This study surveyed the opinions of principals on the relationship between the school library media center and student achievement. Principals from six local North Carolina school districts were invited to fill out a questionnaire online. Results were examined for correlations between principals’ opinions on student achievement as it related to several variables. Questionnaire statements pertaining to student achievement, funding, technology, and communication were each analyzed. The findings from this study reaffirm the need for increased communication between the school library media specialist, principal, and faculty. They also expose the same uncertainty unearthed by previous studies that principals display when it comes to the connection between the school library media center and student achievement. The small response size prohibited any conclusive findings but did highlight areas for further research. While survey results only reflect principal opinions rather than demonstrated causality, they still suggest a disparity between principals’ beliefs and current research in the field.
ELEMENTARY PRINCIPALS’ VIEWS ON THE RELATIONSHIP BETWEEN THE SCHOOL LIBRARY MEDIA CENTER AND STUDENT ACHIEVEMENT

by
Emily E Stitsinger

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Approved by

_______________________________________
Evelyn Daniel
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Introduction

School library media specialists (SLMSs) consider themselves vital to the success of schools and the achievement of students. No matter how highly SLMSs perceive themselves however, their place in schools is marginalized if those who have the decision-making power hold the opposite view. An inescapable fact is that school principals have a great deal of influence over the staffing, funding, and management of school library media centers (SLMCs). In the current education world of high stakes testing and budget cuts, the SLMC is often the target of decreased spending because its role is not deemed as essential as individual classrooms to the academic achievement of students. One reason for this devalued view could be that SLMSs empower students and teachers through their resources and services and it is often difficult to distinguish the extent of the SLMS’s contribution in the finished product. Federal legislation (*No Child Left Behind*, http://www.ed.gov/nclb/) has forced principals to put emphasis on those programs which affect student achievement.

Recent empirical studies in the field have suggested that there *is* a correlation between the SLMC and student achievement (Lance & Rodney, 2000; Lance, Rodney & Hamilton-Pennell, 2000, 2001a, 2001b; Ross & Kuhlthau, 2005). Aside from these studies, other research has pointed to the following critical factors leading to the success of the SLMC program: sufficient funding, current technological infrastructure, principal’s knowledge of SLMC capabilities, and communication between the SLMS and the principal. If a principal is not a well-informed, cooperative advocate of the SLMC, the
program is in danger of elimination. How do elementary principals view the SLMC in relation to student academic achievement? While no study directly addresses this question, literature from the field can provide the background understanding necessary for such future research.

Research studies conducted in relation to school library media centers (SLMC) have focused on a variety of topics. Some of these topics include: the SLMC’s impact on student achievement, communications between the principal and media specialist, support of the SLMC by the principal, flexible versus fixed scheduling, and teacher perceptions of the SLMC. While a host of studies involving the school principal have been completed and many demonstrate that by and large principals support SLMCs, none to this date have examined how principals view the SLMC in relation to student academic achievement. Such a study is vital to the school library field because principals have a monumental influence on the management, organization, and funding of schools and their libraries. In light of recent budget cuts and the demands of the No Child Left Behind Act (http://www.ed.gov/nclb/), principals are forced to focus on retaining those programs and personnel which have an effect on student achievement. The SLMC may be seen as non-essential if decision-makers (i.e. school principals) do not believe it directly relates to student achievement.

The population for this research study are the principals from the public schools of North Carolina, with a sampling frame of all elementary principals from six local school districts. Data from the North Carolina Department of Instruction (http://www.dpi.state.nc.us/) provided a listing of all principals in the public schools of the state of North Carolina with contact information. A link to the survey was emailed to
the participants with one follow-up email sent to all participants encouraging them to participate.

The purpose of this research study was to survey elementary principals in the state of North Carolina and look closely at their responses regarding the SLMC and its relationship to student academic achievement. The survey has provided more insight into the opinions of the most influential decision makers in the school. How principals view the SLMC and what importance they place on the library in connection with the learning of students and staff can have a major impact on the funding and support of the facility and to the future of school libraries across the state of North Carolina.

**Literature Review**

Recent studies examining the impact of school library media centers on the academic achievement of U.S. public school students are on the rise. The most notable of these studies are those completed by researchers affiliated with the Library Research Service of the Colorado State Library and the University of Denver in Alaska, Oregon, Pennsylvania, and Colorado (called the Lance studies after the principal researcher) plus the Ohio Library studies completed by Todd and Kuhlthau. The Lance studies, all completed between 1997-1999, surveyed school library media programs in all four states on a variety of topics, including: staffing levels, staff activities, collection size, usage statistics and available technology. In addition to the survey data, the studies used available data on test scores, teachers, and the community. Although the results of the four studies varied slightly, on the whole the data was consistent in predicting the aspects of the school library media program that were vital to students and teachers. The results also identified the aspects of the school library media programs that most directly
affected student test scores. The following paragraph looks more closely at the research study completed in the state of Alaska.

Lance and Rodney (2000) conducted a study to assess the impact of Alaska school librarians on academic achievement in the state’s public schools. The study explores how high-quality school library media programs can and do contribute to academic achievement in Alaska. During the 1997-1998 school year, SLMCs in 211 Alaska public schools were surveyed concerning various aspects of their program. Test data (version 5 of the California Achievement Test) for grades four, eight, and eleven in each school was also collected. The researchers examined the direct relationship between staffing and student performance and identified selected activities of library media staff that affected test scores. In addition to the key finding of the positive relationship between school librarians and test scores, the study broke new ground by taking steps beyond previous research. The study also verified the findings of previous studies that showed that the relationship between academic achievement and school libraries in one state can be applied to other states.

The research documented in the Alaska study confirms the findings of earlier similar studies (Lance, Rodney, & Hamilton-Pennell, 2000; Lance, Welborn, & Hamilton-Pennell, 1993) that claim that in order for the school librarian to make a difference in student performance, he/she must have the support of the building principal. Principal support of the SLMC can mean more funding for resources and clerical staff, encouragement of collaboration with teachers, and open access due to a flexible schedule. All of the aforementioned can be linked directly to enhanced student achievement. If principals, however, are not aware of the research documenting these findings and do not
believe that the SLMC has a direct impact on student achievement, the SLMC is threatened. Further data needs to be collected from principals regarding their views on the specific relationship between the SLMC and student achievement.

