Budget expenditures of high school library media centers in southern New Jersey

Patricia V. Glave
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BUDGET EXPENDITURES OF HIGH SCHOOL LIBRARY
MEDIA CENTERS IN SOUTHERN NEW JERSEY

by
Patricia V. Glave

A Thesis
Submitted in partial fulfillment of the requirements of the
Master of Arts Degree
of
The Graduate School
at
Rowan University
May 5, 2003

Approved by
Professor

Date Approved May 8, 2003

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This study examined the expenditures of southern New Jersey high school library media centers for the 2001-2002 school year. The applied research design employed mailed questionnaires to collect data from the sample of library media specialists from all public high schools in Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Ocean, and Salem counties in New Jersey. Descriptive survey research and statistics were used to describe the characteristics of expenditures in print, non-print and electronic resources for 56 responses. Relationships between expenditures and socioeconomic rank were discussed, as were sources of funding.

As a region, public high school library media centers were found to be spending less on materials than the national average. High school LMCs in the region devoted a larger percentage of their total materials expenditures to print materials and electronic resources than their counterparts nationally. There was a relationship suggested between the DFG and the level of expenditure per pupil.
ACKNOWLEDGEMENTS

I would like to thank my husband for his support and advice, and for not complaining about the many dinners alone. I would also like to thank Dr. Marilyn Shontz, who inspired this research during my first semester as a library student.
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New school library media specialists are faced with a great many challenges. Along with other job responsibilities, they must select materials, teach a variety of skills, collaborate with teachers, prepare budget proposals, and manage collections.

The American Association of School Librarians’ (AASL, n.d.) *Position Statement on the Value of Library Media Programs in Education* maintains that “to guarantee every young person an equal and effective educational opportunity, officials must provide each school with library media facilities and resources to meet curriculum needs.” The statement continues with the AASL commitment to the development of strong library media programs in all schools.

The school library media center must support the curriculum of the school and provide materials for enrichment in all area of students’ interests. Library media center budgets include more than print materials. The incorporation of technology into schools has resulted in the demand for more information to be made available in non-print and electronic formats.
Statement of the Problem

In recent years school budgets have been defeated in a growing number of school districts in southern New Jersey. As cuts are made, they typically affect all areas of the school to some extent. Studies have examined trends in school library media center expenditures on a national and regional level. There has been no study of high school library media center expenditures in the school districts of southern New Jersey.

This study compared school library media center expenditures in southern New Jersey high schools. Questions addressed included:

1. What were the average annual expenditures and per pupil expenditures for high school library media centers in 2001 – 2002?
2. What percentage of these annual expenditures was spent on print, non-print and electronic media?
3. Was there a relationship between the district factor group rank of a school and the level of the per pupil expenditure?
4. How was the budget funded?

Rationale

High school library media specialists (SLMS) in southern New Jersey have few local resources for developing budgets and planning expenditures. Records of prior years’ expenditures in individual schools may exist and be available within the district. A local organization of SLMS may offer guidance. There are regional and national statistics on school library media center expenditures, but none for high schools in southern New Jersey school districts.
School library media specialists must balance the information needs of today’s high school students within the limitations of the budget. It would be valuable to examine how high SLMS in the school districts in southern New Jersey are spending their budget funds. Such information would enable SLMS to compare their own expenditures to other local school library media centers to more clearly see what their own budgets may accomplish.

Definition of terms

Budget: A financial plan that reflects the goals, objectives, and priorities of a library media center. A budget is developed for a specified time period to indicate the planned expenditures for that year based on anticipated income (McCain & Merrill, 2001, p. 28).

District factor group (DFG): The DFG is an index of socioeconomic status in New Jersey that was created using data for several “indicators” available in the decennial Census of Population. The DFG is a composite statistical index created using statistical procedures, a “model” of socioeconomic status, and input data for various socioeconomic traits. Seven indices utilized as the principal components to produce a statistical score are as follows: percent of population with no high school diploma, percent with some college, occupation, population density, income, unemployment and poverty. Districts were then grouped so that each group would consist of districts having factor scores within an interval of one tenth of the distance between the highest and lowest scores (New Jersey Department of Education, n.d., The DFG Model).
Expenditures: Funds used to acquire or upgrade physical assets such as property, plant, or equipment (Grove, 1981, p. 800).

Library media specialist: The professional administrator of a library media center who has the appropriate degree and meets the requirements for state certification. Library media specialist is used interchangeably with the term school librarian (McCain & Merrill, 2001, p. 114).

Electronic resources: An information collection that shares a common characteristic such as subject discipline or type. These collections are published electronically by public or private database producers and made available for interactive searching and information retrieval (McCain & Merrill, 2001, p. 142).

Non-print resources: For this study, audio recordings and visual recordings.

Print resources: For this study, books, print periodicals, newspapers, and microforms.

School district: The geographical area served by a public school system (McCain & Merrill, 2001, p. 174).

