

Report of Findings and Recommendations of the New Jersey School Library Survey

Phase 1: ONE COMMON GOAL: STUDENT LEARNING

July 2010

**On behalf of the
New Jersey Association of School Librarians (NJASL)
USA**

**Prepared by
Dr. Ross J Todd
Dr. Carol A Gordon
Dr. Ya-Ling Lu**

**Center for International Scholarship in School Libraries (CISSL)
School of Communication and Information
Rutgers, The State University of New Jersey**



N · J · A · S · L

New Jersey Association of School Librarians

CONTENTS

| | |
|--|-----|
| Acknowledgements | 2 |
| Background, Purpose and Methodology of the Phase 1 Study | 3 |
| Executive Summary | 11 |
| Recommendations | 32 |
| Data Analysis and Findings | 42 |
| Appendix A: Survey Instrument | 283 |
| References | 302 |

Acknowledgements

Dr. Ross Todd, Dr. Carol Gordon and Dr. Ya-Ling Lu, are CISSL researchers who were the principal investigators for the study.

CISSL thanks the following organizations and individuals for their support as follows:

The NJASL Board and Membership for having the vision to support this study, and for providing the substantive funding to enable the study to take place.

Angela Crockett and Patricia Massey who served in the office of President of NJASL during the planning and implementation stages of the study.

Dr. Mary Jane McNally, Susan Heinis, and Patricia Massey who served on the Advisory Group to the study.

Dr. Carol Kuhlthau, senior consultant to CISSL provided invaluable input and advice to the research team

Pam Chesky for serving as Project Manager.

Marianne Martens, CISSL Barham Scholar and Doctoral candidate provided web survey instrument development and management, and data analysis and reporting.

Doctoral candidates and recent Ph.D.s: Edith Beckett (doctoral candidate), Nicole Cooke (doctoral student), Jocelyn Deangelis Williams (Ph.D.), Kyong Eun Oh (doctoral student), Paulette Kerr (Ph.D.), Sung Un Kim (Ph.D.), Seong Eun Cho (Ph.D.), Go Un Kim (doctoral candidate), and Andrius Kirkyla (doctoral candidate) for contributions to survey instrument development, data coding and analysis.

David Rothrock and Follett Library Resources for providing access to *TitleWise* data and consultation.

Elizabeth Ciccone, Business Specialist at SC&I for fiscal management of the project.

Andrew Mudrak and Tina Gera of SC&I's IT Services for invaluable software support and troubleshooting during survey development, testing and operation.

Background, Purpose and Methodology of the Study

1. Overview of Research

This report documents the findings and recommendations of Phase 1 of a multiphase research study commissioned by the New Jersey Association of School Librarians (NJASL) in 2009 and undertaken by the Center for International Scholarship in School Libraries (CISSL) at Rutgers, The State University of New Jersey, School of Communication and Information (SC&I). The overall research agenda (Phases 1 and 2) seeks: (a) to construct a picture of the status of New Jersey's school libraries in the educational landscape of New Jersey; (b) to understand the contribution of quality school libraries to education in New Jersey; (c) to understand the contextual and professional dynamics that inhibit and enable school libraries to contribute significantly to education in New Jersey, and (d) to make recommendations to NJ stakeholders to develop a sustained and long term program of capacity building and evidence-based continuous improvement of school libraries in New Jersey. Phase 1 of this research program, documented in this report, sought to provide a comprehensive picture of the status of public school libraries in New Jersey: their infrastructure, personnel, resource and information technology provision, and the instructional and administrative work of the school librarians.

2. Background

School libraries have been an integral and sustained part of the educational landscape of New Jersey for many decades. Some of the earliest national research on the impact of school libraries on student learning was undertaken in New Jersey. Mary Gaver, a professor in the Graduate School of Library Services at Rutgers University, led a major research study, *Effectiveness of Centralized School Library Services in Elementary Schools* (1963), involving 271 schools in 13 states, including New Jersey. She compared the test scores of students in three learning environments: schools with classroom libraries, schools with centralized libraries run by non-librarians, and schools with centralized libraries run by librarians. Students in schools with centralized libraries managed by qualified librarians tended to score higher than students without centralized libraries or qualified librarians. Gaver's pioneering study blazed a trail for subsequent school library impact studies. She held the strong belief that:

With the school library literally the heart of the educational program, the students of the school have their best chance to become capable and enthusiastic readers, informed about the world around them, and alive to the limitless possibilities of tomorrow (Gaver, 1958).

An extensive body of research has grown from Gaver's vision and research, and a substantial number of state-wide studies have been undertaken since 1990 to understand the nature, dynamics and impacts of school libraries and the professional work of school librarians in the educational landscape (Scholastic, 2008). This body of research consistently shows that there is a positive correlation between student achievement on standardized tests and the provision of school library services by a certified school librarian.

This research study is founded on some critical needs arising out of the NJ context of school libraries, as well as national needs. No large scale research of school libraries has been

undertaken in New Jersey since Gaver's work. In 2003-2005, a CISSL study funded by an Institute for Museum and Library Services (IMLS) grant examined how students constructed knowledge of curriculum topics when they engaged in a collaboratively designed and implemented library-based research task. The study, *The Impact Of School Libraries On Student Learning*, involved ten New Jersey public schools, ten school librarians and 17 classroom teachers, and 574 students in grades six to twelve (Todd, 2006). The study found two distinctive patterns of knowledge development: additive and integrative. Additive knowledge development was characterized by the progressive addition of property and manner facts, and where students primarily stockpiled facts, even though facts were sorted, organized and grouped to some extent into thematic units by conclusion. Students' knowledge development remained on a descriptive level throughout the unit of inquiry. The second pattern was integrative, where students moved beyond gathering facts, to building explanations, addressing discrepancies, organizing facts in more coherent ways, interpreting found information to establish personal viewpoints and conclusions, and reflecting on new knowledge. The study found that changes in knowledge growth did not occur evenly in the schools. While overall there were no significant variations across the age, grade, and gender groups, the depth of knowledge development was influenced by factors such as the nature of the research task, engagement and ownership, and nature of instructional interventions focusing on the development of skills to construct knowledge rather than finding information. Data also showed that students valued instructional interventions through the school library that focused on the development of research skills, especially information analysis and synthesis, skills in using specific online sources (online databases, Internet, OPACs), enhanced information seeking beyond Google, dealing with information conflict, and assessing quality of information. These factors appear to contribute to the development of deep knowledge. The study highlights the central importance of instructional interventions that engage students with information and enable them to transform it into deep knowledge, and the role that school libraries can play in this process. The study also developed a Student Learning Impact Measure (S.L.I.M) as a verified mechanism for enabling school librarians and classroom teachers to gather sustained empirical evidence of the impact of school libraries on individual student learning.

In 2006-2007, CISSL was awarded a Rutgers University grant through "The President's Program for Research in Service to New Jersey" to apply its research to reveal positive ways that libraries impact students' learning in order to enable K-12 students in impoverished communities in New Jersey to meet curriculum standards. Participants included 28 Library Media Specialists, two building administrators, seven Supervisors/Directors, as well as Department of Education leaders and association leaders. In a day long think tank, participants expressed both a strong commitment to enabling deep learning through the school library and the need to build school libraries – their informational infrastructure (including staffing, resources and technology), and the instructional capacity of school librarians – so that they play a strong role in promoting student achievement. Rich input was received and centered on the following themes: (a) Communicate and build an understanding of the learning-centered role of school libraries in 21st century schools in New Jersey; (b) Identify the key approaches to effective instruction through the school library media center that enables learners to engage meaningfully with diverse and complex information sources; (c) Build deep knowledge and understandings of their curriculum topics; (d) Develop the skills needed in the 21st century to live and work in an information rich society; (e) Provide professional development for classroom teachers and school librarians on

constructivist learning through school libraries in New Jersey; (f) Identify and/or create information-sharing portals to convey this research and actions; and (g) Meet the need for more sustained research to understand the nature, dynamics and contributions of school libraries and the work of school librarians to the educational landscape of New Jersey .

Large scale studies undertaken by CISSL in Ohio (2003) and Delaware (2005-6) have informed this research process. These build on an extensive body of research, as documented in *School Libraries Work!* (Scholastic,2008). Both the Ohio and Delaware studies show a rich level of help provided through the school library to support curriculum learning and identify key areas for continuous improvement at local and state levels. These studies have provided an empirical basis for implementing improvement plans and professional development to strengthen the role of school libraries in helping students meet state learning standards (Todd & Kuhlthau, 2005a, b). The publication of *Learning Standards for the 21st Century Learner* by the American Association of School Librarians (AASL, 2007) presents a paradigm shift from emphasis of school libraries on acquisition, access, and evaluation of information sources to a more holistic emphasis on the information-to-knowledge experience of students. This involves the following cognitive processes: 1) inquire, think critically, and gain knowledge; 2) draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge; 3) share knowledge and participate ethically and productively as members of our democratic society; and 4) pursue personal and aesthetic growth. (AASL, 2007). This raises important challenges for all school libraries not just in terms of the instructional and resource provision roles of school librarians, but in terms of the adequacy and effectiveness of school library infrastructures, personnel and instructional and reading / literacy programs to enable these standards to be successfully met.