Published more recently than the Lance and Rodney studies are the *Student Learning Through Ohio School Libraries* research studies conducted by Todd and Kuhlthau (2005). Part two of these studies surveyed the perceptions of school principals and teaching faculty in relation to the school library and the help it provides to students (part one surveyed the students directly). Eight hundred, seventy-nine faculty in 39 elementary, middle, and high schools in Ohio were given the opportunity to respond to 48 statements and one open-ended question regarding the SLMC and how it can help students. No breakdown of the number of principals compared to teaching faculty was given, but presumably there were 39 principals, one for each school. Of the entire respondent group (teachers and principals), 99.77% indicated that the SLMC and its services were perceived to have helped students in some way with their learning in and out of school. Todd and Kuhlthau concluded that school faculty do value the school library and view it as playing an important role in student learning.

One interesting finding, however, was that in the quantitative analysis the following areas were ranked low in perceived help gained by students: reading dimensions, independent learning, and academic achievement dimensions. If school faculty believe the SLMC is valuable in relation to student learning, why does this belief not carry over as strongly in relation to student academic achievement? It is critical that the disconnect displayed in the Ohio study be explored and eventually lessened. One way to work towards closing the gap is to ask principals very specific questions regarding the
SLMC and its effect on student achievement, as the study has done. The data gathered will provide a better understanding of how principals view the relationship between the SLMC and student achievement and hopefully point to line of research on this topic.

The aforementioned Library Research Service studies conducted on the impact of school library media programs on the academic achievement of U.S. school students showed that sufficient funding of the SLMC is necessary for the success of the program (Lance & Rodney, 2000; Lance, et al., 2000, 2001a, 2001b). Completed in Alaska, Colorado, Oregon, and Pennsylvania, the research indicates adequate funding is needed to employ both professional and support staff and to have information resources in a variety of formats. In all four states, data on staffing levels correlated with test scores. Professionally-trained and credentialed school library media specialists were found to make a difference that affected student performance on achievement tests. A minimum of one staff person per professionally-trained SLMS was also found to be essential in freeing the SLMS from clerical tasks which detracted from collaboration time with teachers and direct instruction on information literacy. The findings also showed that students tended to have higher test scores when the library staff spent time teaching information literacy to students, planning instructional units with teachers, and providing in-service training to teachers. All of these duties are more feasible when the SLMS is provided with an assistant.

In addition to the funding required to employ both a certified SLMS and support staff, the studies found evidence suggesting that sufficient funding is necessary to have current, multi-perspective information sources in a variety of formats. Larger collections of information resources such as books, periodical subscriptions, and databases were all
associated with schools having higher average test scores. Keeping SLMC collections current and competitive requires a great deal of attention and funding. The principal in each school has a great deal of influence over how money is allotted and how instructional positions are determined. It is crucial for principals to see the SLMC and its programs as a core learning unit and to supply it with the staff and resources necessary to provide students with the maximum opportunity for achievement.

A study conducted in the state of Kentucky further investigated this point by interviewing principals about their perceptions of SLMCs ten years after the implementation of the Kentucky Education Reform Act in 1990 (Alexander, Smith, & Carey, 2003). High positive correlations were found between adequacy of funding and importance, meaning the higher a principal rated the overall importance of the SLMC, the higher he/she rated the adequacy of funding. If principals do not deem the SLMC as important to the academic achievement of students, funding may drop, thereby diminishing the quality of services.

Although linked to the need for sufficient funding, technology warrants special attention due to its widespread growth and utilization in schools today. Multiple empirical studies conducted in the past five years contend that provision of an up-to-date information technology infrastructure for information access and use is a school library predictor of academic achievement (Lance & Rodney, 2000; Lance, et al., 2000, 2001a, 2001b; Todd & Kuhlthau, 2005). The studies conducted in Alaska, Colorado, Pennsylvania, and Oregon produced similar findings when surveyed about technology. In Alaska, the availability of computers in the SLMC capable of connecting to the internet was linked to higher test scores. In Colorado, Pennsylvania, and Oregon similar questions
were asked about technology. Achievement levels increased with the availability of networked computers in both the SLMC and elsewhere in the school that provided access to catalogs, licensed databases and the internet. Evidence was also collected in all four states demonstrating that SLMSs must embrace technology in order to be effective change agents of student achievement. They must be knowledgeable about the latest information resources and technology and ensure that school networks extend the availability of information resources beyond the walls of the SLMC (Lance, 2002). Research found that a networked infrastructure was necessary for students to access information anywhere in the school, and preferably also at home for maximum achievement.

While the Ohio studies conducted by Ross and Kuhlthau (2005) produced analogous results to the above research, the studies went one step further by suggesting that technology literacies are an important indicator in predicting student academic achievement. Over 13,000 Ohio students were surveyed regarding the perceived “helps” they receive from the SLMC. Ranked highest by the students was not only the SLMS’s ability to teach them how to use technology tools to access and evaluate information, but also to provide instruction in how to use these tools effectively and reflectively to create products. The development of media and technology skills, which include critical thinking and communication competencies, as well as the appropriate and ethical use of technology for information access, retrieval, production, and dissemination were all recognized as key building blocks of a successful school library program (Todd, 2003). None of the above situations would have been possible without the support of the building principal. It is critical that principals understand the importance of funding the
most up-to-date technology infrastructure possible and that they see the vital role SLMSs have in cultivating technological literacy in students and teachers.

The lack of knowledge principals have regarding the role of libraries and their ability to improve student learning was revealed in the findings of a national survey conducted by *School Library Journal* (Lau, 2002b). *SLJ* surveyed 242 principals across the country and although 80% of principals said they strongly believe the SLMC plays a positive role in the overall value of the school, only a staggering 47% said there is a direct link between an effective media center and increased student achievement. Even fewer principals acknowledged that the school library has a positive impact on students’ standardized test scores. While the survey results only reflect principals’ opinions rather than demonstrated causality, they still imply a disparity between principals’ beliefs and current research in the field. In another *SLJ* survey sent out to SLMSs in the same year, the findings suggest that while the overall authority of the SLMS is on the rise, less than 46% of those surveyed say their principal is “very informed” about what the SLMC has to offer (Lau, 2002a).