School library media center: An area in a school that contains varied formats of materials and equipment with programs and services provided by a library media specialist and additional staff as needed and as funds are available. It functions as a learning laboratory for students. This is the more current term for school library (McCain & Merrill, 2001, p. 113).
Assumptions and Limitations

This study assumes the library media specialist at each high school has the responsibility of budget spending. It also assumes the 2001 – 2002 school year expenditures were representative of most recent school year expenditures.

The study will be limited to responses from SLMS in public high schools in the following counties of southern New Jersey: Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Ocean, and Salem.
References


CHAPTER 2
REVIEW OF LITERATURE

Studies on Expenditures for High School Library Media Centers

Since 1983, School Library Journal has been publishing a biennial study of school library media center expenditures nation-wide. The studies have, in more recent years, seen the median total materials expenditures grow from $11,144.00 in school year 1995-1996 (Manzo, 1997) to $14,047.00 in 1999 – 2000 (Miller & Shontz, 2001).

The studies done by Dr. Marilyn Miller, professor emeritus and former chair of the Department of Library and Information Studies at the University of North Carolina in Greensboro, and Dr. Marilyn Shontz, associate professor in the library education program at Rowan University in Glassboro, NJ, survey populations of school library media specialists randomly chosen from School Library Journal subscribers covering all 50 states.

The studies provide “an up-to-date account and a longitudinal view of national trends in school library media spending” (Miller & Shontz, 1999, p. 2). Besides data relating to expenditures for materials, the studies also collect data on other facets of the school library media programs. The use of technology, educational level of library media center staff, services offered, and funding sources have also been surveyed and reported.

The survey reported on in October 1999 was sent to 1500 school media specialists in September 1998. There were 537 responses, a 38.2% response rate. Another Miller
and Shontz study conducted in September 2000 had 1530 surveys mailed to a similar sample population of school media specialists with a response rate of 39.8%.

The Miller & Shontz (2001) study reported the national per pupil total materials expenditure in school library media centers was $21.85, with high school media centers in the Northeast spending $31.86 per pupil.

Other studies have been done locally. One study surveyed high school library media programs in the 5 counties near Atlanta. Questionnaires were mailed in January 1993 and 72 were returned for a 77% response rate. The mean annual expenditure for high schools in the Atlanta area for the 1991-1992 school year was $17,092. Of this nearly 50% of the expenditures were on print materials and another 25% on technology (Kurk, 1993).

Callison & Knuth (1994) sent surveys to all Indiana schools, both public and private, with library media centers. Data were collected from September through November 1993. They received 823 responses, a 44% response rate. They reported Indiana school library media center expenditures were 5 to 8 years behind the national average, at about 39% below the average. This even with the average expenditures in the state increasing by 30% between 1985 and 1993.

In Texas, May Lankford, the state Education Agency’s director of library services and educational technology, reported $30 per pupil was being allocated in the school year 2001-2002 budget for technology and only $.30 per pupil for books. “Tech is glitzy and people like to see those kids on computers” she says. She stated she did not believe the state would change this level of spending (Ishizuka, Minkel & St. Lifer, 2002, p. 50).
Expenditures for Types of Resources

School library media specialists buy a variety of materials for use by students and staff. Print, non-print and electronic resources are all commonly purchased in schools at all levels.

In the Miller and Shontz 1989 study, print materials were purchased at a rate of about $5.50 per pupil. The AIME study in 1993 reported an average of $7.38 was being spent in Indiana public schools for books and periodicals (Callison & Knuth, 1994). Atlanta area schools used 48% of their total expenditures for print materials (Kurk, 1993). This was close to the level of median expenditures for print materials in the 1999 Miller and Shontz study of nearly 46%. By 2001, Miller and Shontz reported a drop to 44% of the media center expenditures being used for print materials. Since the total materials expenditures rose 27% from $17,474 to $22,250 in these studies, increases in expenditures were in other types of materials.

Expenditures for non-print materials held steady in both the 1999 and 2001 reports by Miller and Shontz at 9.7% and 9.6% of the total materials expenditures respectively. Clearly the increase was not in non-print resources.

Electronic resources were the fastest growing of the materials expenditures. These resources can be expensive, so it is not surprising that an increasing amount was being spent on these resources.

Kurk (1993) reported Atlanta area high schools spent 23% of their budget on technology. Manzo (1997) reported on the Miller and Shontz 1995-1996 school year survey that showed the median expenditure for computer software had risen nearly $200 to $700 per school since the 1993-1994 survey.
Miller and Shontz reported a median of $2500 in expenditures for electronic resources in the 1999 study, 14.3% of the total materials expenditures. This increased to $4000 or nearly 18% in the 2001 report.

Sources of Funding

Bernstein (2002) listed several ways a library media specialist might increase funds available for use by the library media center. Fundraising by community sources such as parent teacher organizations or other local organizations may be suggested to benefit the library media center. Donations of books from a media center wish list as “birthday books” or gift books were being used in library media centers as a way to increase the collection. Applying for grants through several programs was another source of funds.