The key audiences of this study are school librarians, school administrators and educational authorities in New Jersey who make decisions regarding the provision of school library services across the state and who are committed to a cycle of continuous improvement and capacity building in all New Jersey school libraries. The audience also includes school library educators, school leaders, professional associations, and policymakers in government and business in New Jersey and the nation who are committed to the provision of a rich library infrastructure across the state and who are concerned about what a 21st century education should look like in New Jersey.

The findings presented in this report come at a critical time in New Jersey where fiscal constraints in many school districts question the long-term viability and presence of school libraries staffed by appropriately certified professionals. At present there are no supporting comprehensive data or documentation to address questions such as: What are the resource, personnel and instructional provisions of school libraries in New Jersey? How does the work of New Jersey school librarians contribute to student achievement and prepare students for living and working in an increasingly global and digital world? What are the essential building blocks for quality school libraries in New Jersey? What are the immediate and long term opportunities for continuous improvement of school libraries?

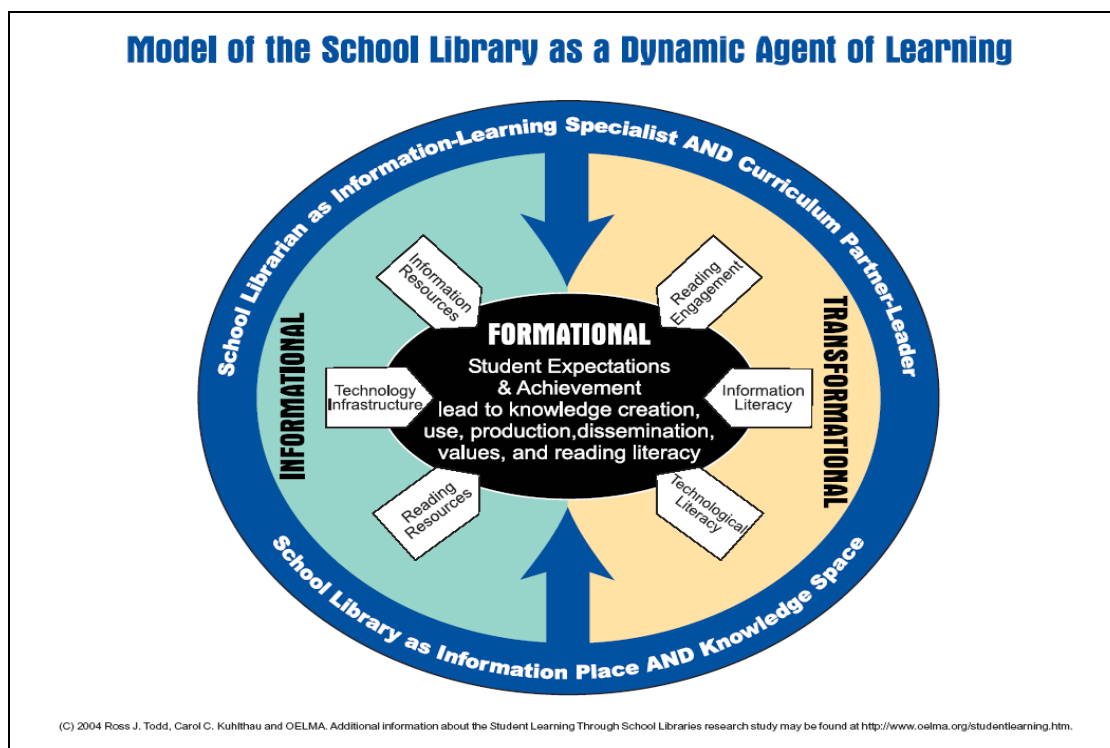
An important building block for sustained state-wide capacity building is data that will build a picture of the status of school libraries in New Jersey. These data will clarify the contributions of quality school libraries to education in New Jersey; as well as the contextual and professional

dynamics that inhibit and enable school libraries to contribute significantly to education in New Jersey. Accordingly, Phase 1 of the NJASL study *One Common Goal: Student Learning* provides data from a substantive sample of school libraries in New Jersey to establish a range of key benchmarks and outcomes.

3. Conceptual Framework, Research Goals, and Methodology.

The conceptual framework for this study is based on the Model of the School Library as a Dynamic Agent of Learning, developed by Todd & Kuhlthau (2005a, b) in *Student Learning Through Ohio School Libraries*. This model, underpinned by an extensive body of school library research extending over three decades, was based on quantitative and qualitative data collected from 13,123 students and 870 faculty and other professional staff (including school superintendents, principals, classroom teachers, information technology leaders, and school librarians) undertaken in 2003 across Ohio. This involved the study of 39 exemplary school libraries and is the largest study to date on school libraries. The findings of this study are documented at <http://www.oelma.org/studentlearning/default.asp>

The model posits that as a dynamic agent of learning, a school library's intellectual and physical infrastructure and output centers on three essential interrelated and iterative components: informational (the information resource and information technology infrastructure; transformational (the instructional interventions, reading and related initiatives, and other student engagement initiatives), and formational (learning impacts and student outcomes). This is shown in the following model:



Guiding the development of the survey questions were comprehensive findings emerging from existing research. These show that the following dimensions have a positive correlation with student achievement:

- A state certified, full-time, school librarian in the building;
- The availability of support staff who undertake routine administrative tasks and free the school librarian to undertake instructional initiatives and reading literacy initiatives;
- A curriculum-centered program that is based on flexible scheduling so that school librarians and classroom teachers can engage in collaborative planning and delivery of information literacy instruction, including development of a technological and critical literacies;
- An active instructional program of information literacy integrated into curriculum content, and targeted towards learning curriculum content and skills;
- Adequate, up-to-date information resources to support curriculum, reading, and literacy development across the school;
- The provision of professional development on information literacy and technology literacies to the teaching faculty;
- A strong networked information technology infrastructure that facilitates access to and use of information resources in and out of the school (Scholastic, 2008).

4. Development and Implementation of the Research Study

From June to December 2008, NJASL and CISSL developed a Letter of Intent that established the willingness of both parties to proceed with the development of a research proposal and formal research contract and established the necessary written inter-organizational agreements. In this formative period considerable input was sought from NJASL membership through presentation and discussion at the NJASL conference (November 2008), the NJASL Board, individual submission of ideas, formal meeting with New Jersey Education Association (December 2008) and feedback from publisher and trade exhibitors at the NJASL 2008 Conference. This provided input for the development of the research goals, and in particular, the development of the Phase 1 data collection instrument. In December 2008 CISSL established a NJASL Advisory Group to facilitate the exchange of ideas, and particularly to guide CISSL researchers in the development of research protocols and data collection processes in New Jersey School libraries. The Advisory Group was comprised of Dr. Mary Jane McNally, Susan Heinis, Patricia Massey, and the presiding President of NJASL, Angela Crockett. The NJASL Advisory Group has played a strong and central role in advising the CISSL researchers on all aspects of this research. A joint meeting of NJASL representatives and the CISSL team on February 24th, 2009 clarified a range of contractual concerns. The formal contract between NJASL and CISSL was signed on April 9th, 2009.

Key benefits to be derived from the study are:

- Accumulation of evidence on a state level of how students benefit from school libraries;
- Confirmation for school librarians in New Jersey and nationally of their role and the impact of school libraries on student achievement and life-long learning;
- Provision of statewide data on best and promising practices in school librarianship;
- Identification of pedagogy for teaching and learning in information-based schools;
- Encouragement for continuous improvement in effective library services across New Jersey which support academic content;

- Identification of professional development opportunities for reflective practice in order to build effective school library programs – for both NJASL and CISSL;
- Provision of a framework for dialogue among parents, communities, school boards, administrators, school librarians, and teachers on the value of effective school libraries;
- Support for school librarians across NJ to develop evidence-based practice for their own school library;
- Implementation of evidence-based initiatives for advocacy with key educational and library stakeholders.

5. Survey Instrument and Collection Process

This report focuses on Phase 1 of the research study of the school library infrastructure and personnel. The goal of this phase was to provide a comprehensive picture of the status of school libraries in New Jersey, including their instructional program, reading and related activities, collections, budgets, facilities, information technology, personnel, and the work of the school librarian. This phase of the research sought to establish baseline data about the fundamental elements of school libraries in New Jersey.

The survey instrument was designed to collect both quantitative and qualitative data, using both categorical data and open-ended questions. In order to develop a comprehensive and strong picture of school libraries in New Jersey the data collection process required a high level of participation by school librarians. Considerable support was pledged by school librarians in New Jersey based on input collected by CISSL through a town hall meeting at the 2008 NJASL conference. The survey was not an anonymous survey so that strategies could be implemented as part of the data collection process to ensure participation by all school librarians; however, participants were guaranteed confidentiality. No names or identifying characteristics would be identified in any reporting or documentation. In planning this approach to data collection, it was considered essential that a high level of participation be reached in order for the data to be useful for planning, decision making and continuous improvement by all stakeholders and to be viewed as a study with a strong level of external validity.

6. Survey Instrument

The survey instrument was in seven parts:

Part 1: Contact information and school details. Data included demographical and descriptive information of participating schools.