Yet another survey conducted by Alexander, et al. (2003) in Kentucky asked principals to rate the overall importance of the SLMS in relation to the learning success of students. On a scale of one to ten with 1 being least important, elementary principals rated the SLMS with a mean of 4.46, while middle school/junior high principals’ mean rating was 5.74, and high school principals rated the SLMS with a mean of 6.29. The low rating of elementary SLMSs is a puzzle considering the amount of time spent instructing students and collaborating with teachers. These findings may demonstrate a disconnect in the minds of principals regarding the learning that goes on in the classroom and the
learning that goes on in the SLMC. It could be inferred from this data that elementary principals still view the SLMC as “special” instead of an accepted core part of the school’s learning and teaching.

Several researchers point to the lack of coverage on school libraries in principal preparation programs as part of the problem (Alexander, et al., 2002; Hartzell, 2002; Veltze, 1992; Wilson, Blake, & Lyder, 1993). Many administrative training courses do little to enhance or develop principals’ understanding of the SLMC and the SLMS. If any attention is given, it is often in a negative manner in relation to the potential problems (i.e. censorship challenges) associated with the SLMC (Hartzell, 2002). Why should it matter that principals demonstrate a lack of knowledge about the role of the SLMC? Gary Hartzell (2002), former principal and known author on the relationship between school administrators and school libraries, sums up the best response:

If principals do not understand what library media centers are about and what media specialists can do in varying realms of school activity, they are not likely to provide opportunities for media specialists to make a difference. If principals do not support, encourage, and facilitate meaningful interactions and collaboration between media specialists and teachers because they do not grasp their value, then media specialists’ opportunities to make a real difference at work are reduced (p. 103).

While the studies mentioned above included one or two questions regarding the value principals give to the SLMC in relation to learning and student achievement, no study to date has explored this perception in depth. Principals determine the quality of the school library media program as much as SLMSs do because they influence or control
budgeting decisions, faculty collaboration, and the SLMS’s ability to serve in a leadership capacity within the school (Hartzell, 2002). More efforts should be made to research the importance school principals place on the SLMC in relation to student achievement and why they hold such opinions.

If principal preparation programs are not educating principals about the significant role SLMCs can and do play in the learning of students, the responsibility must lie with SLMSs themselves (Alexander, et al., 2003; Gallagher-Hayashi, 2001; Grant, 1988; Hartzell, 2002; Haycock, 1981). Communication between the SLMS and principal is imperative for the success of the program and SLMSs must take a proactive role in this relationship. Teachers and administrators do not always realize that the SLMS has the knowledge and skills to be able to assume a role in instructional planning and implantation (Grant, 1988). SLMSs must make themselves more visible by better articulating their mission and the impact they have on student learning (Lau, 2002b).

Research suggests that SLMSs need to consider the perspective, knowledge base, and different forms of communication when attempting to inform principals (or other specific groups) about the library media program (Gallagher-Hayashi, 2001; Hartzell, 2002; Hortin, 1989; Weeks, 2001). Edwards’ (1989) survey of principal perceptions indicated that principals think librarians spend 20% less time on instruction than librarians think they do. Communications were also rated higher if librarians submitted periodic reports to their principals. More than ten years later, Lau’s (2002b) survey of principals revealed that little more than a third of principals say their media specialists take a proactive role in the school. Only 37% of those surveyed say their SLMS familiarizes them with current research on library media programs and student
achievement. If communicating with principals should be a cornerstone for building support for the library program, SLMSs are falling short (Haycock, 1981). The building level professional is the only one with day-to-day influence on the perceptions of the principal. SLMSs should be motivated to communicate more effectively with their administrators in order to gain support for the SLMC and its programs. If principals do not place high importance on the role of the SLMC in relation to student learning and achievement, the SLMC is threatened by being viewed as non-essential by one of the most influential decision-makers in the school.

Even though studies like those conducted in Alaska, Colorado, Pennsylvania, Oregon, and Ohio have been published demonstrating the correlation between effective school libraries and student achievement, many principals are still unaware or in disbelief. Although some of the studies touched upon in this review investigated the principal’s relationship with the SLMS or suggested ways the SLMS could be more proactive in promoting the library program, no empirical study has focused mainly on the principal’s view of the relationship between the SLMC and student academic achievement. The literature revealed coverage in the areas of funding, technology, and communication between the principal and SLMS, but a gap in the literature exists concerning this topic and it would be beneficial to teachers, students, administrators, and SLMSs for the topic to be further explored. The main priority for a principal is to ensure that students are learning and are achieving successfully. Principals also have enormous control over the funding, staffing, and programming of the SLMC; if they do not believe the SLMC is an important contributor to the academic achievement of the students, support will diminish and the SLMC will be threatened. It is not enough for SLMSs to
believe they play a critical role in the learning of students and teachers; principals must also hold this belief and do everything in their power to support the SLMC and its programming. The entire learning community, but most importantly the students, will benefit from such practice.

The purpose of this research study was to survey elementary principals in the state of North Carolina and look closely at their responses regarding the SLMC and its relationship to student academic achievement. The responses of the participants provided insight into the topic and exposed areas for further research.

Method

General Description

The method of research chosen for the study was a survey. Surveys are a good way to gather data about a population too large to observe directly and are also helpful in measuring the attitudes and opinions of that large population. Because the research question sought to uncover the views of elementary principals in the state of North Carolina, a survey seemed to be the most appropriate method for conducting the research. Limited funds and time to complete the research were also contributing factors to the decision to use a survey. Conducting a survey allowed the use of findings to make generalizations about the population and to propose possible explanations for principals’ opinions based on several variables. Although administering a survey did present a few limitations (to be discussed in a later section), the overall advantages outweighed the disadvantages for gathering information from a large population and attempting to make general statements from the opinions of a sample.

