

# An Analysis of the Time Use of Elementary School Library Media Specialists and Factors That Influence It

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[Jean Donham van Deusen](#), Assistant Professor, University of Iowa, School of Library and Information Science

Elementary library media specialists in Iowa logged their time use for two days, recording at fifteen-minute intervals. Time use was classified into fifteen categories. Descriptive measures indicated nearly equal amounts of time for direct services and for management and operations activities. Automation, scheduling, support staff, and number of buildings served by the library media specialist were found to have a significant influence on how time was used. In addition, participants reported characteristics of their school and library media center related to automation, scheduling, staffing, and adoption of whole-language instruction.

Time studies in the literature have focused attention on secondary school library media centers. Barrett and Schon (1) surveyed secondary school library media specialists to determine what tasks they considered important and their estimates of time spent on various tasks. The findings of Barrett and Schon suggest that secondary school library media specialists placed a high value on direct services to teachers and students but spent a substantial proportion of their time on management and operations tasks.

Everhart (2) analyzed the relationship between automation and the work activities of high school library media specialists and found that the high school library media specialists in her study who had automated circulation systems spent significantly more time in "development of the educational program," with particular emphasis on instructional development and use of technology. Those without automation spent significantly more time in production and circulation activities. No difference was found in the categories of administration, instruction, selection, processing, clerical work, providing access, reference, organization, or personal time. In her response to the Everhart study, Carol Truett offered several suggestions for further study.(3) She suggested that there are substantive differences between elementary and secondary school library media programs, and such differences are likely to produce quite different results. She conjectured that the influence of flexible scheduling in elementary library media centers might have an impact on how time is used.

## Methodology

The intent of this study was to investigate the use of time for elementary library media specialists. The following research questions were posed:

1. How do elementary library media specialists spend their time?

2. What are the effects of five independent variables on the ways in which elementary school library media specialists spend their time?
  - *Automated circulation systems.* Typically the circulation activity in elementary schools is much greater than in secondary schools. While secondary school students often use materials in-house and tend to use periodical and reference material heavily, elementary school children tend to check out library books to take to their classrooms or homes. Classroom teachers often expect elementary school children to have books available to read at all times. Elementary school teachers tend to check out large numbers of books for their classrooms. Unlimited circulation policies are growing in popularity among elementary schools as use of trade books in classroom work increases. Circulation is a major task for the elementary school library media program.
  - *Scheduling.* The essence of flexible scheduling is to change the way time is used in the library media program. Its impact on the professional work of library media specialists can indicate whether it is indeed leading to furthering the roles identified in Information Power.
  - *Support staff.* Lack of support staff is a difficult problem for elementary school library media specialists. It is less customary to provide substantial paid support staff at the elementary level than at the secondary level because of smaller enrollments or perceived need.
  - *Whole language.* Does the adoption of a whole-language approach influence the time use of elementary library media specialists? The emergence of the whole-language approach to teaching reading and language arts has been perceived as influencing the work of the library media specialist.
  - *Number of buildings served.* Does the work of library media specialists change when they are assigned to more than one school? Small school size and budget constraints have encouraged some school administrators to assign library media specialists to more than one school. Serving more than one facility would seem to result in less direct service to students and teachers.

The Iowa Educational Media Association is the state affiliate of the American Association of School Librarians. It is the only state professional association for school library media specialists in Iowa. In 1994–95 it had a total membership of 696. One field in the membership database identifies the level at which the member works (e.g., K–12, high school, middle/junior high school, elementary, higher education, student, retired). All 177 members identified in the database as elementary school media specialists (not K–12) were sent a questionnaire and asked to respond to questions about their school and professional assignment. These questions included the following topics:

- Availability of automated circulation and catalog
- Quantity of paid support staff
- Type of scheduling method: flexible, mixed, or fixed
- Characterization of the school as a “whole-language school”
- Whether the principal was positive in support of the library media program
- Full-time equivalency of the library media specialist
- Number of buildings the library media specialist served

