School Libraries Role in Student Academic Achievement:
An Annotated Bibliography

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Introduction

The following bibliography covers the role of the school library media center in students’ academic achievement. Most of the articles included are studies done in various states across the United States, looking at contributing factors of this relationship. Most of the articles find a favorable relationship, although one study does profess to find no significant correlation. Most of the studies have limitations of population size, which affects results slightly. The articles were all published between 2000 and 2009 with the exception of one study from 1993. An emphasis was placed on more recent studies; the older study included was done so because of its continued relevance and impact on all other studies. All articles were published in the United States.

Description of Topic

A school’s main function is to improve the students’ academic achievement; it is only natural that a school library would be included as a resource to help achieve this goal. A school libraries function is to provide access to information for students and teachers to facilitate learning. The American Association of School Librarians (AASL) even created a set of standards for the school library media profession based on their stated mission, which is to ensure that students and staff are effective users of ideas and information. (Burgin and Bracy, 2004) The AASL goes even further to state seven specific objectives to help achieve this mission. Among them are the ability to provide leadership, instruction, and consulting assistance in the use of instructional and informational technology, and to provide resources and learning activities. (Burgin, et al., 2004). There are many ways a school library can contribute to students’ academic achievement.
Literature Review

A school library’s job is to help facilitate learning for students, but not all libraries are achieving this goal to the same extent. Most of the studies conclude that a library does improve student achievement, but cannot determine to what extent. There was one study that found no significant correlation between having a school library media center and a student’s achievement (Sinclair-Tarr, Tarr, 2007). The thing these studies could not really agree on is how a library improves achievement. While all studies agree that student achievement is measured by standardized test scores, no two studies review the same exact factors that affect the level of achievement. There are several recurring themes that seem to be the measurements used most widely in the studies. They are the staff, the resources provided and the interaction librarians have with teachers and administrators.

The library staff had a very large impact on students. Several studies noted a significant difference in test scores between schools with a certified library media specialist versus one with no certification (Farmer, 2003; Lance, Rodney, & Hamilton-Pennell, 2000b; Todd, 2003; Miller, Want, & Whitacre, 2003). Farmer even notes “The library without a credentialed media teacher is like a restaurant without a chef (20003, p33).” Small, Snyder, and Parker even found that by having a certified librarian the schools collection was better which indirectly improved the students’ achievement (2009). Another important factor of the library staff is the number of people employed in the library. With more employees in the library there is more opportunity to assist patrons one on one and provide more activities and programs. Burgin and Bracy found that as staff numbers increase so too does schools performance on standardized tests (2004). Just as important as the number of staff, was the number of hours the staff was available. A
A positive correlation was found between the number of hours library staff were available and students’ success (Burgin et al., 2004; Lance, Hamilton-Pennell, & Rodney, 2000; Lance, Rodney, & Hamilton-Pennell, 2000a). Whether it was the librarian’s credentials, the number of employees, or the amount of time spent in the library, the staff greatly affects student achievement.

Another major factor in the role of libraries was the resources they provided. The collection, as one would assume, has a major impact on students’ achievement. Not only is the size of the collection important, but also the age of the collection (Burgin, et al., 2004). Also, a strong correlation was found between the amount of money spent on the collections and students improvement (Lance, Welborn, & Hamilton-Pennell, 1993). Specifically, money spent on non-print resources and electronic databases had a significant impact on students (Burgin, et al., 2004; Lance, et al., 2000b). Access to technology was also found to be an important factor in students’ achievement. The number of computers as well as access to the internet was found to be very significant factors (Lance, et al., 2000a; Miller, et al. 2003). Overall if the library had adequate resources, the students had access to them and utilized them to their benefit as was reflected in their test scores (Farmer, 2003).