Sample, Population, and Sampling Technique
As stated in the introduction, the population for this research study was principals from the public schools of North Carolina, with a sampling frame of all elementary principals from six local school districts. A listing of all the elementary principals in the state and their contact information was accessed on the North Carolina Department of Public Instruction’s website. The original intent of the study was to use systematic sampling (Babbie, 2004) to create a study population composed of every 3rd element. This sampling technique yielded approximately four hundred potential respondents with three as the sampling interval. As there are approximately 1,200 public elementary school principals in the state of North Carolina, using a sampling interval of three produced a sample size of roughly one third of the total population.

The response rate (8%) garnered from the original sample was so low, however, that the researcher was forced to alter the sample instead to include all principals from six local school districts: Chapel Hill-Carrboro, Chatham County, Durham, Orange County, Person County, and Wake County. All surveys from the original sample were discarded. The sample size then consisted of approximately 140 potential respondents. The rationale for contacting principals in the local school districts was that they might be more willing to complete the questionnaire due to their proximity to and familiarity with the university.

**Sequential Description of Study**

Before submitting copies of the questionnaire to the Instructional Review Board, the researcher asked two principals to review the questionnaire for clarity and organization. This helped to correct any confusion presented by the wording of the statements. An application to the University of North Carolina at Chapel Hill’s Instructional Review Board was submitted and approved. The participants were then
contacted by an email distribution (see Appendix A) detailing the purpose of the study and including the link to a self-administered questionnaire. To allow for more honest answers and opinions, the participants were asked to answer the questionnaires anonymously. The self-administered questionnaires contained no personal identification information for the researcher. One follow-up (see Appendix B) email was sent two weeks after the initial request was sent. Participation in the study was voluntary and respondents received no compensation for their efforts, nor did their participation cost them monetarily, except for the modicum amount of time used in responding. A total of five weeks was allowed for participants to fill out the questionnaires. All questionnaires received after this time were not included in the data collection as it was necessary to move on to the description of the analysis.

**Ethical Issues**

Aside from the unsolicited intrusion into the personal and professional lives of potential respondents, no harm was done. Participation was voluntary. All respondents were asked to answer anonymously and neither the researcher nor the reader of the findings can identify a given response with a given respondent. The software used to collect data from the survey does not save any identifying information from the participants; therefore it is impossible to connect the results with a particular member of the study population. Each respondent was also given the name and contact information of the researcher in order to ask questions or request a copy of the final research report.

**Variables and Measurement Technique**

The measurement technique employed in this study was a questionnaire. The questionnaire was created using a program called SurveyMonkey
(www.surveymonkey.com), which enabled the researcher to design the questionnaire as well as collect and analyze the data using the software. The goal of the questionnaire was to survey elementary principals regarding their views on the relationship between the school library media center and student achievement. The variables included principals’ opinions (as the dependent variable) and previous occupation, communication, and principal training programs (as the independent variables).

It is possible that each one of the independent variables may contribute to the opinions held by the principals. In the case of previous occupation, those administrators having classroom or media specialist experience might likely view the role of the media center differently than those persons lacking that exposure. The communication efforts of the SLMS could influence principals’ views due to the funding the SLMC receives and how it translates into support for the media center. And finally, principal training programs might have the greatest potential to influence administrators’ opinions in their early years because the programs offer training in current practice and exposure to the inner workings of the school and how each section connects the whole learning community. If the school media center is not given any focus in these principal preparation programs, administrators are left with their own personal experiences with school media centers which may be entirely outdated or biased in some way. Questions pertaining to each of the aforementioned variables helped to present a clearer picture of why principals might hold particular opinions regarding the SLMC and student achievement.

The questionnaire (see Appendix C) was comprised largely of closed-ended questions in order to receive a greater uniformity of responses. Statements were made on
the questionnaire which required participants to respond using a Likert scale (i.e. Strongly Agree, Agree, Neither agree nor disagree, Disagree, Strongly Disagree). The closed-ended statements centered on such issues as fixed versus flexible scheduling, collaboration between the SLMS and teachers, funding for technology, student achievement as it relates to the SLMC, and personal knowledge of current research. An open-ended invitation (i.e., “Your additional comments related to this survey are welcome”) at the conclusion of the questionnaire gave respondents the opportunity to provide any further thoughts or comments regarding the school library media center as it relates to student achievement. Possible comments for the open-ended statement were not coded ahead of time as responses were anticipated to be too varied to estimate. Please refer to Appendix C for a copy of the questionnaire.

**Advantages and Disadvantages of Research Method**

In general, survey research offers advantages in terms of economy, the amount of data that can be collected, and the chance to survey a large population. The standardization of the data collected represents another special strength of survey research. Self-administered questionnaires offer several distinct advantages over other types of survey research (i.e. face to face and telephone interviews). Economy, speed, lack of interview bias, and the possibility of anonymity and privacy to encourage candid responses on sensitive issues are all advantages of using self-administered questionnaires (Babbie, 2004). Questionnaires the respondents administer to themselves make large samples feasible. Surveys can also be flexible in that many questions can be asked on a given topic and analyzed for operational concepts after the surveys are returned. Although survey research is generally weak on validity, is it strong on reliability because
all participants are presented with exactly the same questions organized and worded in an identical manner. Careful wording of the questions can also lower the participants’ own unreliability.

Despite the numerous advantages of survey research, the disadvantages must also be considered. Although standardized questionnaire items are reliable in construct, they often “appear superficial in their coverage of complex topics,” (Babbie, 2004, p. 275). The requirement of standardization in surveys forces the researcher to design questions that will be at least minimally appropriate to all respondents. With this in mind, researchers may miss what is most appropriate to many respondents. In addition, although survey research can attempt to ask questions to gain a perspective of a person’s social context, the survey is rarely able to develop a total understanding of the social environment in which the respondents think and act. Simply because a respondent answers one question in a particular manner does not mean he/she would feel the same way about all questions pertaining to that topic. Surveys are also inflexible because of the inability to make changes to the questionnaires once they have been sent. The researcher may not change the questionnaire even though those that have been returned may reveal a new variable or demonstrate confusing or illogical wording of the questions. Ultimately, the design of the study must remain unchanged throughout the duration of the research despite new developments. One of the final disadvantages of survey research is the weakness on validity. Respondents may answer in the way that they think the researcher would like them to respond and it is also often difficult to respond to a question with predetermined answers that may not fit a person’s true opinions. In respect to my specific
study, validity was limited by the small sample size. Therefore, the validity of the generalizations based on the sample population’s responses was weakened.