Callison and Knuth (1994) reported that a total of $2.47 per pupil was being received by Indiana public school library media centers in federal funds. They cited the Millbrook 1990 study that reported 59% of media centers studied did not receive federal funds.

More recent studies by Miller and Shontz (1999) reported an average of $2594 in federal funds were received by 144 of the 532 library media centers responding to their survey. Northeast area schools received an average of $2703 from federal funds, according to the report published in 2000.

Both the Callison and Knuth (1994) and Miller and Shontz (1993) reported funds from gift sources, including parent teacher organizations, of about $1.85 per pupil. A
later study by Miller and Shontz (1998) reported gifts and grants average totals ranging from $500 to $2000.

Summary

There have been national studies of school library media center expenditures since 1983. They have offered an extended view of the trends and changes in school library media centers and their programs of service. Together with similar studies done in various states, one may begin to see patterns of expenditures regionally as well as nationally.

In planning local expenditures, the library media staff involved must consider the goals and objectives of the school district (Buckingham, 1994). When budget reductions must be made, administrators will target those items of the budget that do not appear to impact student learning. Unfortunately many boards do not understand how library and technology programs can improve student learning (Baule, 2002).
References


CHAPTER 3
METHODOLOGY

Research Design

This study examined the expenditures of southern New Jersey high school library media centers for the 2001-2002 school year. The applied research design employed mailed questionnaires to collect data from the sample of library media specialists from all public high schools in Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Ocean, and Salem counties in New Jersey. Descriptive survey research and statistics were used to describe the characteristics of expenditures in print, non-print and electronic resources for this population.

This study compared school library media center expenditures in southern New Jersey high schools. Questions addressed included:

1. What were the average annual expenditures and per pupil expenditures for high school library media centers in 2001 – 2002?
2. What percentage of these annual expenditures was spent on print, non-print and electronic media?
3. Was there a relationship between the district factor group rank of a school and the level of the per pupil expenditure?
4. How was the budget funded?
Questionnaire Design

The questionnaire (see Appendix A) asked for the highest number of students enrolled during the 2001-2002 school year and whether the respondent prepared the budget for the school year being investigated. The second section of the instrument asked the respondent to fill in a chart indicating the amounts of expenditures in print, non-print, electronic, technical processing and computer hardware and audiovisual equipment and the funding sources for these expenditures. The last section of the questionnaire asked for more detailed information about the electronic resources provided by the library media centers and the costs associated with them.

The questionnaire used in this research was modeled after an instrument used by Miller and Shontz in their School Library Journal biennial surveys since 1983. This instrument can be used to survey school library media centers locally as well as nationally.

Variables

This research included several variables. As independent variables, the DFG ranks assigned by the New Jersey Department of Education grouped respondents by the socioeconomic status of their communities. Dependent variables were the levels of expenditures in materials categories and the total materials expenditures. Relationships between sources of funding, the levels of expenditure in materials categories, and the DFG ranking were analyzed. Other variables included the electronic resources the library media centers offered, and the county in which the high school was located.
Data Collection

A cover letter (Appendix B) and a questionnaire (Appendix A) with instructions was mailed to high school library media specialists in the eight counties of southern New Jersey. All public high schools listed by the New Jersey Department of Education in these counties were included in this mailing. A stamped return envelope was provided, as well a post card (Appendix C) for requesting a copy of the research results. This design encouraged honest answers and guaranteed anonymity for the respondent. The questionnaire was coded with a school designation number prior to mailing. The researcher used this code for identifying non-respondents for a second mailing (Appendix D). A code was also assigned as questionnaires were returned to group the responses by county and DFG for analysis. Individual responses remained confidential.

Validity and Reliability

Reliability was established through evaluation by colleagues and pretesting by school library media specialists from schools not included in the sample. The questionnaire was based on a long-standing survey by Miller and Shontz (2002).
REFERENCES


CHAPTER 4
ANALYSIS OF DATA

Response to Questionnaire

On February 1, 2003, questionnaires (Appendix A) were mailed to 102 public high school media specialists in the southern New Jersey counties of Atlantic, Burlington, Cape May, Camden, Cumberland, Gloucester, Ocean, and Salem. A second mailing was sent on February 24, 2003 (Appendix D) to the 75 media specialists who had not yet responded. A total of 58 questionnaires were returned, for a response rate of 56.9%. Of these 58 responses, two were discarded because the high school did not have a library media center. Seven other responses had the portion of the questionnaire regarding the electronic resources provided by the library media center completed but did not include information about their expenditures. These were included only in the findings regarding the use of electronic resources in the high schools studied. One response had data regarding expenditures but no information about the electronic resources. It was used only in the findings regarding expenditures. Table 1 details the returns by county, Figure 1 by DFG.

Five responses came from schools with enrollments of less than 500 students. Twenty-four responses were from schools with enrollments between 500 and 999 students. Eighteen responses were from schools with enrollments between 1000 and
1999 students and 9 responses were from schools with enrollments of 2000 and above (see Figure 2).

