed to *School Library Journal*. The Williams figures are based on the responses from the 92 percent of public schools that replied from a nationally representative sample of 4,500 in the fall of 1985. The high-service schools represents 571 schools from 3,839 public institutions represented in the Williams survey that met the highest criteria for library services provided. (See table 2)

**High Service School Library Holdings and Expenditures Compared to the National Average for the 1984-85 and 1985-86 School Years**

Level and Enrollment: Average Per Pupil Holding or Expenditure	1985-86 Miller National Average	1984-85 Williams National Average	1984-85 High Service Schools (95th Percentile)
<b>Elementary Schools under 500:</b>			
Number of Book Titles			38
Book Budget			\$16.73
Serial Budget			2.67
Audiovisual Budget			6.82
Total Collection Budget			24.42
<b>Elementary Schools above 500:</b>			
Number of Book Titles			27
Book Budget			\$11.52
Serial Budget			1.70
Audiovisual Budget			5.82
Total Collection Budget			18.34
<b>Elementary Schools all enrollments:</b>			
Number of Books	17		
Book Budget	\$ 4.65		
Periodical Budget	1.04		
Audiovisual Budget	3.05		
Total Materials Expenditures	13.11		
<b>Jr. High/Middle Schools under 500:</b>			
Number of Book Titles			34
Book Budget			\$18.74
Serial Budget			5.49
Audiovisual Budget			6.83
Total Collection Budget			33.83
<b>Jr. High/Middle Schools over 500:</b>			
Number of Book Titles			23
Book Budget			\$12.48
Serial Budget			2.97
Audiovisual Budget			3.88
Total Collection Budget			19.75
<b>Junior High all enrollments:</b>			
Number of Books	18		
Book Budget	\$ 6.25		
Periodical Budget	1.84		
Audiovisual Budget	2.96		
Total Materials Expenditures	16.00		
<b>Sr. High Schools under 500:</b>			
Number of Book Titles			58
Book Budget			\$31.54
Serial Budget			11.36
Audiovisual Budget			13.65
Total Collection Budget			59.65
<b>Sr. High Schools between 500 and 1,000:</b>			
Number of Book Titles			29
Book Budget			\$17.69
Serial Budget			7.47
Audiovisual Budget			7.50
Total Collection Budget			25.76
<b>Sr. High Schools over 1,000:</b>			
Number of Book Titles			21
Book Budget			\$13.73
Serial Budget			4.95
Audiovisual Budget			5.26
Total Collection Budget			24.16
<b>Sr. High Schools all enrollments:</b>			
Number of Books	17		
Book Budget	\$ 7.61		
Periodical Budget	3.55		
Audiovisual Budget	3.31		
Total Materials Expenditures	18.20		
<b>All Schools, Enrollment under 500:</b>			
Number of Books		32	
Book Budget		\$ 9.18	
Serials Budget		2.52	
Audiovisual Budget		2.54	
Total Collection Expenditures		16.34	

## **Formulas**

*Information Power*(6) includes suggested formulas for determining local budgets for materials and equipment. Testing of these and other formulas should take place.

This would allow comparisons among schools in similar settings and identical application of allocations over time. Tjomas and Blake,(7) for example, found that the pragmatic allocation formulas developed by William McGrath have a great deal of relevance to school library collection development. The encouraging aspect is that these formulas are based on factors and weights that take the budget calculation beyond dollar amounts strictly based on per-pupil enrollment. "Attrition of the collection" and "inflation rate" are factors that may help to justify some growth in the budget. Additional factors to consider for inclusion in formulas are the conclusions drawn from analyses of student use of materials, citation analysis, and the degree to which collection mapping and curriculum mapping take place.

## **The Selection Process**

### **Involving Teachers**

Several studies in the 1970s(8) identified the strong influence that teachers exert in the selection process. During this period, social studies, English, and science teachers tended to take the most active role in use of instruction materials. Blazek(9) found a high degree of teacher influence as a major factor in acquisitions of new materials. At the same time, a majority of school library media specialists also reported that they had no systematic process for involving teachers in the selection process! At best, teachers were involved through individual contacts and were seldom involved in collection planning.

### **Dependence on Review Aids**

Belland reported that a "favorable review" was the major factor that seemed to influence the library media specialist in making a final selection for purchase. Studies evaluating review sources (10) consistently raise questions as to their value in terms of being critical and providing enough information to make selections that support the local curriculum. Vandergrift (11) reacted to the conclusion that reviews hold such a high degree of influence by stating, "This would tend to imply that school personnel have neither the time nor the commitment to analyze materials in terms of a particular curricular need. They defer judgment to those persons who are professionally involved in reviewing a wide variety of materials." By not engaging in the preview, teacher committee review, and student feedback processes, the library media specialists forfeit a major communication line by which they can influence curriculum through development of the collection and vice versa.

Blazek (12) provided the most conclusive evidence that more attention should be given to specialized selection guides and teacher committee review and less attention should be given to the general selection journals. He found that two specialized journals, "Arithmetic Teacher and Mathematics Teacher, provided over 80 percent of the relevant reviews pertaining to the subject area of mathematics. Fewer than 5 percent of the relevant reviews were found in *Booklist, School*

*Library Journal, Media and Methods* and *VOYA*. Seventy-five percent of the most relevant materials could be located only through specialized journals.

## **Selection of Nonprint Items**

In the late 1970s, school library media specialists ranked information on grade level and source of reviews for nonprint materials as being more important to them than results of learner verification.(13) This was the case at a time when only one in four library media specialists had access to “hands-on” examination of audiovisual materials through centralized preview centers. Furthermore, few actually used the preview services available because of lack of time for such activity.