**Descriptive Statistics and Analysis**

Ten emails were returned as undeliverable leaving the elementary principal sample size at 130. Thirty-two participants completed the online questionnaire for 24.6% of the population. This is a much smaller response than was hoped for by the researcher. Because of the small sample size, results should be considered preliminary. There is no way to know why so few people chose to complete the questionnaire but it is speculated by the researcher that principals are continually inundated with requests and did not feel the questionnaire was a priority in their schedule and no incentive was provided to motivate participation.

**Demographics**

The amount of experience varied among participants with the greatest percentage (41.4%) having 0-4 years experience. See Figure 1 for a more detailed description. All participants had received certification for other positions in the field of education, including: regular education (32), superintendent (3), school counselor (2), special education (2), curriculum specialist (2), career development (1), and reading (1).
Half of the participants worked in elementary schools with a student population of over 600 students. An equal number of principals (5) worked in smaller schools with student populations ranging from 300 to 500 students. In regard to training, 14 of the participants agreed that they should have received more training regarding the role of the SLMS in their principal preparation program, while 10 were unsure and six disagreed. Responses to the rest of the questionnaire could be grouped into the following categories: student achievement, funding, technology, and communications. Statements falling into more than one category were labeled according to the category that best fit the statement.

**Student Achievement**

Statements directly mentioning the phrase “student achievement” or statements closely related to the category are discussed in this section. A surprising 19 of the principals agreed that they were aware of the recent studies conducted by experts in the field showing a connection between the SLMC and student achievement. Seven participants were not sure and 4 responded that they were not aware of the recent studies.
concerning the SLMC and student achievement. Statements 1 and 2 referred to the importance of having a certified media specialist and full-time library assistant for the academic achievement of students. While 26 principals strongly agreed it is important to have a certified media specialist in their school, only 18 strongly agreed that they actually employ a certified person in their school. Comparatively, only 17 of principals strongly agreed that the presence of a full-time assistant is necessary for an effective school library media center program and only 12 strongly agreed that they currently employ a full time library media assistant in their school. Figures 2 and 3 display those numbers.

![Presence of Certified Media Specialist](image)

**Figure 2. The Opinions of Participants on The Importance of Employing a Certified Media Specialist Compared to The Actual Number Employed**
The next set of statements pertained to scheduling in the SLMC. More than two thirds (21) of participants agreed that a flexible schedule is the best schedule to enhance student achievement. Two principals commented specifically on the benefits of observing a flexible schedule in the SLMC.

- “We have been using the flexible scheduling concept since 1995, when we were part of the Readers’ Digest Library Power Grant Program. We do some fixed scheduling with our kindergarten and first grade classes due to story time with these groups. These two grades also do some flexible scheduling when they are working on projects or are doing research. All other grade levels (2-5) use flexible scheduling, and plan/collaborate with the media specialist for research projects/special units. Our Central Office Media Associate Superintendent readily
advocates the flexible scheduling model, and works with principals and media specialist to encourage the use of this model in elementary schools.”

- “Our current media specialist is a graduate of the UNC program and has energized our media center, students, and staff. We operate on a flexible schedule with the exception of our preschool and kindergarten students who have a fixed/flexible schedule to introduce them to the media center. We also have student assistants, a book swap, and an ongoing program to teach students and staff about the research model. Our program is innovative and unlike any other I have seen! Our media center is a hub of learning and considered an extension of our classroom!”

Six participants strongly agreed or agreed that a fixed schedule is the best schedule to enhance student achievement. Interestingly, 11 principals neither agreed nor disagreed with this statement, possibly indicating a need for more explanation or training in this area. In response to the statement that a combination of fixed and flexible schedules is the best schedule to enhance student achievement, almost three fourths (23) of principals agreed, and 8 disagreed. Figure 4 reveals the type of scheduling actually observed in the schools of all participants.
Most principals (29) strongly agreed and agreed with the statement that students use the SLMC in their school on a weekly basis. The results were more varied in response to the statement that students in their school use the SLMC regularly for student research. All but 4 people either strongly agreed or agreed. Those who did not agree skipped this question altogether, possibly indicating their desire not to appear unknowledgeable about the habits of their students. Not surprisingly, more participants were sure that students regularly checked out materials for free reading from the SLMC: 28 strongly agreed or agreed and 1 person was unsure.

In response to the statement: “I have seen student test scores positively affected by the work of the media specialist,” 21 either strongly agreed or agreed. Nine participants were unsure and only 2 people disagreed with the statement. Twenty-two principals reported strongly agreeing that they personally view the SLMC and its programs as a core learning component in their school. Twelve principals, however, strongly agreed that the faculty holds this same view. Only 3 principals strongly agreed
that students who spend more time in the SLMC (individually or in groups) tend to have higher test scores, while 14 agreed and 13 were unsure. Nine principals strongly agreed that student academic achievement in their school would be adversely affected with the removal of the certified media specialist. In response to this same question, 14 participants agreed and 7 were either unsure of disagreed. If over half the principals reported being familiar with the recent studies displaying a connection between the SLMC and student achievement, it is interesting that the preceding questions received such little support.

**Funding**

The value any principal places on the SLMC has some connection with the amount of funding received. Not surprisingly, only 3 and 16 participants respectively strongly agreed and agreed that there is sufficient funding in their school to support an effective SLMC. With this in mind, all but 2 principals agreed that there is a line item in their budget every year for the SLMC. If their school was faced with budget cuts, 8 principals agreed and 14 disagreed that they would be willing to reduce the SLMC’s budget for one year. All but 2 participants were careful to note that even in times of decreased funding, it is important to have a certified media specialist in their elementary school. The following statement was met with much uncertainty from the participants: “Surplus money in the budget would be better spent in the SLMC as opposed to individual classrooms.” Fourteen principals were unsure while 5 agreed and 10 disagreed with the statement. One principal went on to clarify her responses: “There are many tough decisions that need to be made in a school finance realm. Classroom support and direct instruction to children is the absolute top priority. The more a department extends
itself to support classroom teachers and children directly, the more valuable the department and/or service is to my school.”