In addition, each participant monitored time for two specified dates in April 1995, recording his or her activity at fifteen-minute intervals from 8:05 a.m. to 4:05 p.m. each day for a total of sixty-six entries over the two-day period. Instructions asked participants to record the activity at the moment, not during an interval. Library media specialists who served more than one building were asked to report their activity for only one of the schools—namely, the second school in alphabetical order. They reported their activity for sixty-six time segments starting with the designated start date (April 1995) and continuing until they had been in the school enough time to complete the log. In this way, their reporting reflected the same amount of time within one building as full-time library media specialists serving one school, and they were also able to respond to the questions regarding characteristics of the school. They did include travel time in their reporting. Those who worked part time likewise began their recording on the designated starting date but continued to log activities until they had completed the sixty-six time slots on the log form. In this way, the total sample of work was consistent for all participants. Of the 177 questionnaires sent, 90 responded with complete data; an additional 15 were incomplete and therefore unusable; and three were returned by the post office for incorrect addresses. Therefore, 52 percent of the 174 delivered were usable.

Each activity reported by the participants was coded into one of fifteen categories. A preliminary study in the Osseo Area School District in Minnesota had provided the basis for development of the categories. When library media specialists reported that their days ended before 4:05 p.m., the times recorded between their end-of-day and 4:05 p.m. were recorded as “Personal Tasks” (see table 1).

### **Table 1.** Library Media Specialist Task Categories

#### Direct Services to Teachers and Students

##### Electronic Support

- Troubleshooting equipment
- Setting up equipment
- Videotaping
- Installing software
- Seeking technical support
- Meeting with or talking to district technologists regarding hardware or software support

##### Teaching

- Teaching library media lessons to large or small groups

##### Story Time

- Helping individual students find or use information
- Helping individual students use electronic resources

##### Reading Guidance

- Book talking
- Giving individual book selection assistance to students

### Consulting

- Planning with teams or individual teachers
- Locating or gathering materials for teachers
- Teaching a teacher about a piece of software

### Supervision

- Supervising students either in the library media center or elsewhere

### Management and Operation Tasks

#### Management

- Working on budget
- Meeting with administrators
- Scheduling
- Supervising work of support staff or volunteers
- Communicating with faculty or staff regarding policy or scheduling or operation
- Reading mail
- Staff meetings
- “Paperwork”

#### Cataloging

- Creating or editing cataloging records
- Processing materials
- Maintaining catalog Professional Development
- Attending inservice on technology
- Attending inservice on educational issues

#### Planning

- Planning lessons for library media instruction
- Learning to use a piece of software in anticipation of teaching it to students or faculty

#### Selection

- Reading reviews
- Making purchase decisions

#### Clerical

- Typing orders or correspondence
- Filing
- Putting up displays

#### Circulation

- Checking materials out or in
- Editing patron data in circulation records
- Preparing overdue notices
- Re-shelving materials