Part 2: School library staff. Information included: levels of certification of school librarians; number and level of staff—both professional librarians and support staff; full and part-time status of staff; technology support.

Part 3: Teaching activities in the school library and professional activities. Data included: the number of cooperations, coordinations and collaborations that occur during the academic year between school librarians and classroom teachers; the main foci of information literacy instruction, including identification of instructional activities related to effective use of information technology; student learning outcome(s) enabled by the school library program and priorities for change and continuous improvement of school library programs.

Part 4: Reading and related activities in the school library. Data included the nature of reading/writing/literacy initiatives during the previous school year.

Part 5: Administration of the school library. Data identified the range of administrative tasks (e.g., selection, ordering, processing library materials); supervision of paraprofessional /student / volunteer aides; maintenance of equipment; non-library duties (e.g., building assignments); the library collections, including materials in print, digital and other formats; additions to library collection in last school year; extent and frequency of weeding; extent of technology, including AV and computer hardware available to students in school library; availability of local and remote access to an automated catalog; access to the Internet; existence and functionality of a school library web site; availability of subscription databases; availability of applications (e.g., Microsoft Office applications such as Word, PowerPoint, and Excel), production software (e.g., computer-assisted instruction), educational software; audio-visual materials (e.g., video, DVD, and CD); and availability and use of interlibrary loan from local and regional libraries.

Part 6: School library access. Data identified type of library access availability for student use.

Part 7: School library budget. Data identified budget allocation, sources and trends.

A copy of the survey instrument is provided in Appendix A.

Of considerable benefit to the study was the provision of *TitleWise* data on collections documented in accounts administered by Follett Library Resources. *TitleWise* is a robust collection analysis tool that provides a high level of both detail and accuracy on nature and status of collections in school libraries. According to Follett, about 80% of school libraries in New Jersey utilize this tool. Participants in the study were asked to give permission for CISSL to access their school's *TitleWise* data through Follett.

The survey instrument underwent pilot testing by a team of seven school librarians at the information technology lab at the School of Communication and Information on March 20, 2009. Pilot test participants completed the survey (for timing purposes) and then engaged in a rigorous analysis and feedback process to further refine the instrument. The pilot testing resulted in important modifications to survey wording, categorization of certification levels, and question refinement to ensure consistency of responses by participants.

In addition to pilot testing, CISSL completed the necessary documentation for ethics clearance provided through the Institutional Review Board (IRB) at Rutgers. This approval was given through the Rutgers Office of Research and Sponsored Programs in April 2009. CISSL also received support from the New Jersey Department of Education through the presiding Commissioner of Education, Lucille Davy, in a formal statement to school superintendents notifying them of her support and encouraging them to engage school librarians in the data collection process. This document was sent out to schools in late April 2009. During the development and pilot testing period potential risks were discussed, particularly the lack of participation and inflation of input in order to present a positive picture of school libraries. The assurance of confidentiality and setting up a network of NJASL professionals to work in districts to build participation were key mechanisms to reduce these risks.

Data collection took place through an online survey instrument. The survey software was *SelectSurvey*, a standard secure survey instrument development tool made available through Rutgers University and used across a number of departments in the university. *SelectSurvey* can support large data sets and its flexibility allowed us to create a custom-designed survey with in-depth questions, bulk user registration, structures for data export analysis and cross-analysis, and graphical report options. During March and April 2009 CISSL engaged in substantive testing of the data collection instrument to establish the stability, security and efficacy of the web-based data collection process. In addition, it developed a downloadable version of the survey instrument to aid librarians in collecting the data for each of the questions of the survey. From the pilot study feedback, it was estimated that the survey would take 25- 30 minutes to complete.

Data collection commenced on 4th May, 2009. This was preceded by extensive notification through NJASL, listervs, emails, and print announcements requesting participation in the study. In the initial rollout of the survey instrument, participants were given one month to complete the survey. The number of responses by 31st May was 331. This was not considered adequate for a robust, credible sample. CISSL and NJASL mutually agreed to extend the data collection period though the summer 2009. During this time, CISSL team members and NJASL members made use of the two telephone callback provisions under the IRB ethics agreement. Data collection closed on October 7th following the final round of notifications to schools. This agreement had an impact on the research schedule, delaying the completion of Phase 1 by three months. (Targeted completion was March 31st, 2010)

At the close of data collection 765 valid responses were received (doubling the number of responses as of May 31st, 2009) which represented 30% of the schools in New Jersey. This raises the question of the representativeness of the sample. The sample for this survey was a voluntary sample and was drawn from all schools in New Jersey. It is recognized that the size of a sample is not a guarantee of its ability to accurately represent a target population. It is acknowledged that non-respondents tend to differ from respondents, so their absence in the final sample makes it difficult to generalize the results to the overall target population. We believe that we have achieved a representative sample because the sample source includes the whole population of schools in New Jersey, the data collection method actively sought to reach the whole population without the imposition of selection bias. CISSL minimized non-response bias through an active process of telephone, email and personal call-back, as permitted under the IRB ethics agreement. Based on the survey data and a standard confidence level of 95%, the margin of error is calculated to be 2.7%. In other words, if we repeat the survey 100 times we would expect the answer to any question to vary 2.7% in 95 out of 100 times. Statistically, this means that our sample in the study does not differ from the true population by more than 2.7% a certain number of times. This suggests that the sample has a strong level of representativeness of the population.

Following the close of data collection the data file was examined, cleaned, and prepared for conversion into SPSS (*Statistical Package for the Social Sciences*) to enable statistical analysis, and qualitative analysis. A preliminary broad summary of data was presented at the NJASL conference in December 2009.

Executive Summary

The school library is a vital and important part of New Jersey's schools. The findings of this survey show that New Jersey school libraries and the work of school librarians contribute in rich and diverse ways to the intellectual life of a school, and to the development of students who can learn and function in a rich, complex and increasingly digital information environments. School libraries in New Jersey that are staffed by certified school librarians provide common information grounds for supporting learning across the school through engagement with information, with particular emphasis on developing students' abilities to interact with information and to use it to learn well. This contribution is underpinned by an information and technology infrastructure and enabled through strong instructional, service, and administrative roles of school librarians. It is the instructional role of school librarians that stand out in these findings. The large number of collaborations developing information literacy capabilities, as well as large numbers of cooperations and coordinations show a strong level of engagement in teaching and learning. The qualitative survey responses collectively show the contribution of the school library to the development of the whole child and to the mission of its school. The school library is portrayed as an agency for intellectual development and for the social and cultural growth of students as they grow up in a complex and diverse information world.

Based on the evidence the school librarians provided in this study, the school library contributes to school life in the following ways by:

- Helping students meet core curriculum content standards;
- Developing a wide range of information handling competencies;
- Providing students with the intellectual and technical scaffolds they need to learn and to be ethical and productive users and consumers of information;
- Nurturing and supporting students as readers by contributing to the reading and literacy agenda of schools.

Responses of participants, particularly to open questions, convey a sense of strong and active commitment and participation to a whole-school team approach that works toward meeting curriculum standards, engaging students, and helping them achieve academically. This commitment extends beyond the provision of library services to embrace and support all aspects of school life.

The high level of employment of school librarians with state certification in New Jersey, coupled with their strong instructional role, demonstrate that many school decision-makers recognize the importance of professional qualifications of school librarians. These decision-makers exhibit an understanding of the value and contribution of school libraries to the teaching and learning agenda of the school and the intellectual and social development of students. The service, administrative, and instructional roles of school librarians, as documented in this study, demand this professional expertise. School librarians in New Jersey clearly utilize their professional expertise to ensure the effective functioning of a school library.

Certainly there are areas for continuous improvement and ongoing development in the provision of school library infrastructure: resources, full-time professional staffing, support staffing,

collection currency and capacity, and availability of information technology. Participants in the study also recognize that there are challenges ahead for both school libraries and school decision makers in ensuring that school libraries maintain the necessary levels of information resources, staffing, information literacy and information technology instruction, and reading initiatives to support learning and achievement in the schools. School librarians in the study are aware of limitations and barriers, yet they remain optimistic about the future and their capacity to provide high quality instruction and services that affect student learning. These challenges are not insurmountable and mutual negotiations at all levels are essential.

The strength of the findings, coupled with challenges in the findings, highlight the complexity of student learning in an increasingly globalized and technological world with its rich abundance of information both in print and in digital form. These findings also highlight the importance of responding innovatively to the challenges. In this information environment school librarians in New Jersey are committed to intellectual quality as a key learning outcome, underpinned by authentic and powerful pedagogy centering on information literacy, intellectual engagement and relevance, and supportive learning environments. The school librarians clearly recognize the centrality of a dynamic technology and media-suffused information environment. Such a learning environment demands complex capabilities related to timely and expert use of information, technology and media for building knowledge of curriculum topics, and for providing instruction in a diverse range of skills which foster the development of citizens of a digital world..

Summary of findings

The bulleted points below summarize the findings based on quantitative and qualitative analyses undertaken. Page references refer to pages in the data analysis and findings section of the report where full statistical details and findings are presented.