**Technology**

Recent empirical studies contend that provision of an up-to-date information technology infrastructure for information access and use is a school library predictor of academic achievement (Lance & Rodney, 2000; Lance, et al., 2000, 2001a, 2001b; Todd & Kuhlthau, 2005). Funding for current technology in the SLMC is a priority for 23 of the principals surveyed in this study. Almost all participants (27) strongly agreed or agreed that their school has a networked infrastructure for easy access of information. All the participants responded that most of the computers in their school have internet access and students have access to the internet in the SLMC as well as the classroom. Please see Figures 5 and 6 for results indicating the number of computers in each classroom versus the number of computers in the SLMC. Although all classrooms had various numbers of computers, the SLMC was equipped with the most technology. Many SLMCs share a space or are connected to a computer lab used by a technology specialist. Higher numbers of computers reported in the SLMC may reflect such a situation.
Communications

Communication between the principal, SLMS, and faculty is crucial to the development of a successful SLMC program. As one principal commented at the end of the questionnaire: “Collaboration is critical to the success of the students—the teachers, media and technology facilitator MUST work together to integrate the curriculum and
help all students succeed.” In response to the questionnaire, 24 principals strongly agreed that they encourage the faculty in their school to collaborate with the SLMS. In addition, 25 principals strongly agreed that it is important for the SLMS to plan instructional units with the teachers. A wider range of responses, however, was gathered in response to the statement that the certified SLMS should provide in-service training to teachers. Over three fourths of principals strongly agreed or agreed with the statement, while 6 were unsure, and 1 disagreed.

Principals also varied in their opinions on whether the media specialist takes a leadership role in their school. Ten participants strongly agreed with the statement, 14 agreed, and 6 were unsure. “The media center in my school is the hub of much activity in the school. The media specialist is involved in all facets of life on the school campus,” one principal commented. “She is a member of the Cultural Arts and Curriculum committees and meets with each grade level quarterly for grade level planning.” The following observation from another principal illustrates the absolute necessity for the SLMC to take an active role in the school, otherwise her position is devalued: “I think my opinions [on the questionnaire] are directly related to the quality of my media specialist. I believe the role could be integral. However, my media specialist is not a leader and does not create an energetic, motivating environment in the media center.”

Discussion and Limitations

The goal of this study was to gain more insight into the opinions principals from six local North Carolina school districts hold about the relationship between the SLMC and student achievement. Due to the small response size of this study, it is impossible to generalize the findings to the larger community of principals in this area of the state.
Also, as mentioned in the methods section, the very nature of a survey prevents one from gaining a total understanding of the social context from which participants base their responses. Elaboration of responses and clarification of statements are also not possible, thereby inhibiting the truer picture that might be garnered from other research methods such as interviews. However, the results are still valuable in that they reveal several interesting dichotomies as well as bring to light the positive things that are happening in schools surveyed.

It is interesting to note that while 21 principals strongly agreed or agreed that a flexible schedule is the best schedule to enhance student achievement, only eight schools surveyed currently observe a flexible schedule. In a related statement, it is evident from the responses (only 17 strongly agreed) that principals do not feel the presence of a full-time media assistant is necessary for an effective school library program. It is not surprising then, that the majority of schools surveyed are not operating on a full time flexible schedule. Flexible scheduling requires the presence of a media specialist and assistant to be truly effective. One principal noted that her school changed to a flexible schedule after their participation in Reader’s Digest Library Power Grant Program. Her comment reflects the value grant programs have to demonstrate effectiveness. Perhaps more principals would have answered “strongly agree” on the statement referring to test scores being positively affected by the work of the SLMS if in fact the SLMS had more time to invest in the authentic teaching a flexible schedule supports.

In a related statement, 13 principals reported neither agreeing nor disagreeing with the statement that students who spend more time in the SLMC (individually or in groups) tend to have higher test scores. Yet 19 principals claimed to be aware of the
recent studies conducted by experts in the field displaying a connection between the SLMC and student achievement. Many of these studies report statistics which support the claim that more time spent in the SLMC boosts student test scores (Lance & Rodney, 2000; Lance, Rodney & Hamilton-Pennell, 2000, 2001a, 2001b; Ross & Kuhlthau, 2005). Possibly a few probing follow up statements could have helped to explain just how familiar principals are with these recent studies.

Two responses that pertained to funding were also worth noting. One statement asked participants to reflect on whether surplus money in their budget would be better spent in the SLMC as opposed to individual classrooms. While only 5 principals agreed with the statement, 10 disagreed and 14 were unsure. These numbers may reflect the view that the learning which goes on in the classroom takes precedence over the learning in the SLMC. One participant went on to comment that the financial decisions in any school are difficult; therefore classroom support and direct instruction to children are the absolute priority. This statement reinforces the belief that programs and/or personnel directly impacting student achievement receive priority in funding. If the SLMC and its staff are not valued for contributing to the academic achievement of students they may not receive appropriate financial support.

Several positive points were revealed in the study. Three fourths of principals reportedly encouraged faculty to collaborate with the SLMS and an even greater number (25) strongly agreed it is important for the SLMS to plan instructional units with teachers. Unfortunately, only 12 principals believed that the faculty viewed the SLMC as a core learning component in the school. This may indicate a need for increased encouragement from the principal to collaborate with the SLMS. The result might also point to the need
for the SLMS to do a better job of promoting his/her talents and services to the faculty. If
the SLMS wants her role to be valued and respected as having an impact on student
achievement, she must assert herself as a leader in the school community. In addition, if
faculty and the SLMS are not given planning time and a flexible schedule with which to
operate, students will not receive the full benefits of learning in the SLMC.