Perhaps one of the most important factors related to students’ achievement was the interaction between the librarians, the teachers and administrators. Schools that did not have the full support of the administration tended to participate less in collaborations and as a result contributed less to students achievement (Lance, et al., 2000b). Librarians’ interaction with teachers was also very important. In Phase II of the New York study, many teachers even noted this as important for students’ achievement (Small & Snyder, 2009). Many of the schools with
higher student achievement had teachers who regularly collaborated with librarians on lesson plans. (Haycock, 2007; Lance, et al., 2000a; Lance, et al., 2000b). This resulted in better materials being purchased for the library, as well as additional materials used by teachers in the classroom. One study even noted that science, math and technology collections in libraries were often underdeveloped due to lack of collaborations between the teachers and librarians (Mardis & Hoffman, 2007). Another collaborative element between teachers and librarians is instructional activities with classes. Many teachers who regularly discuss lessons with librarians also found it beneficial to bring classes and librarians together for additional information about services in the library, this in turn led to better student understanding of subjects (Lance, et al., 2000; Mardis, et al., 2007).

One of the most striking statistics in these studies was the lack of conclusive evidence that any of these factors were statistically significant to the study. Farmer found no statistical significance to validate her study (2006). While other studies, like the Missouri, Pennsylvania, and second Colorado studies, found varying levels of statistical significance (Lance, et al., 2000a; Lance, et al., 2000b; Miller, et al., 2003). However, that does not mean that a school library does not benefit its students by providing more information to help them achieve excellence. Even though experts cannot seem to agree on what factors affect student achievement, or to what extent these factors are affective, they do all agree that a school library media center is an important part of a students’ success and more attention needs to be paid to this relationship.

**Abstract:** The state of North Carolina has enjoyed a long and favorable reputation as a leader in school media librarianship. We have taken pride in developing and maintaining strong programs, which have warranted our significance in the local schools. The “No Child Left Behind Act,” which requires that all teachers are qualified in core subjects, clearly impacts the vital contributions school library media specialists make in the academic lives of North Carolina’s children. Recognizing these developments and the importance of conducting research to confirm our beliefs and the perceptions of our classroom and administrative colleagues, the North Carolina Library Association and the North Carolina School Library Media Association in collaboration with the North Carolina Department of Public Instruction and the State Library of North Carolina sponsored this study to determine the impact of school library programs on student achievement in North Carolina public schools. (Taken from the introduction)

**Annotation:** A scholarly study, published by a reputable company, that provides an unbiased look at the school libraries in North Carolina. It also looks at specific factors that affect student achievement. It even provides summaries of previous studies.

**Search Strategy:** I found this study while reading the sources of another article that I did not use for this bibliography. The information to locate the study was included in the citation, so there was no need to find it in a database.

**Database:** LISTA

**Method of Searching:** Citation Searching

**Search String:** School Librar* and Academic Achievement

Referenced in:


**Abstract:** This book endeavors to examine the factors that contribute to student achievement by taking a systems approach. Specifically, what does each stakeholder in a student’s education bring to the table? These factors are designated as input processes and products. What impact
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does each have on student achievement? These factors are designated as output processes and products. Research findings and best practice constitute the basis for examination of these factors, the assumption being that library media teachers (LMTs) can draw upon substantive work to improve their own programs. In general, syntheses of research reviews and key research studies have been cited here to optimize referral to the relevant information. (Excerpt from introduction)

**Annotation:** This document specifically looks at the topic of school libraries role in achievement. Even though it offers some suggestions on how to improve the library it is still a scholarly work looking at both sides of the argument. The author is a very prominent author in the field of school libraries.

**Search Strategy:** I chose to do a search of Hagerty’s OPAC to see what they had that might be relevant to the topic.

**Database:** Hagerty’s OPAC

**Method of Searching:** Keyword search

**Search String:** school library* and academic achievement.


**Abstract:** This study examines possible factors related to school library programs that correlate with student academic achievement. Analyzing library programs as a system, the investigator adapted the American Association of School Librarians (AASL) principles for library media programs in conjunction with standardized tests. For the population examined (60 southern California schools), the measure that correlated most closely with library program principles was standardized reading scores. Specifically, the degree to which information access/delivery principles were implemented correlates significantly with student reading scores. The study results identified key indicators within the library program that impact student academic achievement: access to high-quality library facilities and resources, and collaborative planning with professional library staff. (Published Abstract)

**Annotation:** This article is a scholarly work, published in a peer reviewed journal. The author is very prominent in the field and often presents her findings. While this particular study is a little small it does offer some interesting insight into factors to consider in such studies, and points to a relatively negligent correlation.