General

- 765 participants took part in the survey. This represents 30% of the school libraries in New Jersey, both public and private.
- Data were collected from all counties of New Jersey. Middlesex and Bergen Counties provided the highest number of responses – 82 and 77 respectively. Salem and Cape May Counties provided the lowest number of responses – 10 and 8 respectively. (See pages 42-58)
- The average enrollment of participating schools was 733 students. The average enrollment of elementary schools was 490; middle schools was 695, and high schools was 1,278. (See pages 58-59)
- Total number of students enrolled at the participating schools was approximately 560,740 students. (See pages 58-60)
- 53% of the sample of participating schools was elementary schools. 18.5% of the participating schools were middle schools and 24.5% were high schools. (See page 61)

- 96.9% of schools participating schools were public schools. There was a very small number of private schools participating in the survey. (See pages 60-61)
- Consistent with distribution of participating school by type, there is a higher representation of elementary grades in the study, compared to middle and high schools. (See pages 62-63)

Personnel

- 95.2% of the participants in the study were professional librarians. (See pages 63-65)
- 27.2% of participants have 1-3 years experience, 39.3% have 4-10 years experience, 20% have 11-20 years experience, and 13.5% have more than 20 years experience. (See pages 63-65)
- The most common job title is School Library Media Specialist (43.5% of sample). 24.9% of the sample is called Educational Media Specialists. 12.2% of the sample have the official AASL title of School Librarian. (See pages 64-68)
- 84.5% of the sample are New Jersey state certified school librarians, either at the master's level of certification (58.9%) or associate certification level (having completed 18 credits). (See pages 68-75)
- 85.5% of elementary school librarians have state certification, 89% of middle school librarians have state certification, and 86.8% of high schools have state certification. There is a higher percentage of associate school librarians in elementary schools (31%) compared to middle schools (23.4%) and high schools (20.9%). (See pages 68-75)
- More than 50% of participants have acquired certification in the last 10 years. 35.5% of the participants have held certification from 1-5 years. There is no significant difference between the length of certifications held and employment in the types of schools – elementary, middle, high. (See pages 68-75)
- 91% of the participants in the study have full-time employment. There are no significant differences according to school type. In notes provided in the survey, participants in elementary and middle schools indicated that their full-time positions were spread between two or three schools. (See pages 76-79)
- On average, 52.5% of school libraries have some level of support staff working in the school library, and this is more likely to be in high schools. This support gap is particularly noticeable in relation to the elementary schools and middle schools, with 54.5% and 43.3% respectively) having no support staff. There was no significant difference between elementary and middle schools in the pattern of support staff. (See pages 79-85)

- The larger the enrollments of schools, the more full-time equivalent support staff schools employed. (See pages 84-85)
- 70.9% of the participants indicate some level of responsibility for technical hardware support. This may indicate that school librarians are perceived to have expertise with the school library's technology infrastructure. (See pages 86-91)
- There is no statistically significant difference in responsibility for technology support by school type. In other words, librarians in all types of schools provide this technical support. It does not differ by school type (elementary, middle or high school). (See pages 86-91)
- 42% of the participants provide one or more hours of time in technical support. Time in technology support within the school library differed depending on the level of school. The higher level of school, the more time school librarians spend on technology support within the school library, with the least amount of time spent in elementary schools. (See pages 92-103)
- 50.9% of requests for technology support are met within a day, and an additional 31.8% are met within two to three days. (See pages 96-99)
- 50% of the participants in the study provide some level of technical support outside of the school library each week. School librarians in middle schools spent significantly more time supporting technology outside of school library than elementary schools, yet comparisons between elementary and high and between middle and high did not present any significant differences. (See pages 100-103)

Teaching and Professional Activities

- School librarians in New Jersey engage actively with New Jersey Core Curriculum Content Standards through a substantial number of cooperations, coordinations and collaborations. 19,320 cooperations, 11,179 coordinations and 3,916 collaborations were undertaken during the 2008-2009 school year. (See pages 104-105)
- On average, school librarians contributed 27 cooperations, 15 coordinations and 5 instructional collaborations with classroom teachers during the school year. Elementary school librarians contributed 14 cooperations, 6 coordinations, and 3 instructional collaborations during the school year. Middle school librarians contributed an average of 35 cooperations, 20 coordinations, and 8 instructional collaborations during the school year. High school librarians contributed an average of 45 cooperations, 32 coordinations, and 9 instructional collaborations during the school year. (See pages 104-105)
- Instructional collaborations typically take place in all schools in Language Arts Literacy, Social Studies and Science. (See pages 104-105)

- Many school librarians in New Jersey have actively participated in various school and community forums. There is some variation according to the type of activity and school type (elementary, middle, and high). (See page 106)
- 48.5% of school librarians take the opportunity to interact with classroom teachers at grade level meetings when these are held in schools. (See pages 106-108)
- 51.5% of school librarians take the opportunity to interact with classroom teachers at team level meetings when these are held in schools. (See pages 108-109)
- 58% of participants in the study take the opportunity to interact with classroom teachers at department level meetings where available in a school. The results indicate that the higher the school level, the more opportunities school librarians took to make presentations at department level meetings. (See pages 109-110)
- 66.4% of participants take the opportunity to interact with school colleagues at faculty level meetings. The results indicate that the higher the school level the more opportunities school librarians took to make presentations at faculty meetings. (See pages 110-113)
- 45.7% of participants in the study take the opportunity to interact with school colleagues at Parent / Community Organization meetings. The results indicate that the higher the school level the more opportunities school librarians took to make presentations at these meetings. (See pages 113-115)
- 63% of participants are involved in the provision of professional development in relation to information literacy in their schools. Elementary school librarians provided formal/informal professional development on information literacy fewer times than in middle and/or high schools. There was no significant difference between middle and high schools in terms of the frequency of provision. (See pages 115-118)
- 72.8% of participants are involved in the provision of professional development in relation to information technology in their schools. This takes place more frequently in high schools than in elementary and middle schools. (See pages 118-120)
- The data show active communication with school principals. 96.1% of school librarians meet with their school principal during the school year. High school librarians meet more frequently than do librarians in middle or elementary schools. 51.7% of the school librarians meet more than 5 times a year. (See pages 120-122)
- There is a strong pattern of communication with curriculum supervisors. 74.4% of school librarians meet with curriculum supervisors during the school year. High school librarians meet more frequently than do librarians in middle or elementary schools. 24.3% of the school librarians meet more than 5 times a year with curriculum supervisors. (See pages 122-125)

- 38.3% of school librarians meet with their superintendent during the school year. There were no significant differences in frequency according to school type. (See pages 125-127)
- The data show a robust contribution by a number of school librarians to the work of various committees in schools and districts, outside the immediate arena of the school library, indicating an active participation in the decision making processes of the school. (See pages 127-131)
- School librarians show a high level of belonging to professional associations, both within the library community as well as the educational community. Of the 765 participants, 98.9% have membership or affiliation with at least one professional association. This is predominantly, but not solely, the New Jersey Association of School Librarians. 83% of the participants are members of more than one professional association, including regional library and school library associations, and educational associations. (See pages 132-133)
- School librarians in New Jersey engage in a diverse range of professional development activities. 2261 instances of professional development were documented, representing an average of three discrete professional development activities by each of the 756 participants who engaged in professional development (98.8% of sample). (See pages 133-135)

Information Literacy Instruction

School librarians make an extensive contribution to information literacy instruction in their schools. This instruction primarily centers on:

- Knowing about the school library
- Knowing about different sources and formats and developing strategies for doing effective research
- Learning how to use the resources
- Evaluating information for quality
- Learning to use information ethically (See pages 135-147)

Despite issues with staffing in the elementary schools, school librarians where available are contributing substantially to this instruction.

At least 70% of school librarians provide information literacy instruction in relation to:

- Knowing about the school library (92.5%)
- Accessing information efficiently and effectively (89.1%)
- Knowing how to use the different sources and formats of information (85.9%)
- Strategizing for finding, evaluating, and selecting appropriate sources to answer questions (84.8%)
- Knowing about different sources and formats of information (82.1%)
- Using information ethically (plagiarism, citation, bibliography) (80.8%)

- Using information technology responsibly (78.8%)
- Accommodating differentiated learning styles and abilities (75.7%)
- Evaluating information for its relevance to the task (74.3%)
- Seeking information for personal and recreational pursuits (73.8%)
- Sharing knowledge and information with others (71.5%)
- Evaluating information for quality (70.2%)

All school types have the following skills on their top 10 skills lists for students' information literacy:

- Knowing about the school library
- Accessing information efficiently and effectively
- Knowing how to use the different sources and formats of information
- Strategizing for finding, evaluating, and selecting appropriate sources to answer questions
- Knowing about different sources and formats of information
- Using information technology responsibly
- Using information ethically (plagiarism, citation, bibliography)

“Knowing about the school library” ranked #1 in all school types.

“Accessing information efficiently and effectively” ranked #2 in all school types.