**Significance of Study**

The potential implications of this research are far reaching for the field of school
library media. Questions pertaining to the SLMC and its effect on student achievement
were asked along with questions relating to the other factors that have also been linked to
an effective library media program. Research has already shown that the relationship and
communication between the principal and the school library media specialist are
important. Support by the principal is also essential for the SLMC to be successful. A
vital and active SLMC, in combination with an effective media specialist, leads to an
increase in student achievement (Harada, 2005). In today’s educational realm of high
stakes testing and federal legislation, principals are ultimately responsible for the
academic achievement and growth of the students. It becomes crucial then, for principals
to acknowledge the SLMC as the learning center of the school and an essential
contributor to the academic achievement of the students.

Results of the elementary principals’ surveys in the state of North Carolina gave
an indication of how principals view the SLMC in relation to student achievement.
Previous data has already been collected displaying the positive impact school libraries
have on student achievement (Lance & Rodney, 2000; Lance, Rodney & Hamilton-
Pennell, 2000, 2001a, 2001b; Ross & Kuhlthau, 2005). The findings of this study
revealed, however, that principals were not resolute in their belief that the SLMC has an effect on student achievement. It will be up to future research to determine whether this belief stems from master’s administration courses, lack of communication between the principal and the media specialist, or in some other realm. School media specialists, teachers, and principals should be interested in this research as it can affect the way they interact and the resources which are allocated to their students. The fact is that resources will always be in short supply for schools, and the programs showing the most value are the ones that will receive funding. Decision makers (i.e. principals) must look for and react favorably to information that shows the worth of instructional programs. Principals have enormous control over the funding, scheduling, and staffing of the SLMC. It is imperative for principals to not only support the SLMC but to also validate the effect it can and does have on student achievement.

Conclusion

It is evident from the research conducted over the past ten years in the library science field that professionally staffed and supported SLMCs do have an effect on student achievement. Several other factors in connection with the SLMC have also been linked to higher student test scores. These factors include a collaborative relationship between faculty and the SLMS, a strong focus on the teaching of information literacy skills, current technological infrastructure in the SLMC as well as in the entire school, and sufficient funding for collection development and programming in the SLMC. Although many principals support the notion that the SLMC is an important component of the school, an overwhelming number are still hesitant when it comes to expressing their support for the connection between the SLMC and student achievement.
Communication between the SLMS and the principal is extremely important in garnering support for the media center. The SLMS can play a huge role in advocating services and informing the principal about the current research documenting higher student achievement as a result of instruction and time in SLMC.

The principal is the most influential person in the school when it comes to budgeting, staffing, curriculum, and programming. It is essential that all principals view the SLMC and student achievement as inextricably linked. It is crucial for principals not only to support the SLMC but to believe in the potential effect it has upon student academic achievement. Sufficient funding, open access, encouragement of faculty/SLMS collaboration, appropriate staffing, and the teaching of information literacy skills are all areas where the principal has a substantial amount of control. These are also areas which have had a demonstrated effect on student achievement. If principals do not believe in the relationship between the SLMC and student achievement, the entire learning community suffers.

Results from this study reaffirm the need for increased communication between the SLMS, principal, and faculty. They also expose the same uncertainty unearthed by previous studies (Lau, 2002a; Lau, 2002b) that principals display when it comes to the connection between the SLMC and student achievement. Further research is needed in the field to explore principals’ opinions regarding this relationship. Several steps could be taken to increase participation in the use of surveys to gather data. Administering the surveys at a professional state-sponsored principals’ conference may boost the response rate. Another suggestion would be to get a letter of support from the state or district superintendent encouraging participants to respond. In addition, interviews, rather than
surveys, should provide a more in-depth look into the relationship. Interviewing participants will allow the researcher to ask probing follow up questions and give participants a chance to explain the reasoning behind their opinions. Although interviews may not be as reliable as surveys, they will provide the validity that is missing from research attempts thus far in the field. Additional exploration of the specific understanding principals have regarding current studies on student achievement and the SLMC may clear up the discrepancies noted in this study.
Appendix A- Invitation to Participate in Study Email

Dear Colleague:

I am conducting a research study focused on elementary principals and their views on the relationship between the school library media center and student achievement. You were randomly selected from a list provided by the Department of Instruction for the State of North Carolina as a possible participant in this study. A total of 400 elementary principals have been chosen from across the state to participate in this study. Your participation in this study is completely voluntary.

To participate in the study you would complete an online questionnaire. Completing this questionnaire connotes your consent to be a participant in this study. This questionnaire is composed mainly of close-ended questions addressing your opinions regarding the school library media center and some questions (demographic) used to describe the respondents in this study. Completion of the questionnaire should take no longer than 15 minutes. You are free to answer or not answer any particular question and have no obligation to complete answering the questions once you begin. To access the questionnaire, please click on the following link or copy and paste it into your browser: http://www.surveymonkey.com/s.asp?u=158641708325. No further instructions are needed to complete the questionnaire.

Your participation is anonymous. You are asked not to enter any identifying information while completing the questionnaire. All data obtained in this study will be reported as group data. No individual can be or will be identified. I plan on using the results of this research for my Master’s paper as well as possible publication in a professional journal in the future. The only persons who will have access to these data are the investigators named on this letter.

There are neither risks anticipated should you participate in this study nor any anticipated benefits from being involved with it. However, there will be professional benefit from this study, as the information I obtain will be communicated to the profession through publication in the literature. There is no cost to you or financial benefit for your participation.

You may contact me with any questions at (919) 260-7866 or by email (baseball@email.unc.edu).

All research on human volunteers is reviewed by a committee that works to protect your rights and welfare. If you have questions or concerns about your rights as a research subject you may contact, anonymously if you wish, the Institutional Review Board at 919-966-3113 or by email to IRB_subjects@unc.edu.

Thank you for considering participation in this study. I hope that I can share your views with the greater professional community and use your response to help shape recommendations for further research.

Sincerely,

E. Elizabeth Stitsinger
Graduate Student
UNC Chapel Hill
School of Information and Library Science

Dr. Evelyn Daniel
Supervising faculty member
UNC Chapel Hill
School of Information and Library Science
Appendix B- Follow-up Email

Dear Colleague:

Two weeks ago you were contacted regarding a research study I am conducting focused on elementary principals and their views on the relationship between the school library media center and student achievement. If you have already chosen to participate in this study by completing the questionnaire, I appreciate your time and you may disregard the remainder of this email. If you have not completed the questionnaire, I am asking once again for your participation. You were randomly selected from a list provided by the Department of Instruction for the State of North Carolina as a possible participant in this study. A total of 400 elementary principals have been chosen from across the state to participate in this study. Your participation in this study is completely voluntary.