**Search Strategy:** I chose to search Dialog because it offers access to so many articles, and allows for more advanced searching. I chose to do this search using descriptors pertaining to my topic.

**Abstract:** Several studies identify collaboration between classroom teachers and teacher-librarians as a key factor that affects student achievement. Studies in teacher-librarianship have established procedures and processes for effective collaboration. This study examines collaboration from a broader theoretical and research perspective, beginning with 20 factors that specifically influence successful collaborations. These are clustered in six areas: factors related to the environment, to membership characteristics, to process and structure, to communication, to purpose, and to resources. Research from teacher-librarianship is then applied to substantiate and reinforce the factors and provide context for successful collaboration and thus effect on students' learning in schools. (Reprinted by permission of the publisher.)

**Annotation:** This document provides a unique view of my topic by looking at the role of teacher/librarian collaboration as a key factor. Not only is the article peer reviewed and scholarly, but its author has also been honored by the American Library Association for outstanding contributions to the profession.

**Search Strategy:** I chose to search Library Literature and Information because it is a reputable database that provides information relevant to my topic. Also it provided full text articles, so I would have access to the information immediately. I also viewed the thesaurus to determine the most appropriate search terms.

**Database:** Library Literature and Information

**Method of Searching:** Descriptor Searching

**Search String:** School Libraries AND Student Achievement. Limit to: Full Text

Abstract: This study is an assessment of the impact of Alaska school librarians on academic achievement in the state's public schools. It examines the direct relationship between such staffing and student performance and identifies selected activities of library media staff that affect test scores. Other conditions of library media center operation were also considered as potential predictors of academic achievement. During the 1997-98 school year, library media centers in 211 Alaska public schools were surveyed about their staffing levels, hours of operation, staff activities, usage, technology, policies, and cooperation with public libraries. Each library media program characteristic was assessed as a potential predictor of academic achievement, and relationships among potential library media predictors that might create indirect effects on academic achievement were also examined. Recommendations for raising student achievement levels are included. Appendices include a bibliography, list of participants, copy of the questionnaire, a brochure entitled "A School Librarian Can Make a Difference!" and early results briefs. Although the findings, conclusions, and recommendations reported in this work are substantially the same as those of its original edition, this edition corrects typographical and transcription errors, eliminates unnecessary and misleading methodological information, clarifies ambiguous statements, corrects misinterpretations of statistical details, and contains citations accidentally left out of the original bibliography.

Annotation: This study was conducted by some of the leading experts in this field. It provides a scholarly, unbiased view of the data and comes to some interesting conclusions. Although the population data is very broad, resulting in inconclusive data, there are some interesting findings.

Search Strategy: I had seen the study mentioned in several other bibliographies, so I decided to find it. I searched ERIC directly for the title and author of the study.

Database: ERIC

Method of Searching: Citation Searching

Search String: Title- Information Empowered* and Author- Lance, Keith.


Abstract: This study establishes the link between the presence of adequate school library staffing and higher academic achievement as indicated by PSSA (Pennsylvania System of School
Assessment) reading scores. School library staffing is correlated with such scores; as library staffing rises, reading scores rise. This correlation is not explained away by other school conditions, such as per pupil expenditures by school or the teacher-pupil ration. Likewise, the relationship is not explained away by community conditions, such as poverty and low adult educational attainment. Several characteristics of school library programs beyond staffing help to explain the relationship between library staffing and academic achievement. These characteristics include: school library expenditures; information resources; information technology; and staff activities that help to integrate information literacy into the school's approaches to standards and curricula. This report contains 14 data tables and several statements by school librarians. (MES)

Annotation: This study is scholarly and done by a well reputed author in the field. Also, it has been noted as a basis for other studies on the same topic in other states. While it is slightly outdated it does provide distinct conclusions that pertain to the topic.