#### Personal

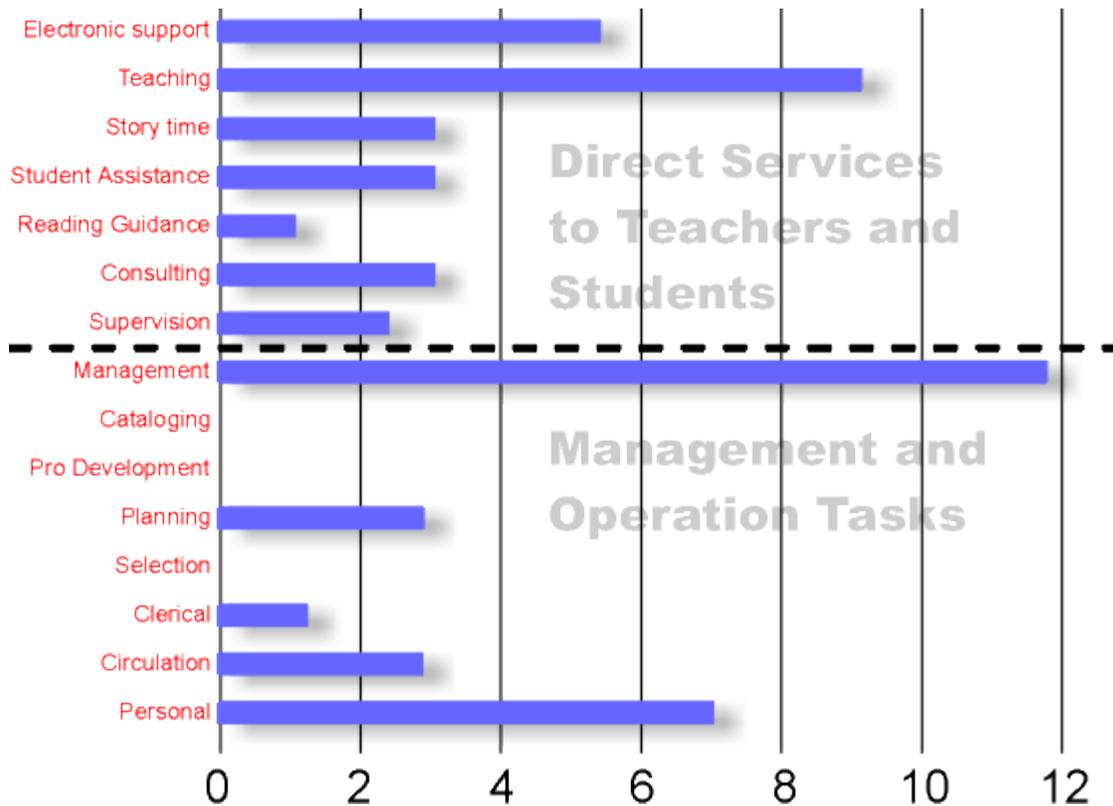
- Lunch
  - Break
  - Leaving for the day
  
  - Travel between buildings
- 

## Results

Of the 90 respondents, 57 worked full time in a single building; the remaining 33 worked either full time but served multiple schools or worked part time serving one or more schools. Seventy-two respondents described theirs as whole-language schools. All but two respondents answered the question regarding principal support; of those 88 respondents, 82 described their principal as supportive of the library media program. Only 19 of the respondents indicated that they still had manual circulation, whereas 51 reported that they still had card catalogs. Based on the median value of 30 hours, availability of support staff was divided at the 30-hour-per-week point. Of the 75 respondents who indicated support staffing levels per week, 54 reported that they had 30 hours or more. Only 4 reported having no paid support staff at all, and 65 percent reported having support staff between 24 and 48 hours per week. Values represent number of instances reported out of sixty-six over the two-day period.

Overall activity was divided nearly evenly between those activities that constitute direct work with or for students and teachers and those that are management and operation of the library media center itself. The median values for direct services to teachers and students are identified above the dotted line of figure 1. Activities below the dotted line are operational and management tasks.

**Figure 1.** Median Values for Library Media Specialists Tasks



The median scores for cataloging, professional development and selection tasks are noteworthy because they are all zero. These activities did occur since the mean is greater than zero (see table 2), but most such activity must have occurred beyond the standard working day or occurred so seldom that fewer than one-half of the respondents did these tasks during the data collection. In contrast, in the Everhart study of secondary library media specialists, selection was an activity that represented on average more than 6 percent of the time use reported. Selection in the elementary group was 2 percent, and the mean was influenced by a few respondents reporting high values for this variable, as evidenced by the fact that the standard deviation is twice the mean value.