Table 1  

<table>
<thead>
<tr>
<th>County</th>
<th>Received</th>
<th>Mailed</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlantic</td>
<td>7</td>
<td>9</td>
<td>77.8</td>
</tr>
<tr>
<td>Burlington</td>
<td>8</td>
<td>18</td>
<td>44.4</td>
</tr>
<tr>
<td>Camden</td>
<td>14</td>
<td>23</td>
<td>60.9</td>
</tr>
<tr>
<td>Cape May</td>
<td>1</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>Cumberland</td>
<td>2</td>
<td>7</td>
<td>28.5</td>
</tr>
<tr>
<td>Gloucester</td>
<td>12</td>
<td>14</td>
<td>85.7</td>
</tr>
<tr>
<td>Ocean</td>
<td>9</td>
<td>19</td>
<td>47.3</td>
</tr>
<tr>
<td>Salem</td>
<td>3</td>
<td>7</td>
<td>42.8</td>
</tr>
<tr>
<td>Total</td>
<td>56</td>
<td>102</td>
<td>54.9</td>
</tr>
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</table>

Figure 1  

Responses by District Factor Group
Statistical Analysis

Questionnaires were given numeric county and alphabetic DFG designations appropriate to the school district they represented as they were received. These codes, as well as the enrollment numbers for each school, were entered into a Microsoft Excel spreadsheet with the expenditures for print, audiovisual, electronic resources, technical processing, and computer hardware and audiovisual equipment reported on the surveys. The electronic resources provided by each school library media center were also recorded. The results were sorted by county and by DFG grouping.
Per pupil expenditures in each materials category and in total expenditures were calculated. Median and mean expenditures in each category were calculated for each county and DFG grouping. Vocational school districts do not have a DFG designation assigned them by the New Jersey Department of Education. The designation V was used to indicate vocational high school districts. The median was calculated in each category since each contained a value that was atypically large or small. Since the median will produce a more meaningful measure than the mean, in most cases in this study the median will be discussed. Total materials expenditures (TME) were the sum of print and audiovisual materials, computer software, CD-Rom and World Wide Web based products, technical processing, computer hardware, and audiovisual equipment reported on surveys.

Presentation of Results:

Total Materials Expenditures

The total materials expenditures (TME) for the 49 high school media centers locations reporting ranged from $3000 to $103,316. The median TME for the entire sample was $20,264. The per pupil figure for TME ranged from $2.50 to $97.11, with a median per pupil expenditure of $22.96. County results are shown in Figures 3 and 4.

Results by county

Atlantic County actual total expenditures ranged from $11,500 to $60,580 for the seven high schools reporting. The median was $18,000. The per pupil expenditure ranged from $7.95 to $36.33 with a median per pupil expenditure of $23.81.
Burlington County’s seven high school SLMC responding to the questionnaire reported a median expenditure of $15,300 with a range from $7,850 to $62,836 for actual total expenditures. The per pupil expenditures ranged from $9.55 to $29.92 with a median of $22.12.

The twelve Camden County high school SLMCs reported median total expenditures of $20,910 and a median per pupil expenditure of $18.17, with ranges of $3000 to $56,666 actual total expenditures and $2.90 to $32.73 per pupil.

Figure 3  Median Total Materials Expenditures (TME) by County
The single response from Cape May county reported a total materials expenditure of $5,243 for a per pupil expenditure of $10.57.

Cumberland County’s two responses were very different. One reported a TME of $5000 while the other reported total materials expenditures of $94,200. The per pupil expenditures were $4.34 and $97.11.

Figure 4  Median Per Pupil Total Materials Expenditures (TME) by County

<table>
<thead>
<tr>
<th>County</th>
<th>TME</th>
<th>PPE</th>
</tr>
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<tbody>
<tr>
<td>Atlantic</td>
<td>$22.96</td>
<td>$23.81</td>
</tr>
<tr>
<td>Burlington</td>
<td>$22.12</td>
<td>$22.12</td>
</tr>
<tr>
<td>Camden</td>
<td>$18.17</td>
<td>$18.17</td>
</tr>
<tr>
<td>Cape May</td>
<td>$10.57</td>
<td>$10.57</td>
</tr>
<tr>
<td>Cumberland</td>
<td>$50.73</td>
<td>$50.73</td>
</tr>
<tr>
<td>Gloucester</td>
<td>$33.23</td>
<td>$33.23</td>
</tr>
<tr>
<td>Ocean</td>
<td>$17.47</td>
<td>$17.47</td>
</tr>
<tr>
<td>Salem</td>
<td>$35.03</td>
<td>$35.03</td>
</tr>
</tbody>
</table>

n = 7  n = 7  n = 12  n = 1  n = 2  n = 9  n = 9  n = 3
The nine high school SLMS responding to the questionnaire from Gloucester County had median total expenditures of $26,000 with a range of $13,400 to a high of $103,316 actual expenditures. The per pupil expenditures ranged from $11.17 to $86.40, with the median being $33.23.

Ocean County reported total expenditures for materials ranging from $4000 to $82,280 with a median of $23,745. The per pupil expenditures ranged from $2.50 to $33.88 with a median of $17.47 at nine reporting high schools.