Highest ranked information literacy instructional initiatives in elementary schools are:

- Knowing about the school library (93.5%)
- Accessing information efficiently and effectively (88.1%)
- Knowing how to use the different sources and formats of information (84.3%)
- Strategizing for finding, evaluating, and selecting appropriate sources to answer questions (82.5%)
- Knowing about different sources and formats of information (78.0%)
- Accommodating differentiated learning styles and abilities (77.2%)
- Seeking information for personal and recreational pursuits (75.4%)
- Sharing knowledge and information with others (75.1%)
- Using information technology responsibly (72.4%)
- Using information ethically (plagiarism, citation, bibliography) (71.8%)

Highest ranked information literacy instructional initiatives in middle schools are:

- Knowing about the school library (93.6%)
- Accessing information efficiently and effectively (92.2%)
- Using information ethically (plagiarism, citation, bibliography) (90.8%)
- Knowing how to use the different sources and formats of information (90.1%)
- Strategizing for finding, evaluating, and selecting appropriate sources to answer questions (89.4%)
- Knowing about different sources and formats of information (87.9%)
- Using information technology responsibly (87.2%)
- Identifying inaccurate and misleading information (82.3%)

- Evaluating information for its relevance to the task (79.4%)
- Understanding the different strategies in doing effective research (79.4%)

Highest ranked information literacy instructional initiatives in high schools are:

- Knowing about the school library (92.0%)
- Accessing information efficiently and effectively (90.4%)
- Using information ethically (plagiarism, citation, bibliography) (87.7%)
- Strategizing for finding, evaluating, and selecting appropriate sources to answer questions (86.1%)
- Knowing how to use the different sources and formats of information (85.0%)
- Knowing about different sources and formats of information (85.0%)
- Using information technology responsibly (84.5%)
- Evaluating information for quality (80.2%)
- Evaluating information for its relevance to the task (77.0%)
- Identifying inaccurate and misleading information (77.0%)
- Understanding the different strategies in doing effective research (77.0%)

All school types have the following skills in their lowest rank for students' information literacy:

- Deriving meaning from information presented in a variety of formats
- Forming questions based on information needs
- Developing creative products in a variety of formats
- Applying new knowledge and skills to different contexts
- Strategizing for revising, improving, and updating existing knowledge.

These dimensions of information literacy focus on knowledge construction, and are generally considered to be in the domain of classroom teachers. Accordingly, the extent of participation in these instructional activities is impressive.

Comparative analysis across school types shows that there is some significant – and appropriate – variation in the range of information literacy competencies, especially between high and middle schools, compared to elementary schools. Upper school levels give more attention to critical evaluation of diverse information sources, the identification of main and supporting ideas (the hierarchical and associative structuring of information), the responsible and ethical use of information, and the development of critical thinking capacities. Overall, there is an information resource orientation, but also some knowledge-outcomes focus to information literacy. The focus appears to be on essential skills of accessing and locating information, and evaluating its appropriateness for task and authority. (See pages 142-147)

Instruction In Information Technology

School librarians in New Jersey take a strong instructional role in providing students with the intellectual and technical scaffolds to engage with information technology in efficient and productive ways. Teaching search strategies, both in relation to the World Wide Web and specialized databases, library catalogs and directories is given the most widespread emphasis. There is evidence of the early adoption and integration of a range of Web 2.0 technologies, tools and techniques to support curriculum content standards. This is taking place more strongly in the

high schools and middle schools, rather than in the elementary schools. School librarians in New Jersey show considerable capacity to lead this important journey in their schools. Percentages of instructional involvement are shown below:

- Using library catalogs (91.7%)
- Searching strategies for the World Wide Web (80.9%)
- Using the Internet and other electronic sources ethically (78.3%)
- Using electronic searching in subscription databases (75.1%)
- Evaluating the quality of websites (73.6%)
- Using software applications, such as PowerPoint or Excel, to do school work (58.0%)
- Using e-books (26.7%)
- Using Web 2.0 tools such as wikis, blogs, podcasts, or Twitter (18.4%) (See pages 148-152)

Comparative analysis by school type shows that this is taking place more strongly in the high schools and middle schools, rather than in the elementary schools.

A substantial number of school librarians in New Jersey actively provide a range of information technology related professional development activities to teaching faculty. It shows a commitment to whole school development in term of effective use of information technology. The percentage of school librarians involved in this professional development is shown below:

- Using library catalogs (76.2%)
- Using electronic searching in subscription databases (68.0%)
- Searching strategies for the World Wide Web (42.3%)
- Using software applications, such as PowerPoint or Excel, to do school work (40.8%)
- Using the Internet and other electronic sources ethically (38.2%)
- Evaluating the quality of websites (33.2%)
- Using e-books (22.3%)
- Using Web 2.0 tools such as wikis, blogs, podcasts, or Twitter (19.2%) (See pages 153-157)

Comparative analysis shows that the highest levels of involvement are in high schools, with lowest levels of participation mostly by elementary school librarians.

Data on specific aspects of professional development provided to school faculty in relation to information technology in addition to ideas mentioned above generated five categories of professional development. These focus on professional development in relation to:

- Technical mastery of information technology hardware
- Technical mastery of a range of information technology software
- Technical mastery and use of library-specific software and technology tools
- Pedagogical integration of hardware and software into classroom and library-based instruction, and on-going instructional support
- Use of information technology tools to develop ethical use of information and information technology by students. (See pages 158-160)

This professional development typically takes place through formally scheduled workshops as

part of the school's professional development program, or more informal one-on-one instruction. (See page 161)

School Library Impact on Student Learning

Do New Jersey's school libraries impact student learning?

- Overall, the qualitative responses of the participants collectively show the contribution of school libraries to the development of the whole child. The school library is portrayed as an agency for intellectual development, for social and cultural growth of students as they grow up in a complex and diverse information world. According to the evidence provided by the school librarians, the school library works to meet core content standards, to develop a wide range of information handling competencies and to provide students with the intellectual and technical scaffolds they need to learn and be ethical and productive users and consumers of information.
- Based on qualitative responses by 721 school librarians, New Jersey's school libraries appear to contribute to learning outcomes in six key ways:
 1. Contribution to development of curriculum standards, including mastery of content standards and contribution to test score achievement
 2. The development of resource-based competencies, centering on library operations, mastery of a diverse range of information literacy competencies
 3. The development of research process and learning management competencies, centering on the mastery of explicit aspects of the research process, inquiry processes, strategies of independent learning, and research project management
 4. The development of thinking-based competencies, in particular the processes of thinking, analysis and synthesis that create knowledge and the representation of knowledge through a range of products
 5. The development of affective, personal and interpersonal competencies, including the development of positive and ethical values in relation to the use of information, increased motivation and interest for engaging with information for learning and working effectively with others in research activities
 6. Outcomes related to the development of reading, including increased interest in reading increased participation in reading, the development of wider reading interests, becoming more discriminating readers. (See pages 160-168)

Contribution to Reading and Related Activities

School librarians in New Jersey make an extensive and diverse contribution to reading and related activities in the school. The top 10 reading and related activities, with percentage of involvement, are:

- Literature displays (89.4%)
- Book talks to promote literature for recreational reading (77.5%)
- Encouraging any free voluntary reading outside of school (77.1%)
- Use databases and/or websites to encourage reading (75.7%)
- Any reading incentive program within the school (59.7%)
- Book talks to promote curriculum related reading (57.7%)

- Encouraging any voluntary reading activities, such as DEAR, inside of school (56.7%)
- Self-help information such as brochures, web links, or book lists (55.5%)
- Books or information to help students cope with challenges or sensitive topics (54.4%)
- Summer reading programs (43.8%) (See pages 168-173)

The top 10 reading and related activities in elementary schools, with percentage of involvement, are:

- Literature displays (89.4%)
- Book talks to promote literature for recreational reading (88.1%)
- Encouraging free voluntary reading outside of school (81.6%)
- Reading incentive program within the school (74.4%)
- Book talks to promote curriculum related reading (72.5%)
- Use of databases and/or websites to encourage reading (71.9%)
- Encouraging voluntary reading activities, such as DEAR, inside of school (71.6%)
- Storytelling (68.8%)
- Music and rhymes (58.1%)
- Readers' theater (57.5%) (See page 173)

The top 10 reading and related activities in middle schools, with percentage of involvement, are:

- Literature displays (94.0%)
- Book talks to promote literature for recreational reading (79.1%)
- Use of databases and/or websites to encourage reading (76.9%)
- Encouraging any free voluntary reading outside of school (74.6%)
- Reading incentive program within the school (61.9%)
- Self-help information such as brochures, web links, or book lists (60.4%)
- Encouraging voluntary reading activities, such as DEAR, inside of school (59.7%)
- Book talks to promote curriculum related reading (56.0%)
- Books or information to help students cope with challenges or sensitive topics (52.2%)
- Book clubs or literature discussion groups, where students share ideas and discuss their reading (45.5%) (See page 173)

The top 10 reading and related activities in high schools, with percentage of involvement, are:

- Literature displays (87.9%)
- Use of databases and/or websites to encourage reading (79.9%)
- Encouraging free voluntary reading outside of school (70.1%)
- Self-help information such as brochures, web links, or book lists (70.1%)
- Books or information to help students cope with challenges or sensitive topics (63.8%)
- Book talks to promote literature for recreational reading (55.7%)

- Book clubs or literature discussion groups, where students share ideas and discuss their reading (36.8%)
- Production of print and digital images (34.5%)
- Collaboration with public libraries in reading or writing programs (33.9%)
- Book talks to promote curriculum related reading (33.9%) (See page 173)