**Table 2.** Library Media Specialist Activities for Two Days

**Table 2**

**Library Media Specialists' Activities for Two Days (N = 90)**

Activity	Median	Mean	Std. Dev.	Maximum	Mean %
Direct Service					
Electronic support	4.0	5.2	5.2	27.0	7.9
Teaching	8.0	10.8	8.1	34.0	16.4
Story time	3.0	3.9	4.0	23.0	5.9
Assist student (individual)	3.0	3.9	4.5	26.0	5.9
Reading guidance	1.0	2.4	3.0	14.0	3.6
Consulting	3.0	3.8	3.6	17.0	5.8
Student supervision	2.0	2.3	2.2	11.0	3.5
Total mean percent					49.0
Management and Operation Tasks					
Management	12.0	12.3	6.1	29.0	18.6
Cataloging	0.0	2.0	3.6	22.0	3.0
Professional development	0.0	1.4	2.8	10.0	2.1
Lesson planning	2.5	3.3	3.0	15.0	5.0
Selection of materials	0.0	1.3	2.5	12.0	2.0
Clerical tasks	1.0	1.7	2.3	9.0	2.6
Circulation tasks	3.0	4.5	4.9	27.0	6.8
Personal tasks	7.0	7.2	3.9	20.0	10.9
Total mean percent					51.0

Often the question of how much time library media specialists actually spend teaching arises. This group of respondents reported spending 16.4 percent of their time in direct teaching, in addition to the time spent presenting stories to groups of children. Including the story times, these library media specialists reported that 22.3 percent of the reported activities represented time spent meeting with groups of children. It is interesting to note that the Everhart study reported that approximately 6 percent of high school library media specialists' time was used in instruction. The two sets of data are not comparable statistically because the categories of activity are not matched, yet this finding differs considerably from the percentage of teaching time among these elementary library media specialists in this researcher's study. On the other hand, Everhart reported 14 percent of secondary library media specialists' time spent on reference; the most analogous category in the current study would be individual student assistance, which totaled 5.9 percent. Because of the differences in categorizing data, it is not appropriate to compare for statistical significance. But certainly these general observations signal

substantial variation between the work activities of elementary and secondary library media specialists.

In examining the influence of characteristics of the school and program on the use of time by the library media specialist, several interesting patterns emerged. Of particular interest were the influences of automated circulation systems, scheduling, availability of support staff, and number of schools served.

**Teaching and story times.** A concern about flexible scheduling has been that if library media specialists move away from fixed scheduling, they will lose contact time with students because they will teach less. Library media specialists with flexible scheduling did report slightly fewer teaching instances in the two days (9) as compared with those with fixed or mixed schedules (11.9 and 11.0, respectively), but the difference was not significant. This finding offers support that flexible scheduling did not diminish the teaching role. Story times likewise showed no significant difference between those with fixed schedules and those with mixed schedules; those with flexible schedules, however, did report significantly fewer instances of story times than those with fixed schedules (see table 3).

**Table 3.** Schedule and Teaching Activities

	Fixed Schedule	Mixed Schedule	Flexible Schedule	p value	
	(N = 21) Mean	(N = 55) Mean	(N = 13) Mean	Mixed/Flexible	Fixed/Flexible
Teaching	11.9	11.0	9.0	n/s	n/s
Story time	5.1	3.9	2.2	n/s	.04

It is impossible to know all the features of the schools represented in the three groups. Perhaps the progression from fixed to mixed to flexible scheduling for both of these activities shows a progressive change in paradigm. Treating the library media center as a special classroom may be most prevalent in fixed-schedule programs in which on average nearly one-fourth of the time is spent working with whole classes of students, either teaching or presenting literature. The reporting of minimal amounts of story time in flexible schedule settings suggests that this activity was yielding to other demands. Commitment to whole language was found to have no significant influence on teaching or story time activity; of the ninety respondents, seventy-two reported their schools' reading and language arts curriculum as whole-language programs.