To participate in the study you would complete an online questionnaire. Completing this questionnaire connotes your consent to be a participant in this study. This questionnaire is composed mainly of close-ended questions addressing your opinions regarding the school library media center and some questions (demographic) used to describe the respondents in this study. Completion of the questionnaire should take no longer than 15 minutes. You are free to answer or not answer any particular question and have no obligation to complete answering the questions once you begin. To access the questionnaire, please click on the following link or copy and paste it into your browser: [http://www.surveymonkey.com/s.asp?u=158641708325](http://www.surveymonkey.com/s.asp?u=158641708325). No further instructions are needed to complete the questionnaire.

Your participation is anonymous. You are asked not to enter any identifying information while completing the questionnaire. All data obtained in this study will be reported as group data. No individual can be or will be identified. I plan on using the results of this research for my Master’s paper as well as possible publication in a professional journal in the future. The only persons who will have access to these data are the investigators named on this letter.

There are neither risks anticipated should you participate in this study nor any anticipated benefits from being involved with it. However, there will be professional benefit from this study, as the information I obtain will be communicated to the profession through publication in the literature. There is no cost to you or financial benefit for your participation.

You may contact me with any questions at (919) 260-7866 or by email (baseball@unc.edu).

All research on human volunteers is reviewed by a committee that works to protect your rights and welfare. If you have questions or concerns about your rights as a research subject you may contact, anonymously if you wish, the Institutional Review Board at 919-966-3113 or by email to IRB_subjects@unc.edu.

Thank you for considering participation in this study. I hope that I can share your views with the greater professional community and use your response to help shape recommendations for further research.

Sincerely,

E. Elizabeth Stitsinger     Dr. Evelyn Daniel
Graduate Student     Supervising faculty member
UNC Chapel Hill     UNC Chapel Hill
School of Information and Library Science     School of Information and Library Science
Appendix C- Questionnaire

For each of the statements below, please indicate the extent of your agreement or disagreement by circling the appropriate answer.

Questions 1-37 will offer the following answer choices:

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

1. It is important for the academic achievement of the students to have a certified media specialist in my school.

2. The presence of a full-time library specialist or assistant is necessary for an effective school library media center program.

3. Flexible schedule: Elementary students visit the media center as need warrants. The media center maintains open access all day with no regularly scheduled classes. Teachers collaborate with the media specialist to create lessons varying in length and time. Students may visit the media center individually, in small groups, or as a whole class. A flexible schedule is the best schedule to enhance student achievement.

4. Fixed schedule: Elementary students visit the media center at a set time each week and this time often corresponds to a planning period for the classroom teacher. A fixed schedule is the best schedule to enhance student achievement.

5. A combination of flexible and fixed schedules is the best schedule to enhance student achievement.

6. I have seen student test scores positively affected by the work of the media specialist.

7. I encourage the faculty in my school to collaborate with the media specialist.
8. It is important for the media specialist to plan instructional units with the teachers.

9. The certified media specialist should provide in-service training to teachers.

10. I view the school library media center and its programs as a core learning component in my school.

11. The faculty at my school views the school library media center as a central component to the students’ learning.

12. There is sufficient funding in my school to support an effective school library media center.

13. Funding for current technology in the school library media center is a priority for my school.

14. There is a line item in my budget every year for the school library media center.

15. If my school were faced with budget cuts, I would be willing to reduce the school library media center’s budget for one year.

16. Surplus money in the budget would be better spent in the school library media center as opposed to individual classrooms.

17. Even in times of decreased funding, it is important to have a certified media specialist in my elementary school.

18. Students who spend more time in the school library media center (individually or in groups) tend to have higher test scores.
19. My media specialist takes a leadership role in the school.

20. My media specialist informs me about current research regarding library programs and student achievement.

21. Student academic achievement in my school would be adversely affected with the removal of the certified media specialist.

22. My school library media center can accommodate one entire class (or more) of students at one time.

23. The students at my school use the school library media center regularly for research.

24. The students at my school use the school library media center regularly to check out materials for free reading.

25. Students at my school use the media center on a weekly basis.

26. My school has a networked infrastructure for easy access to information.

27. Most of the computers in my school have internet access.

28. Students in my school have access to the Internet in the school library media center.

29. Students in my school have access to the Internet in their classrooms.

30. The school library media center is used as a planning time for teachers in my school (similar to Art, Music, P.E., etc).
31. The media specialist in my school communicates with me on a regular basis regarding his/her efforts in the school library media center.

32. I have a full time certified media specialist in my school.

33. I have a full time library media assistant in my school.

34. I am aware of the recent studies conducted by experts in the field showing a connection between the school library media center and student achievement.

35. I should have received more training regarding the role of the school library media specialist in my principal preparation program.

For each of the statements below, please indicate your response by circling the appropriate answer.

36. I have been a principal for this number of years.
   0-4  5-9  10-14  15-20  21-25  25-30  30+

37. I have received certification for other positions in the field of education.
   Yes  No
   If yes, please check all that apply.
   □ Teacher
   □ School Counselor
   □ School Psychologist
   □ Media Specialist
   □ English as a Second Language
   □ Speech Pathologist
   □ Other _____________________

38. My library observes the following kind of schedule.
39. The population of my school is as follows.

<table>
<thead>
<tr>
<th>Fixed</th>
<th>Flexible</th>
<th>Combination of fixed and flexible</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-100</td>
<td>101-200</td>
<td>201-300</td>
</tr>
</tbody>
</table>

40. The average number of computers in each classroom in my school.

| 0-1 | 2-3 | 4-5 | 6-7 | 8-9 | 10+ |

41. The average number of computers in the school library media center.

| 0-3 | 4-6 | 7-9 | 10-12 | 13-15 | 16-18 | 19+ |

*Your additional comments relating to this survey are welcome.*
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