Findings show that all school types have the following reading-related activities in their top 10:

- Literature displays
- Book talks to promote literature for recreational reading
- Encouraging any free voluntary reading outside of school
- Book talks to promote curriculum related reading
- Use of databases and/or websites to encourage reading
- “Literature displays” ranks #1 in all school types. (See page 174)

All school types have the following reading-related activities in their lowest rank:

- Electronic gaming
- Integrating reading for understanding strategies in units of inquiry
- Literature-related programs for students with special needs
- Interpretation of print and digital images (See pages 174-175)

Some librarians provided additional activities such as the following: Reading race, book giveaways, reading buddies, compile booklist/bibliography, create podcast/book trailer (min-commercials), have students create promotional materials for library, run family reading programs, book swaps, track what the teachers are reading, readers’ advisory, Paws to Literacy (read to pet), as examples. (See page 182)

Statistical analyses of data on reading and related activities revealed the following trends:

- Lower levels of schools were more likely to provide the following activities, regardless of their rankings: book talk to promote recreational reading, book talk to promote curriculum related reading, author visit, encouraging free volunteer reading inside of school, storytelling, reading incentive program within the school, integrating reading for understanding strategies in units of inquiry, and readers’ theater
- Compared with middle and high schools, elementary schools were more likely to provide the following activities, regardless of their rankings: creative writing activities related to literature, music and rhymes, and interpretation of print and digital images
- Compared with middle and high schools, elementary schools were less likely to provide self-help information
- A chi-square statistics test revealed that school type was not significantly related to the following activities regardless of their rankings (that is, school type did not make these activities more or less probable): use of databases and/or websites to encourage reading; literature display; production of print and digital images. (See pages 175-182)

Findings also show that reading and related activities in elementary schools focus largely on

literacy skills development and interest-building to encourage children to read better and read more and to become steady readers, though most of the top ranked activities such as literature displays and book talks do not guarantee student interaction. The majority of reading activities in middle and high schools are passive too, except for a few activities such as creative writing and book discussion clubs that show a slightly higher level of demand for student interaction. (See pages 175-185)

Continuous Improvement

In working towards the future and identifying key areas for continuous improvement, school librarians identified seven key priorities for change. These are:

1. Adopting flexible scheduling for school libraries across the grades.
2. Developing richer and comprehensive understanding of the role of the school library, the work of the school librarian, and the contribution of the school library to learning outcomes for teachers, administrators and community members.
3. Building a sustainable culture of curriculum-centered collaboration in the school focusing on integrating information, technical and critical literacies into curriculum.
4. Providing adequate support staff to enable the professional role of the school librarian to be undertaken, particularly for instructional collaborations.
5. Continuing to provide state-of-the-art information technology for access to information, as well as access to technology tools, to support the production and presentation of knowledge.
6. Providing adequate budgets and participation in budget decisions.
7. Enhancing and upgrading library facilities and space. (See pages 185-193)

School Library Administration

- 91 % of school librarians in New Jersey are engaged in administrative tasks related to acquisition and circulation of resources at least on a daily or weekly basis, with 78% of them involved in this on a daily basis. It is a time-consuming task, one of critical importance to maintaining the highest quality collection targeted to curriculum needs, reading abilities, and learning styles. When this is broken down by school type, 75.1% of elementary school librarians engage in this task on a daily or weekly basis; 79.5% for middle school librarians, and 84.3% of high school librarians. (See pages 193-195)
- A similar pattern emerges with clerical tasks. When this is broken down by school type, 82.4% of elementary school librarians engage in this task on a daily or weekly basis; 80.6% for middle school librarians, and 77% of high school librarians. (See page 196)
- School librarians in New Jersey clearly undertake supervisory responsibilities of paraprofessional and volunteer staff, when they are available or assigned as part of their daily routines. When this task is broken down by school type, 73.3% of elementary school librarians engage in supervision on a daily or weekly basis; compared to 69.0% of middle school librarians, and 78.3% of high school librarians. (See page 197)
- To a lesser extent, school librarians in New Jersey also undertake responsibilities in relation to the everyday maintenance and management of equipment, such as computers,

projectors and recorders. These are also part of their daily routines. When this is broken down by school type, 31.5% of elementary school librarians engage in this task on a daily or weekly basis; compared to 44.4% of middle school librarians, and 48.4% of high school librarians. (See page 198)

- Overall, there is little variation in the range of broad responsibilities undertaken across school types (elementary, middle and high), apart from some maintenance of equipment, which appears to have a stronger presence in high schools, and the performance of assigned duties such as bus, cafeteria and the like. These seem to be more assigned to elementary school librarians, who are already shared between schools which has an impact on the potential full provision of library services. (See pages 199-202)

Service to the School Community

School librarians give considerable service to their schools in a multitude of ways. Five key areas of contribution were identified. These are:

- Information service roles, including school publishing and school-wide media responsibilities, publicity, school website and community information links
- School wide reading and literacy initiatives, involving clubs, reading challenges and competitions, reading incentive schemes and specialized reading celebrations
- General school services utilizing the expertise of school librarians, such as school committees and grant writing
- Student leadership, including participation in and coordination / leadership of school events targeted to developing student responsibility, leadership and civic participation
- A range of extracurricular activities focusing on student responsibility and civic participation. (See pages 202-204)

Collection Analysis

Data on school library book collections came from two sources in the study. Participants either gave permission for CISSL to access the *TitleWise* database maintained by Follett Library Resources, or they provided data on their book collections by responding to survey questions. Survey responses from a maximum of 61% of the original sample of 765 school libraries supplies data on the book collections from school librarians. In addition, survey data describes non-book materials for all participants in the study. A summary of these survey responses follows. (See pages 204-229)

- The mean, or average number of school library materials reported by survey participants is 13,846.9. The average number of books in the collections is 13,028.3. The average number of new materials added to the collections in 2008-09 is 580.1. The average number of new books added is 532.7. (See pages 205-206)
- While the mode, or most frequent response given for total and added numbers of books/materials in the collections does not vary that much from the mean, the range of responses indicate large differences among school library collections. The lowest number of materials in a school library is 300; the highest number is 115,000. The lowest number of books in a school library collection is 150; the largest is 115,000. The lowest number

of new materials added is 12; the largest is 8,000. The lowest number of new books added is zero; the largest is 8,000. This wide variation indicates substantial inequities in size of school library collections and in the size of their acquisitions, or new materials added. These data indicate inequities in the funding of school library budgets. The high values of the standard deviations, or differences among the averages values, support these conclusions. (See page 205-206)

- The mode, or value most frequently reported for the number of magazine and newspaper subscriptions in school libraries is zero, indicating that there are more school libraries that do not take subscriptions for periodicals in print format than libraries that do subscribe. Inequity is also indicated in the range of minimum and maximum number of periodical subscriptions reported, with a range of zero to 301 for magazines, and a range of zero to 250 for newspapers. (See page 207)
- The mode reported for electronic (subscription) database availability in collections is one; the mode response for purchased databases is zero. This indicates that there are more school libraries with access to one or no databases than school libraries that have database access. There were wide ranges in the number of databases available through purchase or from another source, indicating substantial inequities among school library access to electronic databases. (See page 208)
- The means, or averages of DVDs and videocassettes are, respectively, three and ten times greater than the numbers of CDs and audiocassettes in the reporting school libraries. The modal value for each of these four types of non-print materials is zero, indicating that more school libraries have none of these kinds of non-print materials than those who do. The ranges of minimum and maximum values also indicate the inequities among reporting school libraries. The average reported number of audio cassettes is higher than the number of CDs, but maximum values indicate that audio cassettes collections scattered across school libraries are not more than 1,000, while the largest CD collection reported is 5,500. This probably indicates the declining frequency of audiocassettes in the collections as a whole. (See pages 208-209)

The *TitleWise* accounts from a 39% of the original sample of 765 school libraries provided data on the book collections of those school libraries who hold *TitleWise* accounts and gave CISSL permission to access their accounts for analysis. This analysis yielded the following findings. (See pages 210-229)

- An overview of the collections shows the total number of books in New Jersey school libraries is 3,018,667. Of these, 2,420,983 (62%) are non-fiction; 1,497,684 (38%) are fiction. The average number of books per student is 15.7. The average non-fiction, fiction, and overall copyright date is 1989. (See page 210)
- The largest number of non-fiction books are Geography/History (11.4%), followed by Social Sciences (8.5%) and Natural Sciences/Mathematics (8.5%). 6.4% of non-fiction is Reference; 6.6% is Biography. The categories with the fewest books are Generalities (.8%) and Philosophy/Psychology (.8%). (See pages 211-212)