Search Strategy: I found the study while citation searching other articles not used in this bibliography. I decided to do a specific search for this study in ERIC. Because it is such a large database, I thought I would have the best chance of finding it there.

Database: ERIC

Method of Searching: Citation searching

Search String: measuring up to standards (title) and Lance, Keith (author)


Abstract: In 1993, the Colorado State Library published "The Impact of School Library Media Centers on Academic Achievement." This follow-up study focuses attention on the library media specialist and the services she or he provides throughout the building, rather than just the library media center as a specific place, and emphasizes the fact that better library media services lead to better student performance on standards-based tests. In addition to confirming and updating the findings of the first Colorado study, this project expands on the original study's results by measuring the impact on academic achievement of specific leadership and collaboration activities of library media specialists; principal and teacher engagement in library media programs; and information technology, particularly networked computers offering licensed databases and the Internet/World Wide Web. On all three counts, this study showed a positive impact. This study is put into perspective with past research as well as the American Association of School Librarians' new standards, "Information Power." It contains reports of the findings in a variety of readily usable formats, including: an executive summary, a brochure, and a brief report that includes similar studies completed recently for Alaska and Pennsylvania.
Appendices include a bibliography; list of participants; sample survey form; the brochure; and a section of "Fast Facts" and PowerPoint slides. Includes 40 tables and 2 figures. (AEF)

Annotation: This scholarly study is actually an update to the 1993 study done in Colorado by some of the same authors. It looks at newer data and has a narrower focus. It takes assumptions from the first study and focuses more on specific duties that contribute to their conclusions. This allows for more conclusive findings than have been previously noted. Lance is a well known authority on the subject and his associates for this study also have excellent credentials.

Search Strategy: I found the study while citation searching other articles not used in this bibliography. I decided to do a specific search for this study in ERIC. Because it is such a large database, I thought I would have the best chance of finding it there.

Database: ERIC

Method of Searching: Citation Searching

Search String: Title: How school librarians help kids achieve standards* AND Authors: Lance, Keith


Abstract: This study provides evidence of the positive impact of library media centers on academic achievement in 221 Colorado public schools during the 1988-1989 school year. In contrast to previous research on the relationship, this study uses schools rather than students as units of analysis, considers service outputs as well as resource inputs, and rules out the effects of selected school and community conditions which might have explained away this relationship. (Taken from Executive Summary)

Annotation: This is a specific detailed study in Colorado related to my topic. Although slightly outdated it offers a unique view of studying by taking into consideration several issues that could skew the data. Also, the author is very prominent in the field.

Search Strategy: I had found several other articles that referenced this study. I chose to locate it and began my search in Hagerty’s OPAC.

Database: Hagerty’s OPAC

Method of Searching: Citation Searching/ Keyword Searching

Search String: School Librar* and Academic Achievement

**Abstract:** In many ways, science classrooms and school library media centers are parallel universes struggling with their own reform issues and with documenting their own positive impacts. As the trend toward data-driven decisions grows in the school setting, it is increasingly important for every component of the learning environment to have demonstrable effect and to be mutually reinforcing. Yet, science reformers do not seem to recognize the potential for school library media specialists (SLMSs) to support their efforts (Lanahan, 2002), nor do school library media practitioners and researchers seem to be building relationships with science educators (Abilock, 2003). In *The Impact of Michigan School Librarians on Academic Achievement: Kids Who Have Libraries Succeed* (Rodney, Lance, and Hamilton-Pennell, 2003), the Michigan School Library Study (MSLS), researchers investigated variables from the Colorado study (Lance, 1993). The researchers concluded that Michigan Educational Assessment Program (MEAP) test reading scores for seventh graders tended to improve with access to many specific features of middle school library programs. (Partial Abstract)

**Annotation:** This article is from a scholarly, peer reviewed journal. It also provides a unique look at a specific subject area. Also, as the study is so recent it offers even more insight into what is happening in libraries now.