The three high school SLMC responses from Salem County reported a median TME of $19,617 and median per pupil expenditure of $35.03. Total materials expenditures ranged from $16,020 to $37,705 and per pupil expenditures from $20.54 to $56.28.

**Results by District Factor Group**

Data were also analyzed according to the District Factor Groups (DFG) assigned by the New Jersey Department of Education (see Figures 5 and 6). Both median TME and median per pupil expenditures were calculated.

The DFG is an index of socioeconomic status in New Jersey that was created using data for several "indicators" available in the decennial Census of Population. The DFG is a composite statistical index created using statistical procedures, a "model" of socioeconomic status, and input data for various socioeconomic traits. Seven indices utilized as the principal components to produce a statistical score are as follows: percent of population with no high school diploma, percent with some college, occupation, population density, income, unemployment and poverty. Districts were then grouped so
that each group would consist of districts having factor scores within an interval of one tenth of the distance between the highest and lowest scores (New Jersey Department of Education, n.d., The DFG Model).

There were eight responses from DFG A high school media specialists. Within this group the median per pupil expenditure was $21.07 and the median total expenditure was $15,559. The total materials expenditures ranged from $5243 to $94,200 and the per pupil expenditures from $3.09 to $97.11.

DFG B high schools reported a range from $3000 to $24,010 in total expenditures with a median of $15,370. Per pupil expenditures were from $2.90 to $25.44 with the median at $15.49 for the six SLMC.

Ten DFG CD high school library media centers responded to the questionnaire. The median total expenditure was $24,490 with a range of $13,400 to $82,280. The range of per pupil expenditures was $7.95 to $56.28 with a median value of $17.98.

The median per pupil expenditure from DFG DE high schools reporting was $18.16 with responses from $2.50 to $33.88. The median total actual expenditure from these 9 high school SLMCs was $14,750. The range of total actual expenditures was from $4000 to $50,617.

The three DFG FG high school media specialists reported total materials expenditures from $16,020 to $58,130 with the median at $43,225. The per pupil expenditures were from $20.54 to $36.79 with a median of $36.33.

Seven DFG GH high schools had a median total materials expenditure of $30,100 with a range from $15,300 to $103,316. The median per pupil expenditures for the group was $22.12 with a range from $9.55 to $35.63.
Only two DFG I reported actual total expenditures of $16,000 and $20,718, with a median of $18,359. Per pupil expenditures were $11.03 and $28.78, with a median of $19.90.

Four vocational high school districts reported total actual expenditures from $20,271 to $56,666 with a median of $27,871. The range of per pupil expenditures was from $18.17 to $33.23 with a median of $31.49.
Print Expenditures

Expenditures for print materials ranged from $1,200 to $57,340 in the 47 questionnaires that were returned. The per pupil expenditure (PPE) for print material ranged from $0.52 to $57.94. The median PPE was $12.67.

When analyzed as a percentage of total expenditures, print material proved to be the greatest percentage of the materials categories. When analyzed by DFG, print expenditures made up 47% to 70% of the total material expenditure (see Table 2). The
range, when grouped by county was nearly the same at 48% to 73% of the total material expenditure (see Table 3).

Audiovisual Expenditures

Many SLMS were not responsible for purchasing audiovisual materials for their high schools. In these high schools, the individual departments purchased educational videos, DVDs, audiocassettes and audio CDs for classroom use. In the 31 high schools where the library media specialist did this purchasing, between $300 and $18,530 was spent during the 2001-2002 school year on audiovisual materials. The median PPE was $2.05 with a range from $0.20 to $8.96.

The percentage of total expenditures for on audiovisual material ranged from 3% to 15% analyzed by DFG and 5% to 14% by county (see Tables 2 and 3).

Electronic Resources

Computer software packages, CD-Rom programs, WWW based products and Online or Web-based subscription services were a part of most high school library media centers. Some were the responsibility of technology departments; in this study 38 SLMC purchased these services from their budgets. They spent from $395 to $35,470, though some products were provided for no charge by state and regional library cooperatives. The PPE ranged from $0.65 to $19.22 with the median of $5.07.

The percentage of funds spent on electronic resources ranged from 8% to 27% analyzed by DFG and 15% to 36% by county (see Tables 2 and 3).
Technical Processing

Fees were paid to vendors for catalog maintenance and other technical services by 35 of the high school SLMS responding to the questionnaire. These fees ranged from $65 to $13,000. The PPE ranged from $0.15 to $13.40 with median of $0.66.

Computer Hardware and Audiovisual Equipment

Purchases of computer hardware and audiovisual equipment including charges for equipment maintenance were reported by 26 high school SLMS. Others reported that technology departments were responsible for this material. Between $300 and $50,000 was spent, with the PPE between $0.19 and $66.67. The median spent per pupil was $3.16.

The percentage of funds spent in technical processing and computer hardware and audiovisual equipment ranged from 11% to 39% analyzed by DFG and 5% to 43% by county.