- General Fiction comprises 20% of the collections; Easy Books is 11.2%. The categories with the fewest books are Paperbacks (2.8%) and Story Collections (.8%). (See pages 211-212)
- An analysis of non-fiction by school type indicates a trend toward more non-fiction than fiction books for every level of schooling from elementary through high school. This phenomenon is labeled the “fiction-non-fiction gap.” (See pages 213-214)
- The trend in the size of fiction collections indicates a slight decrease in elementary and elementary/middle school libraries. The fiction-non-fiction gap originates with the sharp drop of almost 50% in the number of fiction books in middle and middle high school libraries. This trend corresponds with a national decline in the amount of sustained reading among middle school students and a decline in their reading scores. High school libraries indicate a slight increase in the number of fiction titles, but the size of these fiction collections are about half of elementary school fiction collections. This trend raises the question of accessibility of narrative reading materials for older students many of whom become disengaged from reading in their secondary years of schooling. (See pages 215-216)
- The categories that exhibit the most difference when elementary and high school collections are compared are Social Sciences (300s), Literature/Rhetoric (800s), Geography/History (900s), and Reference. It is interesting to note that Science and Mathematics (500s) books decline by more than 50%, from 11.36% of elementary collections to 4.61 of high school collections. (See pages 216-217)
- Four Dewey categories present a difference of more than 5% between the sizes of elementary and high school non-fiction collections: Social Sciences, Literature/Rhetoric, Geography/History, and Reference. These four categories have a common denominator: they contain the subject matter content of the school libraries’ most frequent users. Teachers in secondary schools can exercise choice to use school library resources because typically these schools operate on flexible, rather than fixed scheduling. English/Language Arts and Social Studies classes are the most frequent users of school library print collections. The increase in non-fiction purchasing for secondary collections reflects differences in elementary and secondary curriculum, and points to a focus on reading and literacy development in lower grades. (See page 217)
- A comparison of the percentages of the four Dewey categories that present the largest difference between elementary and high school library collections shows the relational similarities between elementary and high school libraries.
 - Social Sciences: Elementary (6.4%); High School (12.3%)
 - Literature/Rhetoric: Elementary (2.5%); High School (9.8%)
 - Geography/History: Elementary (6.9%); High School (15.1%)
 - Reference: Elementary (2.3%); High School (11.81%)

Although there is more than a five percent difference between each of the categories when elementary and high schools are compared, both school types have the about the

same proportionate number of books in these Dewey categories books relative to the sizes of the collections. (See page 218)

- A Balanced Dewey Comparison that compares the percentages of non-fiction books in each Dewey category with the recommended percentages from H.W. Wilson Company and with Follett Library Resources shows that there are plus or minus differences of 4.6% or less in almost every category. The exception is Reference, which is 14.7% below the Wilson recommendation and 8.6% below the Follett recommendation. (See pages 218-221)
- An analysis of the currency of fiction books shows an average copyright date of 1989. Books that are custom catalogued, i.e., assigned a material type other than the types specified in the *TitleWise* database, have the most recent average copyright date of 1993, followed by Paperbacks (1992). Story Collections and Easy Books have the oldest average copyright date of fiction types: 1985. Reluctant and struggling readers are most affected by this trend since they tend to choose short books and books that are written on low reading levels. (See pages 221-222)
- General fiction, which is comprised of novels, has an average copyright date that is 20 years old (1990.7). This indicates that the fiction collections are dominated by classics (i.e., classic adult novels, classic children's books, and classic Young Adult novels.) This statistic strongly indicates that new titles (e.g., Caldecott, Newbery, and other award winning titles) and high interest books, e.g., best-sellers, books that have entered other media such as film, and new books that appeal to specific sub-groups or cultures, such as urban fiction and manga, are not accessible in school libraries to a large number of young readers. Old, worn, outdated, and irrelevant literature will not motivate youth to read in the sustained and meaningful way that develops reading comprehension. (See pages 221-222)
- An analysis of the currency of non-fiction books shows that eight of the 13 Dewey categories have copyright dates prior to 1990. The oldest category is 1984 for Literature/ Rhetoric (800s), which includes essays, drama, and poetry. Again, the opportunity to provide young readers with access to contemporary literature is lost. Religion (200s) and Geography/ History (900s) have copyright dates of 1986 and 1987 respectively. Middle/high schools and elementary schools have the oldest collections, with average copyright dates of 1987 and 1988 respectively. The "newest" collections have average copyright dates of 1991. (See pages 222-223)
- An analysis of currency for fiction by school type shows middle/high school libraries have the oldest copyright date (1987), followed by elementary schools (1988). High school libraries have a average fiction date of 1990; elementary/middle and middle school libraries have an average copyright date of 1991. (See page 223)
- An analysis of currency of non-fiction by school type shows middle/High school libraries have the most aged non-fiction with an average copyright date of 1984, followed by high school libraries (1987) and middle school libraries (1990). Elementary/middle and elementary school libraries have the most recent average date of 1992. (See page 224)

- Age sensitivity, as established by the Continuous Review, Evaluation and Weeding (CREW) guidelines (Larson, 2008) and adapted by Follett Library Resources, targets vulnerable Dewey subjects to establish the percentage of books outside the acceptable range, which is either three or five years from copyright date. The analysis found:
 - 93% of Geography/History books are five years old or older;
 - 90% of computer and program and system books are three years old or older.;
 - 92% of books on commerce, transportation, and communication are in the unacceptable range of five years or older;
 - 87% of political science books are five years old or older;
 - 85 % of books on astronomy and life sciences are five years old or older;
 - 80-82% of books on social problems and services, medicine and disease, and education are five years old or older;
 - The average percentage of age sensitive non-fiction books that are in jeopardy of carrying misinformation is 85%. (See pages 224-226)
- An analysis of the average percentage of age sensitive books by school type reveals that 92% of the age sensitive books in middle high school libraries are in the unacceptable range of three to five years old, followed by elementary/middle school libraries (87%). High, middle, and elementary school libraries have fewer age sensitive books that are likely to be outdated, with a range from 82% to 84%. The average of the percentages of aged titles for all five types of school libraries is 85.6%. This means that 14.4% of all the non-fiction books in the five types of libraries that participated in this study are less than five years old for the nine categories identified as age sensitive. (See page 227)
- Using five categories of school types, for the 2008-2009 school year elementary school library budgets average \$11,855; elem/middle school library budgets average \$11,415; middle school libraries average \$13,395; mid/high libraries average \$12,789; and high school library budgets average \$17,190. The average budget for elementary school libraries is 44% less than for middle school libraries. The average middle school library budget is 62% less than for high school libraries. Elementary, middle, and high school libraries fare better than libraries in hybrid schools, i.e., elementary/middle and middle/high libraries. Elementary/middle libraries receive more than middle school libraries; middle/high libraries receive less than high school libraries. These inequities are reflected in size and currency of the hybrid school library collections. (See page 228)
- Books added since 1949 were charted to look for patterns in the number of acquisitions by decade since 1949. A calculation of books added to these collections since 1949 provides some insight into funding. A steady increase in books added from 171 in 1949 to 3,949 in 1990 illustrates a strong trend. The decline in books added dropped in the years after 2000 to 3, 571. The strong and steady growth of school library collections from the 1960's to 1990 is attributed to federal funding for schools through the Elementary and Secondary Education Act (ESEA) which contributed substantial funding for the development of school library collections, including audio visual equipment and materials. In the 1990's that growth trend was reversed when the ESEA was replaced with No Child Left Behind. (See page 229)

- A grouping and analysis of New Jersey school libraries using an adaptation of the New Jersey Department of Education's District Factor Grouping (DFG) shows that the size of high socioeconomic school (SES) library collections is larger, with the largest discrepancies in the social sciences (300's) and geography and history (900's). There is consistency within each Dewey category showing a strong trend that school libraries in low and low-mid SES DFGs have fewer books than school libraries in mid-high and high SES DFGs and fewer new acquisitions. (See pages 230-231)
- A comparison of the percent of fiction and non-fiction by socioeconomic school (SES) categories shows less difference in the ratio of fiction to non-fiction than when this ratio is analyzed by school type. However, regardless of SES status, non-fiction outnumbers fiction by almost 20% or more in all DFG categories. (See pages 231-232)
- A comparison of the percent of non-fiction and fiction in school libraries by their schools' socioeconomic status (SES) shows that across school types low and mid-low SES school libraries have consistently fewer fiction and non-fiction books than mid-high and high SES school libraries. The fiction-non-fiction gap increases from 15% in low SES school libraries to 22% in high SES school libraries. Low-mid SES school libraries have the largest fiction-non-fiction gap with a difference of 28%. (See page 233)
- Analysis of the average sample age sensitivity by SES type reveals the difference in age sensitivity of school library collections by SES type. Collections in low SES school libraries have a slightly higher percentage of books that are considered age sensitive, or more than three to five years old in categories designated as age sensitive. (See page 234)
- One third of the variance in the size of a collection of a school library was explained by the school's socioeconomic status: the lower the SES, the fewer books in the collection. (See pages 234-237)
- Libraries in mid-low socioeconomic groups purchased significantly fewer book than the mid-high and high SES schools. (See page 237)
- 47.2% of school librarians make use of interlibrary loans to meet resource needs in their schools. 12.4% of the sample make extensive use of this process, with more than 50 loans per year provided through interlibrary loans. The differences between school types are significant. High school librarians make greater use of interlibrary loans than do middle and elementary school librarians. (See pages 238-240)
- 83.2% of the school libraries in the study have membership in a regional library co-operative. High schools and middle schools are more likely to be members, as compared to elementary schools. (See pages 240-243)
- There is a high level of penetration of key information technologies that enable access to and use of information resources. 96.4% of school libraries have internet access; 92.1% make available word processing software; with a slightly lower level of availability of

presentation software (87.8%); and spreadsheet software (82.2%). 81.6% of the school libraries in the sample have a school library website. Other technologies, such as wireless access, email access have a lower level of penetration (44% and 34.3% respectively). Overall, high school libraries and middle school libraries in particular have a significantly stronger provision and access to a range of information technologies through the school library compared to elementary school libraries. (See pages 244-249)