**Search Strategy:** I chose to do a Dialog search of ERIC because it is one of the most comprehensive databases pertaining to my topic. I chose to do a keyword search and combine it with some controlled vocabulary.

**Database:** ERIC (file 1)

**Method of Searching:** Keyword searching

**Search String:**

```
S1  3808   SCHOOL()LIBRARY OR MEDIA()CENTER
S2   145705   ACADEMIC
S3   102524   ACHIEVEMENT   (ADDED 07/01/1966)
S4    62768   S2 AND S3
S5    126   S1 AND S4
```


**Abstract:** This study was undertaken to measure the impact of School Library Media Center Services on Missouri schools’ student achievement, specifically on MAP scores. In addition, there was a desire to share the findings of this project with school
decision-makers—school boards, superintendents, principals, teachers, and library media specialists. (Taken from introduction)

**Annotation:** A scholarly, unbiased study conducted for the Missouri Department of Education and the State Library. This study includes student demographic status in their study, which results in some interesting findings.

**Search Strategy:** I found this study while reading the sources of another article that I did not use for this bibliography. The information to locate the study was included in the citation, so there was no need to find it in a database.

**Database:** LISTA

**Method of Searching:** Citation Searching

**Search String:** School Librar* and Academic Achievement

Referenced in:


**Abstract:** The article summarizes the method and impetus for collecting educational data that compared student *achievement* at *schools* with and without a *school library*. The authors wanted to see if having a *school library* improved *achievement* and what the *library* did which made that possible. The authors describe the methods they used to collect data and how they made adjustments to data to allow for variations in demographics. They found that students of *schools* with *libraries* did significantly better than *schools* without, but they also found that the breadth and kind of *library* materials available also played a role.

**Annotation:** This document is a summary of a dissertation by the original author and published in a scholarly peer reviewed journal. It outlines a detailed study and offers a viewpoint not pursued in other studies; school libraries have no significant effect on student achievement

**Search Strategy:** I chose to search LISTA because it is large database that is relevant to my topic. I searched by keywords relevant to my topic.

**Database:** LISTA

**Method of Searching:** Keyword Searching

**Search String:** School Librar* and Academic Achievement.

**Abstract:** In recent years, a number of statewide research studies have been conducted to determine the impact of school library media centers and their school library media specialists (SLMSs) on student achievement. Research studies in eighteen states have clearly established the relationship between well-staffed, well-funded school libraries on student achievement test scores. This article reports the results of the first phase of the New York State School Library Impact Study, funded by the U.S. Institute of Museum and Library Services, which investigates the effect of school libraries in New York State on student achievement and extends previous statewide library impact studies, using multiple research methods, to explore (1) the influence of the SLMS on technology use, (2) the relationship between principals and their SLMSs and (3) the level of service to students with disabilities. Results are expected to provide guidance for effective school library programs and services and increase our understanding of the complex and multidimensional ways in which school libraries influence student learning. (Contains 2 figures and 12 tables.)

**Annotation:** This is a well balanced study looking at all types of schools within the state. Although it provides no conclusive evidence, it does provide some interesting data. It is also published in a peer reviewed scholarly journal and is quite recent, which provides some interesting data in current trends in schools.

**Search Strategy:** I chose to search Eric as it is one of the most comprehensive databases pertaining to education. I searched the thesaurus to find descriptors that were relevant to my topic and then created a search string that included the descriptors.

**Database:** ERIC (file1)

**Method of Searching:** Descriptor searching

**Search String:**

```
S1 54097  ACADEMIC ACHIEVEMENT  (ADDED 07/01/1966)
S2 5796  SCHOOL LIBRARIES  (ADDED 07/01/1966)
S3 157  S1 AND S2
S5 192084  ROLE  (ADDED 06/27/1994)
S6 78  S3 AND S5
```


**Abstract:** This article reports the results of the second phase of a three-phase study on the impact of the New York State's school libraries' services and resources on student achievement and motivation. A representative sample of more than 1,600 classroom teachers, students, and
school library media specialists (SMLs) from 47 schools throughout New York State participated in the second phase, the in-dept (Partial Abstract from ERIC)

**Annotation:** This is a well balanced study looking at all types of schools within the state; it goes into more depth than phase I of the study. It also offers some great quotes from students and teachers about the effects of the library on them. It is also published in a peer reviewed scholarly journal and is quite recent.