Table 2 Percent of Total Expenditure in Materials Categories by DFG

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>CD</th>
<th>DE</th>
<th>FG</th>
<th>GH</th>
<th>I</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print n = 47</td>
<td>50%</td>
<td>59%</td>
<td>57%</td>
<td>56%</td>
<td>53%</td>
<td>47%</td>
<td>70%</td>
<td>50%</td>
</tr>
<tr>
<td>Audiovisual n = 31</td>
<td>3%</td>
<td>15%</td>
<td>6%</td>
<td>9%</td>
<td>7%</td>
<td>11%</td>
<td>9%</td>
<td>11%</td>
</tr>
<tr>
<td>Electronic Resources n = 38</td>
<td>8%</td>
<td>15%</td>
<td>26%</td>
<td>20%</td>
<td>21%</td>
<td>27%</td>
<td>10%</td>
<td>22%</td>
</tr>
</tbody>
</table>
When all the results were calculated, a total of $762,341 was spent in 2001 – 2002 on print materials, $114,315 on audiovisual material, $294,666 on electronic resources, and $270,408 on technical processing and hardware. Figure 7 shows these expenditures as percentages of the total materials expenditures.

<table>
<thead>
<tr>
<th>Percent of Total Expenditure in Materials Categories by County</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Print</strong>&lt;br&gt;n = 47&lt;br&gt;&lt;br&gt;Atlantic</td>
</tr>
<tr>
<td><strong>Audiovisual</strong>&lt;br&gt;n = 31&lt;br&gt;&lt;br&gt;Atlantic</td>
</tr>
<tr>
<td><strong>Electronic Resources</strong>&lt;br&gt;n = 38&lt;br&gt;&lt;br&gt;Atlantic</td>
</tr>
</tbody>
</table>

Figure 7  Total Materials Expenditures
Funding

Of the $1,441,730 in expenditures reported on in this study, only 11 high schools received funding from other than local sources. Eight had done some fundraising or received gifts ranging in size from $100 to $1,500 for a total of $3,295. Three others used federal funds of $7,875, ranging from $300 to $6,000 per school.

Electronic Resources Provided

Many high school library media centers received electronic resources at a reduced rate or at no charge through agreements with state and regional library cooperatives. Fifty-five of the 56 high school SLMCs that responded to the survey indicated they provided some electronic resources to their students. EBSCO, Facts on File, and SIRS were most often provided at 52, 39, and 31 sites respectively (see Table 4).

Table 4  Electronic Resources Provided

\[ n = 56 \]

<table>
<thead>
<tr>
<th></th>
<th>Ebsco</th>
<th>Facts on File</th>
<th>SIRS</th>
<th>Gale Group</th>
<th>Electric Library</th>
<th>Grolier</th>
<th>NewsBank</th>
<th>Wilson</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of sites</td>
<td>52</td>
<td>39</td>
<td>31</td>
<td>18</td>
<td>17</td>
<td>11</td>
<td>9</td>
<td>9</td>
<td>62</td>
</tr>
</tbody>
</table>

Summary

In the counties with 7 or more high schools reporting, the total material expenditures ranged from $15,300 to $26,000. The total material expenditures per pupil ranged from $17.47 to $33.23.

In district factor groups with 6 or more members reporting, the total material expenditures ranged from $14,750 to $30,100. The total material expenditures per pupil ranged from $15.49 to $22.12.

Print materials comprised the greatest percentage of the total materials expenditures in all cases.

Of the electronic resources, EBSCO was available in more than 94% of the high school library media centers represented, in large part because it was available at no charge.
References

CHAPTER 5
SUMMARY AND CONCLUSIONS

Summary

With a response rate of nearly 57%, conclusions made regarding the sample can be considered representative. When considering the results by county, results from Cape May county and Cumberland county, with a 20% and 28.5% response rate respectively cannot be considered representative of those counties. All other counties' response rates ranged from nearly 43% to 85.7%. When sorted by DFG, only groups FG and I returned responses too low to be representative of those groups.

Research Questions

*What were the average annual expenditures and per pupil expenditures for high school library media centers in 2001 – 2002?*

When compared to the most recent national survey by Miller and Shontz (2001), public high school library media centers in southern New Jersey lagged behind. The national average from the 1999 – 2000 school year study for total materials expenditures (TME) was $30,636 and the mean TME per pupil was $32.15. While the southern New Jersey mean TME of $29,423 is less than 4% lower than the national average, the South Jersey mean TME per pupil was calculated to be $21.26, more than 40% lower.
When comparing median expenditures, the New Jersey median TME was $20,264, 9% lower than the national median and the per pupil expenditure $22.96, 5% higher than the results in the same Miller and Shontz study. Discounting the counties with low response rates, Cape May and Cumberland counties, the only counties with a TME over the national median of $22,250 were Gloucester and Ocean counties. Atlantic, Burlington, Gloucester, and Salem counties per pupil total materials expenditures topped the $21.85 national median from the Miller and Shontz study. (2001)

What percentage of these annual expenditures was spent on print, nonprint and electronic media?