**Electronic support.** Library media literature is replete with articles describing the invasion of electronics in schools. Computer-based teaching and learning are widespread, and often the library media specialist is perceived as the building expert for the instructional use of electronic resources. Among these participants, the availability of an automated circulation system was

significantly related to how many instances of providing support for electronics were reported. Electronic support activities included troubleshooting equipment, setting up equipment, videotaping, and installing software. It did not include teaching or recommending software to a teacher; this activity was considered consultation. Nor did it include helping students to use electronic resources, which was classified as assistance to students. It did not include such activities as maintenance of automated catalogs or other information resources in the library media center or editing catalog records; these tasks were classified as cataloging. And it did not include learning new software. “Electronic support” was technical support. Library media specialists who had automated circulation systems provided significantly more technical support than those without it (see table 4). Perhaps these library media specialists had developed skills and confidence by learning to use their own systems. Teachers may perceive these library media specialists as having more skills because they were often seen using a computer. They may work in schools with more technology, including their automated system, and so have more electronic support needs.

**Table 4.** Circulation and Electronic Support

<b>Table 4</b>			
<b>Circulation and Electronic Support</b>			
	<b>Automated Circulation (N = 71) Mean</b>	<b>Manual Circulation (N = 19) Mean</b>	<b>p value</b>
Electronic support	5.8	2.7	.020

Scheduling pattern was the other factor that showed a significant relationship to the number of entries classified as electronic support. Those respondents who reported working in fixed-schedule situations listed significantly fewer instances of providing electronic support than those with flexible scheduling or its variant, mixed scheduling (i.e., some flexible, some fixed) (see table 5). This difference is not likely to be explained by fixed-schedule sites having far more teaching time, because fixed-schedule programs did not differ significantly from mixed- or flexible-schedule programs in teaching occurrences. Perhaps the old paradigm of library media programming (i.e., weekly scheduled classes as a “special case”) signals other old paradigms in the school as well. Perhaps these schools had not embraced technology, and so the demands for electronic support are fewer. This finding may strengthen the position that scheduling is part of a school’s system, and systemic change will be needed for more flexibility in scheduling as well as for other reforms.

**Table 5.** Schedule and Electronic Support

<b>Table 5</b>			
<b>Schedule and Electronic Support</b>			
	<b>Fixed Schedule (N = 21) Mean</b>	<b>Flexible or Mixed Schedule (N = 68) Mean</b>	<b>p value</b>
Electronic support	3.2	5.8	.043

**Individual assistance to students.** One activity that was significantly higher in schools with flexible scheduling is individual assistance to students (see table 6). Activities in this category include helping students to locate information or extract it from print or electronic resources or helping students to use software. One of flexible scheduling's intents is to open access for students, and indeed these findings suggest that individual students sought and received individual assistance from the library media specialist more in the flexible- or mixed-scheduling schools than in those with fixed schedules.

**Table 6.** Schedule and Individual Assistance to Students

<b>Table 6</b>					
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	<b>Fixed Schedule (N = 21) Mean</b>	<b>Mixed Schedule (N = 55) Mean</b>	<b>Flexible Schedule (N = 13) Mean</b>	<b>p value</b>	
				<b>Mixed/Flexible</b>	<b>Fixed/Flexible</b>
Student assistance (individual)	1.9	4.1	6.7	.002	.049

Two other factors influenced the incidence of individual student assistance. Whether library media specialists were assigned to a single building or to multiple buildings had a significant impact on their providing individual assistance to students (see table 7). This would be an intuitive expectation because they cannot provide assistance when they are not physically available. Those who had automated circulation systems also provided more individual assistance. There was no significant difference between those with and those without automated catalogs.

**Table 7.** Individual Student Assistance

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**Individual Student Assistance**

	Automated Circulation (N = 71) Mean	Manual Circulation (N = 19) Mean	p value	Single Building (N = 70) Mean	Multiple Buildings (N = 20) Mean	p value
Student assistance	4.4	2.1	.040	4.6	1.5	.005

This finding parallels the impact of automated circulation on the electronic support provided to teachers. If schools with automated circulation systems have more information technology in general, it follows that more individual assistance might be sought by students in electronically rich schools. Perhaps individual students are more attracted to library media centers characterized by greater electronic resources.