Brodeur (14) reported that catalogs, mail advertisements, and sales representatives seem to have as much influence as the opinions expressed by teachers in the final selection and purchase of nonprint materials. A majority of the surveyed media directors reported that they did involve teachers in the preview of films. However, the background of media directors seemed to influence the degree of importance placed on training teachers in media selections: those media directors with a library science education background placed less importance on training of teachers in how to evaluate media than did media directors with a curriculum design background.

Daly-Lewis (15) identified several selection and evaluation practices among building-level library media specialists in New York. This statewide survey produced the following conclusions:

- The library media specialist often did not investigate the claims of the audiovisual software producer;
- The library media specialist usually selected from the first few items noted in catalogs, seemingly unaware of the many options;
- The library media specialist was often unaware of the educational context in which the material would be used;
- The library media specialist seldom considered the possible need for teacher training in order to establish effective use of the software;
- In only a few cases, schools shared their evaluative data of the merits of the software purchased so that other library media specialists could use such information in decisions for purchase of audiovisual materials.

While the majority of the school library media specialists (66 percent) responding to the New York survey indicated that they involve students in the preview of nonprint materials, only 7 percent attempted to gain some student feedback following the preview. None of the school library media specialists reported field testing audiovisual materials to determine “what students learn” from the software.

Most previewing practices seem to involve teacher “screening” of materials sent from the distributor to the school building for a thirty- to sixty-day loan. In the New York survey, schools with higher budgets for audiovisual materials tended to preview nearly all potential purchases. Schools allotted the least amount of money for audiovisual materials tended not to preview.

“Opinion of the teacher,” curriculum applicability” and “age appropriateness” tend to be the key evaluation factors for audiovisual materials. Nonprint collections tend to be built strictly to meet the instructional needs of the classroom teacher. Often material will be purchased to meet only the curricular demand. This means that some items are purchased in order to have at least something in the collection on a particular new topic regardless of the quality of the material.

Additional studies in New York (16) and Pennsylvania (17) have found the audiovisual selection process to be “loose and disjointed,” and identified a need for a more systematic approach. Kahler (18) found that when elementary school library media specialists engaged teachers in “giving and seeking feedback” on selection of audiovisual materials and involved teachers through in-service training for selection and use of audiovisual material, there was substantial increase in the classroom use of such materials.

## **Selection of Instructional Computer Software**

Over the past decade, hundreds of computerized software programs have been placed on the market. Often, especially in the first few years of the “computer revolution,” these programs were not field tested in their intended educational environment.(19) Studies on teacher evaluation of computer software (20) agree that teachers with more experience and exposure to computers tend to rate computer software higher than those without such experience. These studies also show that:

- When a teacher has experience in use of a variety of software on a similar topic, acquisition evaluations will be more specific than the general and often nonconclusive evaluations from teachers who have not examined similar programs;
- Teachers will give more time to evaluation software if they can tell within the first few minutes that the content has relevance to their current class objectives;
- Teachers and students tend to agree on software they do not like, but disagree on software they favor;
- Students tend to favor simulation-formatted programs, while teachers tend to favor tutorials that match established lesson plans.

## **The New Video Revolution**

Over 60 percent of the homes with school-age children now own videocassette recorder/players (VCRs). The growth in video is astronomical during the past four years while educational 16mm film production is stagnant. A majority of public libraries now offer access to extensive video collections not available five years ago.(21) Many of the larger public and academic libraries have dramatically increased the amount of money invested in video-formatted software.(22)

Investigations of the impact of the new wave of video on public education and school library media collections is essential. Trends appear to be toward larger building-level video collections, use of more liberal agreements on duplication and distribution of instructional video, and less emphasis on the use of regional film collections.(23)

## Collection Policies

Prior to 1985, numerous surveys in the school library media field<sup>24</sup> indicated that up to half of the nation's collections have been developed without a written selection policy in place. Miller (25), however, found that in the mid-1980s, a majority of the school library media specialists had a selection policy in place.

Still, while many school library media specialists now appear to have a selection policy on file, questions exist as to how many have a full, written collection development policy (established through committee) that describes the philosophy, long-range plan, and selection and evaluation processes of the library media collection.<sup>(26)</sup> It is the written collection development policy that articulates a clear direction for gathering quality instructional materials as well as the level of involvement of teachers and students in the selection process.

In terms of censorship, studies conclude that the presence of a well-constructed and board-approved policy will not decrease the likelihood of a challenge to specific controversial titles in the school library collection. Presence of such a policy will, however, increase the likelihood that challenged materials will be rarely reviewed and more often retained.<sup>(27)</sup>

## Librarians As Censor

Several studies indicate that selection decisions made by school library media specialists are influenced by their perceived narrow standards of the community or the self-imposed narrow standards of the school library media specialist. Warnings contained in book reviews overly influence the acquisition practices of many school librarians.<sup>(28)</sup> Written policies may help to counter not only the local biases found in many communities, but also broaden the selection criteria of some school library media specialists. Written policies may prove to be the difference between an unwillingness to "take a risk" and the willingness to "innovate with a progressive collection" in support of the information needs faced by today's young people.

The research on policy development focuses mainly on intellectual freedom issues. More attention needs to be given to the impact of written policy on the development of a quality collection in support of the educational goals and objectives of the local school system. Research in this area could test methods for evaluation of the collection, community analysis, learner analysis, and how knowledge gained from such local studies modifies the content and emphasis of the locally-written collection development policy.

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