Southern New Jersey high school library media centers spent 53% of their total materials expenditures on print materials, 8% on nonprint media, and 20% on electronic resources. Using data from the 2001 Miller and Shontz study, senior high schools nationally spent 50% of their materials expenditures for print materials, 13.5% on nonprint, and 15.5% on electronic resources. In the two years between these studies, a shift of funds from nonprint media to electronic resources might be an indication of a trend in spending. Comparing these results to a national study examining the 2001 – 2002 school year now being conducted by Miller and Shontz might add to evidence of such a shift in spending.

Public high school library media centers spent from $0.52 to $57.94 per pupil on print materials, with a median expenditure of $12.67. The national median in the Miller and Shontz 2001 study was $9.77. Salem County at 36% was the lowest in print expenditures, Ocean County the greatest at 62%.
Many library media centers were not responsible for the purchase of audiovisual materials and computer software, technology departments and academic departments often purchased these media. The 31 high schools that responded to the survey spent a median $2.05 per pupil on nonprint media as compared to $2.38 for senior high schools in the 2001 Miller and Shontz study. Camden and Salem counties spent the most, 14% and 13% of their total material expenditure respectively.

Electronic resources are gaining popularity in southern New Jersey high school library media centers. Media specialists are keeping up with advances in technology with the help of discounts and databases at no charge through the New Jersey Library Network. These resources are updated regularly, can be accessed in school or at home, and are often the reference sources preferred by students. All counties spent at the 15% level or higher, with the median per pupil expenditure of $5.07, as compared to the national median reported by Miller and Shontz (2001) of $2.94.

Was there a relationship between the district factor group rank of a school and the level of the per pupil expenditure?

There were too few responses from district factor groups (DFG) FG and I to consider the responses reliable and the V or vocational high school group receives students from municipalities throughout their county and does not have a DFG rank, therefore determining a relationship between DFG and expenditures per pupil was not conclusive.

In the DFG A districts included in this study, three had library media center expenditures in excess of $60,000 while the remaining five averaged less than $10,000.
This certainly skewed the results. The median expenditure per pupil in the five districts was $11.36, in the group as a whole $21.07. A representative figure for the group lies somewhere between the two. Figure 5 showed a slight climb in median expenditures per pupil from DFG B to DFG DE and again from DE to GH. The results suggested a positive relationship between DFG and per pupil expenditures, but not enough data were available to make that assertion.

How was the budget funded?

Most of the funding for high school library media centers in southern New Jersey came from local funds. Only three high schools of the 56 responding reported using federal funds and eight received funds through gifts or fundraising. Less than 1% of the total funding was from other than local sources.

Electronic Resources Provided

Fifty-five of the 56 LMC responding to the questionnaire indicated they provided some electronic resources to their students. The New Jersey Library Network agreements that enable school library media centers to subscribe to EBSCO and Facts on File at no cost to the LMC make this possible. The New Jersey Library Network also negotiated discounts from many other vendors so the high school library media centers in the state offered a wide variety of databases to their member libraries at low cost.
Conclusions

As a region, public high school library media centers were spending less on materials than the national average. While LMCs in Atlantic, Burlington, Gloucester, and Salem counties were spending as much as the national per pupil expenditures, those in Camden and Ocean counties were spending significantly less. These LMC may not be meeting the needs of their students.

High school LMCs in the region devoted a larger percentage of their total materials expenditures to print materials and electronic resources than their counterparts nationally.

Nearly 45% of the SLMCs responding to the questionnaire indicated other departments purchase nonprint media for use in school. Since so many LMCs in the region do not purchase this type of material, it might explain the difference between the regional and national level of expenditure per pupil in this category.

There was a relationship suggested between the DFG and the level of expenditure per pupil. More study needs to be done to determine whether the relationship between the socioeconomic rank of the community and the level of spending in the LMC exists. More importantly, more study needs to be done to determine how the level of spending effects student achievement.

Most funding for LMC budgets came from local sources: municipal, county and state tax revenue. Few high school LMCs in southern New Jersey received federal funds, gifts, or fundraising.
High school library media specialists in the region recognized the value of providing electronic resources available at discounts or at no charge through the New Jersey Library Network.

Recommendations for Further Study

Miller and Shontz are scheduled to publish a national study of library media center expenditures in the fall of 2003. Comparing the results of this study with results nationally from the same school year will present a much more accurate picture of the trends of spending in the southern New Jersey region.

A statewide study of media center expenditures is recommended. It would be very helpful for media specialists to compare their LMC expenditures to others in the state.

More studies need to be done to examine the correlation between student achievement and the LMC programs in New Jersey public high schools.
References

BIBLIOGRAPHY


This survey is designed to provide information about expenditures for resources in your high school library media center (LMC). For some of the questions you are asked to check the answers, for others you are asked to provide figures. If you do not have exact figures, approximations may be substituted, but please mark any approximations with an "A" after the figure. All questions should be answered only in terms of the one school to which this questionnaire is addressed. All information should be from the 2001-2002 school year. All individual responses are confidential.