**Consulting with teachers.** The consultation role described in *Information Power* has challenged library media professionals to view teachers as an important client group. The role involves working with teachers as they prepare to teach and sometimes participating with them in the delivery of instruction. Tasks include planning lessons or units with teachers, locating and gathering materials for instruction, helping to design activities for student learning, and providing instruction to teachers, individually or in groups, on new technologies and new resources.

Several factors were related to the occurrence of consulting, and all of these are directly related to time. Automated circulation, available paid support staff, class scheduling pattern, and assignment to a single building are all factors that gave the library media specialist more time (see table 8). Time saved appeared to be used, at least in part, to provide services to teachers.

**Table 8.** Consultation Tasks

**Table 8**

**Consultation Tasks**

<b>Tasks</b>	<b>Mean</b>	<b>p value</b>
Automated circulation ( <i>N</i> = 71)	4.2	—
Manual circulation ( <i>N</i> = 19)	2.4	.046
Single building ( <i>N</i> = 70)	4.2	—
Multiple buildings ( <i>N</i> = 20)	2.4	.044
Support staff ≥ 30 hours per week ( <i>N</i> = 54)	4.4	—
Support staff < 30 hours per week ( <i>N</i> = 31)	2.8	.044
Flexible or mixed schedule ( <i>N</i> = 68)	4.4	—
Fixed schedule ( <i>N</i> = 21)	2.2	.018

All four of these factors suggest that in those schools where there was fiscal and organizational support for the library media program, the performance of the consultation role was greater. Expending dollars for automated circulation and support staff is an administrative decision. There must be a case made for such expenditures, and there is undoubtedly some expectation of benefits from them. One can speculate that those library media specialists who successfully advocated for automation and support staff have also provided increased service in the form of teacher consultation. Likewise, investment in a professional to serve just one building rather than multiple buildings represents administrative confidence in the potential of the library media program to make a positive difference. (Respondents' responsibility ranged from one building to nine schools.) Finally, flexible or mixed scheduling often represents a change from a traditional fixed-schedule program; advocacy and administrative confidence are often factors here as well. These findings suggest that such investments and advocacy result in significant difference in the consultation activities of the library media specialists.

**Clerical and circulation tasks.** Clerical tasks and tasks involving circulation together represented on average 9.4 percent of the time monitored. Efficient school management minimizes the time a professional spends on clerical tasks to maximize the use of a highly skilled, highly paid employee. The results of this study give some clear indications of choices that can be made to improve the likelihood of library media specialists using their time to accomplish professional work rather than clerical work.

Installation of automated circulation systems and provision of sufficient paid support staff were significantly related to reduced clerical work (see table 9). These clerical tasks appear to have given way to services to teachers because they were also related to increased consulting activity. When teachers and principals both want professional services, it seems that these two investments in assistance can increase the consulting services. Library media specialists with fixed schedules reported significantly more instances of performing nonprofessional tasks. Explanations for that could be either the choice of the library media specialist to perform this work or the limited expectations for higher-level professional work.

**Table 9.** Clerical and Circulation Desk Tasks

	Clerical Mean	p value	Circulation Mean	p value
Automated circulation ( <i>N</i> = 71)	1.4		3.8	
Manual circulation ( <i>N</i> = 19)	2.8	.012	6.8	.017
Support staff ≥ 30 hours per week ( <i>N</i> = 54)	1.3		3.0	
Support staff < 30 hours per week ( <i>N</i> = 31)	2.6	.050	7.0	.0003
Flexible or mixed schedule ( <i>N</i> = 68)	1.4		3.8	
Fixed schedule ( <i>N</i> = 21)	2.6	.041	6.3	.041