**Search Strategy:** I chose to use Dialog to search ERIC by descriptor terms to see if it would provide any new items that I was not finding with a keyword search.

**Database:** ERIC (file 1)

**Method of Searching:** Descriptor Searching

**Search String:**

- S1 5796 SCHOOL LIBRARIES (ADDED 07/01/1966)
- S2 54097 ACADEMIC ACHIEVEMENT (ADDED 07/01/1966)
- S3 157 S1 AND S2


**Abstract:** This brief summary provides an overview of the background, key findings, and recommendations of the Student Learning through Ohio School Libraries research study undertaken from October, 2002 through December, 2003. This study of 39 effective school libraries across Ohio involved 13,123 students in Grades 3 to 12 and 879 faculty. The research study sought to understand how students benefit from school libraries through elaborating conceptions of help (the nature and extent of help provided by the school library in relation to student learning) and providing some measure of the extent of these “helps,” as perceived by students and faculty.

**Annotation:** This study is a scholarly study provided by the state education association. It offers a large sample, and is cited in several other articles and studies. Also, the author is an accredited professor at Rutgers University where he specializes in School Libraries.

**Search Strategy:** I found this study as the main reference for another article about it that I did not use in this bibliography. It and its website were listed in the other article.

**Database:** Library Literature and Information is where I found the other article I’m not using. This study was linked through that article.
Method of Searching: Citation searching.

Search String: School Libraries AND Student Achievement. Limit to: Full Text

NOTE: The source below is included because of its relevance to the topic and the information it provides. It is not intended to be part of the Annotated Bibliography.


Abstract: This fifth edition of the annotated bibliography covers research on the influences of school library services on student learning in works published from 1953 through 2000. Included with the bibliography are the short introductions to the second, third, and fourth editions; there is no introduction to the fifth edition. A total of 129 sources is divided into three sections: Primary Sources (59); Secondary Sources (26); and Other References of Interest (44). Topics include measuring the impact of a library learning center; library outreach for disadvantaged students; library classroom cooperation; library role in students' academic achievement; students and faculty media center use; access to an academic online catalog at the high school; teacher's role in library service; library skills needed by office personnel; perceived value of libraries; transferability of library research skills from high school to college; students' attitudes toward the library media program; the teacher-librarian team; credentialed school librarians; comparative analysis of schools with and without a central library; library instruction; and library funding. (AEF)

Search strategy: Found in Dialog while searching under descriptors School Libraries and academic achievement.

Personal Statement

During the course of this assignment I have learned a lot about how to research and identify information. Through my previous experience, I thought that I was a good judge of scholarly information and that my research skills were fairly good. After completing this project I have had to reevaluate that opinion. I think that my previous knowledge and skill was a great starting point, but I have learned so much more. For example, there are many ways to search for information, not just by subject or author. Using a thesaurus to find good descriptors is an
excellent way to ensure that you are finding the most articles pertaining to a topic. The thesaurus is also useful in either broadening or narrowing a topic.

Another important skill I have honed is my ability to assess an article for its scholarliness. There are so many different little things that you can look at to determine how scholarly an article is. Not only can an article be on topic, but it can also be written by someone knowledgeable in the field, published in a scholarly journal, peer reviewed, and current or at least still relevant. I had never really given much consideration to these factors before.

I have also discovered a wealth of databases that are very useful. Many of them have different formats and layouts but the concepts behind how they are constructed is very similar. Many offer similar formatting for searches, such as Boolean operators, but it is always important to look at the help section to ensure that you are using the database to its fullest potential when creating search strings.

The most important lesson I have learned this term is that, the most obvious search does not always yield the best results. Often several searches need to be conducted using various search strings and methods to truly find the information you seek. I think the most important thing to remember when doing a search is that the information is always out there, it is just a matter of figuring out how and where to find it.