1. What was the highest number of students enrolled during the 2001-2002 school year? __________

2. Did you prepare and submit to your principal or supervisor a 2001-2002 budget for the library media program? yes______ no______

This part deals specifically with expenditures for library materials during the school year 2001-2002. I am interested in the amount of money that was spent during that year on various categories of library resources. For each category indicate the amount spent from each funding source. Please note that "Local School Board Appropriations" includes all city, county and state funds allocated at the system level for your school.

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>3. Print materials (include processing costs) all books, periodicals and newspapers, micro formats (not CD-Rom products)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Audiovisual materials (purchased or leased) Include DVDs, video tapes, audio tapes, and audio CDs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Computer software packages, CD-Rom programs, WWW based products (programs or licences purchased, online/Web based subscriptions and fees paid for Web-based resources services and support)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Technical processing (include fees paid to vendors for online catalog maintenance, charges for converting catalog records, OCLC charges, etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Computer hardware and Audiovisual equipment (include charges for equipment maintenance)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The responses in this part will assist in reporting the use of electronic resources in the LMC and the costs associated with them.

8. Does your LMC provide access to any of the following Internet or CD-Rom resources? What is the cost to the LMC? Please check all appropriate choices.

<table>
<thead>
<tr>
<th>RESOURCE</th>
<th>COST TO LMC</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. EBSCOhost</td>
<td></td>
</tr>
<tr>
<td>b. Electric Library</td>
<td></td>
</tr>
<tr>
<td>c. Facts on File</td>
<td></td>
</tr>
<tr>
<td>d. FirstSearch (OCLC)</td>
<td></td>
</tr>
<tr>
<td>f. InfoTrac</td>
<td></td>
</tr>
<tr>
<td>g. netLibrary</td>
<td></td>
</tr>
<tr>
<td>h. NewsBank</td>
<td></td>
</tr>
<tr>
<td>i. ProQuest magazine databases, Silver Platter</td>
<td></td>
</tr>
<tr>
<td>j. SIRS Researcher, Discoverer</td>
<td></td>
</tr>
<tr>
<td>k. WilsonLine Readers' Guide</td>
<td></td>
</tr>
<tr>
<td>l. Others: (please list)</td>
<td></td>
</tr>
</tbody>
</table>

Thank you for your assistance!
Please use the space below to make any comments about your LMC resources or this survey.

Please use enclosed envelope
to return surveys to:
Patricia V. Glave
116 Diane Avenue
Delran, NJ 08075
February 1, 2003

Dear Library Media Specialist,

As a graduate student in the School and Public Librarianship program at Rowan University, I am conducting a research project as part of my Master's thesis under the supervision of Dr. Marilyn Shontz. The purpose of this research is to study the school library media center expenditures in public high schools in Southern New Jersey.

Surveys are being sent to all public high school library media specialists in Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Ocean, and Salem counties. Participation in this survey is strictly voluntary and your responses will be kept confidential and anonymous. You may request a copy of the results by returning the enclosed card.

School library media specialists must balance the information needs of today's high school students within the limitations of the budget. It would be valuable to examine how high school library media specialists in the school districts in southern New Jersey are spending their funds. Comparing such information to their own expenditures will enable media specialists to more clearly see what their budgets may accomplish.

Please complete this survey and return it in the enclosed envelope. If you would like a copy of the results, please complete and mail the enclosed card separately. If you have any questions regarding this survey, please contact me by email at pglave3@comcast.net. You can contact Dr. Marilyn Shontz at (856) 256-4500 x 3858 or by email at shontz@rowan.edu.

Thank you for taking the time to assist me with this research.

Sincerely,

Patricia V. Glave
APPENDIX C
For a copy of the results, please fill in your name and address below.

________________________________________

________________________________________

________________________________________

________________________________________
February 24, 2003

Dear Library Media Specialist,

I recently sent a survey to all public high school library media specialists in Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Ocean, and Salem counties as part of a research project being conducted for my master’s thesis. The purpose of this research is to study the school library media center expenditures in public high schools in southern New Jersey. I have not as yet had a response from your school.

School library media specialists must balance the information needs of today’s high school students within the limitations of the budget. It would be valuable to examine how high school library media specialists in the school districts in southern New Jersey are spending their funds. Comparing such information to their own expenditures will enable media specialists to more clearly see what their budgets may accomplish.

Please take a few minutes to complete the enclosed survey; the data from your school is important to the validity of the research. I hope you will complete this survey so it may be included in the research. Participation in this survey is strictly voluntary and your responses will be kept confidential and anonymous.

Once you have completed the survey, return it in the enclosed envelope. If you would like a copy of the results, please complete and mail the enclosed card separately. If you have any questions regarding this survey, please contact me by email at pglave3@comcast.net. You can contact my project advisor, Dr. Marilyn Shontz, at (856) 256-4500 x 3858 or by email at shontz@rowan.edu.

Thank you for taking the time to assist me with this research.

Sincerely,

Patricia V. Glave