**Management.** Tasks related to management of the program accounted for approximately 18 percent of the entries among respondents. Responses indicate that a particularly time-consuming management task is staff meetings, which were characterized as meetings to contend with management issues in the school, to coordinate upcoming events, and to discuss student management issues. Other management tasks frequently listed were working on budgets, scheduling activities, and supervising paid and volunteer support staff by assigning work to be done, responding to questions, clarifying tasks, and reviewing tasks accomplished. Those library media specialists with flexible scheduling reported significantly more instances of performing managerial tasks than those with fixed or mixed schedules (see table 10). Perhaps flexible scheduling demands more management, or perhaps these programs have evolved into more complex organizational entities.

**Table 10.** Management and Scheduling

	Fixed Schedule (N = 21) Mean	Mixed Schedule (N = 55) Mean	Flexible Schedule (N = 13) Mean	p value	
				Mixed/Flexible	Fixed/Flexible
Management	11.0	11.9	16.1	.02	.03

## Implications

Direct services to students and teachers constitute the output of the library media program. Increasing output is likely to be a goal for library media specialists wanting to improve the performance and impact of their programs. For increased direct services to students and teachers, several factors were significant.

- Several direct services were positively influenced by automated circulation systems: consultation work, instances of providing individual assistance to students, and electronic support for teachers using technology. Automated circulation also appeared to reduce the nonprofessional work performed by library media specialists.
- Flexible or mixed scheduling had a positive relationship to individual assistance to students, provision of electronic support for teachers, and consultation work performed for teachers, while it appeared to be related to reduced time spent on nonprofessional tasks. There was evidence of increased time spent on management with flexible scheduling. There was no evidence of significant loss in teaching, although the amount of story-time activity was lower among flexible-scheduling programs.

Availability of support staff was related to increased consultation work for teachers as well as a reduction of nonprofessional tasks.

While direct comparisons with previous studies of secondary school library media specialists' work activities would not be statistically valid, general comparisons of patterns suggest some meaningful differences between the work activities at elementary and secondary levels. Comparisons between the findings of the Everhart study and the current study reveal that more teaching and circulation activity were reported among elementary media specialists in the current study, whereas more selection and reference work were reported among the secondary respondents in the Everhart study.

Perhaps this current study can provide baseline data for tracking trends. There is considerable speculation that electronic support activities have increased and will continue to increase in library media programs. A replication of this study in three years may help to document that potential trend. Likewise, an investigation into the decrease in story-time activities, particularly

with the spread of literature-based instruction and whole-language approaches in reading and language arts, is worth pursuing to determine whether a trend toward less story-time activity is real. In this study, 80 percent of the respondents described their schools as “whole-language” schools; thus it was difficult to determine whether there were differences in schools without whole language.

As organizations grow more complex with increased site-based decision making, more team planning and team teaching, more multi-age groupings, more active learning, and other current trends in education, the need for increased management activities may exist. In this study, more management was associated with flexible scheduling. Further investigation into the time spent on management and these educational reforms may give insight into the library media program’s development in concert with changes in schools.

Finally, an examination of the demands on the time of the library media specialist indicates the types of continuing education needed for library media specialists and the areas to be emphasized in preservice education as well. The dominance of management, teaching, and electronic support suggest these are areas for professional development emphasis. How time is used can help reveal what activities are valued by the library media specialists and those they serve.

## References

1. Barbara K. Barrett and Isabel Schon, “Are We Doing What We Think Is Important?” *The Book Report* 8 (May/June 1989): 26–27.
2. Nancy Everhart, “An Analysis of the Work Activities of High School Library Media Specialists in Automated and Nonautomated Library Media Centers,” *SLMQ* (Winter 1992): 86–89.
3. Carol Truett, “Responses to ‘An Analysis of the Work Activities of High School Library Media Specialists in Automated and Nonautomated Library Media Centers,’” *SLMQ* (Winter 1992): 96–97.