- At least 90% of school libraries in the sample have automated circulation systems. Elementary schools have statistically significantly less numbers of automated circulation systems than middle and/or high schools. There was no significant difference between middle and high schools. (See pages 249-250)
- 98.7% of the school libraries in the sample have automated catalogs. Follett, Destiny and Sagebrush are the predominant providers (30.3%, 25.3% and 21.3% respectively). Follett predominates in elementary schools, Destiny in high schools and Sagebrush in middle schools. Largest gap in provision is in middle schools. (See pages 251-252)
- 46.4% of school libraries in the sample provide access to web-based catalogs. Specifically, 63.6% of high schools, 54.0% of middle schools and 46.5% of elementary schools provide web-based catalogs. There is a statistical difference in relation to the availability of web-based catalog in school libraries, with high school and middle school libraries more likely than elementary schools to provide these. (See pages 252-254)
- 90.6% of school libraries provide computers for student use, and 84.7% of these computers have internet access. Overall, there is a high correspondence with availability of computers and availability of internet access through them. The average number of computers with internet access in elementary school libraries is 12; in middle schools it is 31, and in high schools it is 44. High schools have significantly more computers than elementary and middle schools. (See pages 254-255)
- Printers, VCR players, DVD players, Televisions, Overhead Projectors, and copiers are the most common equipment available in school libraries. To a much lesser extent, digital cameras, scanners, SmartBoards, video cameras, whiteboards, and video data projectors are available, although less than half of the school libraries have these equipments. High schools are significantly more equipment enriched than middle schools and elementary schools. Elementary schools in particular are missing out on major access to contemporary technologies. (See pages 256-262)

Access

- 36.2% of the schools provide full flexible access (including access out of school hours), and 61.8% of school libraries provide all or some flexible access. (See pages 263-265)
- There is a significant difference in types of access according to school type. 98% of elementary schools operate on a fixed or modified fixed schedule (compared to 33.6% of middle schools and 19% of high schools). 2% of elementary schools provide flexible and open access, compared to 66.4% of middle schools and 80.9% of high schools. (See

pages 264-266)

- 99.1% of school libraries operate as single rather than shared facilities. (See page 266)

School Library Budget

- The average elementary school library budget is \$8,299; average middle school library budget is \$17,932; and average high school budget is \$29,228.
- The highest average budget allocations are in Morris, Cape May, Gloucester, Burlington and Mercer Counties, and the lowest average budget allocations are in Warren, Essex, Passaic and Hudson Counties. 13 counties have average budgets below the statewide average of \$15,603. (See pages 270-272)
- 54.5% of school library budgets remained unchanged from the 2007-2008 and 2008-2009 school years. 18.5% of school library budgets increased, and 27.2 decreased during these times. The data analysis shows that no one school type – elementary, middle or high – appeared to suffer more budget cuts than the others. (See pages 270-272)
- There is considerable variation across school libraries in terms what is purchased with school library budget allocations, and this variation also occurs across different school types. While trade and library books, periodicals, and library furnishings are common budget expenditures across school libraries, there is little consistency as to other expenditure items. (See pages 273-282)

Personnel Changes

- 94% of participants indicated that they will be returning to their position in the 2009-10 school year. Elimination of school library position and retirement are the predominant reason for 6% of the participants who indicated that they will not be returning to their school in the new school year. (See pages 283)

Recommendations

Part A: School Libraries and Transformation

A1. It is recommended that NJASL establish mechanisms for the production and distribution of the findings of this study in multiple forms and formats to all educational stakeholders in New Jersey, to ensure that the findings are visible and provide the basis for the development of continuous improvement initiatives in schools. Underpinning this is the identification of key audiences for the findings, and establishing the most appropriate and effective means of presenting the findings and follow-up actions. These should include:

- Press releases;
- Concise fact sheets for distribution to school administrators, faculty, school board;
- Summaries posted on school library web sites;
- Evidence-based advocacy materials to celebrate school libraries in New Jersey;
- Conference presentations;
- Papers in peer-reviewed and practitioner journals.

A2. In conjunction with Recommendation 1, it is recommended that NJASL establish a formal feedback meeting inviting New Jersey Department of Education leaders, school principals and superintendents, representatives of school board associations, targeted community organizations, and district school library supervisors and school librarians to participate. The purpose of this meeting would be:

- To present an overview of the findings of this study, with emphasis on the holistic contribution of the school library to the learning agenda of the school and the development of the intellectual and technical capabilities of students;
- To identify key challenges and issues in school library provision (e.g., staffing patterns, flexible scheduling, budget allocations and expectations regarding school librarian-classroom teacher collaborations);
- To identify enablers and barriers to enacting the recommendations of this report;
- To discuss an agenda of continuous improvement so that all school libraries can continue to grow and flourish.

The list of seven priorities identified by school librarians may serve as a useful framework for establishing this agenda and a professional development agenda for stakeholders / professional associations to enable school librarians to take steps to achieving these goals. It is recommended that this meeting take place in Fall 2010 so that actions and development plans can be initiated as whole-school activities for Spring 2011.

A3. In the context of the state's current financial crisis, the challenges confronting school libraries and their role in learning and in the digital landscape of the 21st century are significant. A statewide innovative, visionary statement on imagining and re-engineering school libraries, with buy-in from all stakeholders is critical. We recommend that NJASL, in conjunction with various educational and community stakeholders, develop a shared vision document for the future of school libraries in New Jersey. The findings of this study, with its emphasis on the development of the intellectual capacity of students, should be a key starting point. We suggest:

- The development of futuristic and research-based documents such as, “New Jersey School Libraries: Towards a 2020 Vision.” This futuristic document would acknowledge the dramatic changes in the digital information world. It would chart the development of creative and powerful pedagogies that engage the information landscape in all its richness to foster curriculum standards and deep knowledge outcomes.
- That NJASL leadership carefully examines the work being done in terms of conceptualizing school libraries as “learning commons” where the central focus is on: inquiry-based learning through information; intervention and socialization for learning; how to function effectively in the complex informational and technological world beyond school; and knowledge-centered outcomes and intellectual engagement.
- Positioning the school library as a pedagogical center where instructional teams engage in innovative design and instruction to access and use information and web tools to empower learning through creativity, discovery, inquiry, cooperation, and collaboration. The center would be fueled by the development of expertise of learning with and through information and IT tools to create, produce and share knowledge.
- Engaging the information technology expertise as evidenced in this study to position the future school library as a 24/7 learning environment: one which supports the knowledge building process out of school and operates as a central portal for knowledge development.

A4. It is recommended that all school librarians use the findings of this study as a guide to benchmarking in their own schools, and to negotiate and establish continuous school improvement plans (i.e., each not more than a three-year plan) that focus on meeting targeted standards of professional and paraprofessional support for school libraries. Each school community should review these findings and tailor a school library improvement plan which is responsive to the context of the particular school. The plan should establish annual improvement goals, (e.g., increases in budget allocations; building collections to recommended levels of resources, increasing paraprofessional support, and the opening up of fixed library schedules to more flexible schedules; the initiation of school librarian-teacher collaborations in targeted curriculum areas, and development information technology competencies for teaching faculty and students.)

A5. It is clear the school librarians in New Jersey engage actively in the development and instruction of an extensive range of information and technical literacies. This instruction primarily centers on knowing about the school library, knowing about different sources and formats, with sound levels related to understanding the different strategies in doing effective research, learning how to use resources, evaluating information for quality, and learning to use information ethically. It is also pleasing to see that despite issues with staffing in the elementary schools, school librarians, where available are contributing substantially to this instruction. Overall, there is an information – resource orientation. The focus appears to be on essential skills of accessing and locating information, and evaluating its appropriateness for task and authority.

There is no question that these are important competencies. With increasing emphasis in New Jersey on intellectual quality and the development of deep knowledge as key curriculum outcomes, we recommend that the “use” dimension of information literacy be strengthened in instructional teams. These are the abilities and dispositions that explicitly focus on knowledge building, critical thinking, problem solving, and the creation, construction and sharing the products of knowledge that demonstrate deep knowledge and understanding. This is an extension of the instructional role: moving from instruction centering on “finding information” to “doing something with the found information” which constitutes individual and collective knowledge building. Accordingly, it is recommended that school librarians engage in professional development that helps them create and implement information literacy instructional interventions linked to knowledge creation and sharing.

A6. One of the key challenges emerging out of this study is the need for school librarians to be able to state learning outcomes and impacts of school library initiatives with greater precision. It is encouraging that school librarians can articulate improvements in terms of reading, information literacy, use of information technology, and improved attitudes towards the library. However, only a small number could articulate specific learning outcomes in relation to the students’ development of deep knowledge and deep understanding of content areas. At best, outcomes were expressed generally as “meet curriculum standards” in subject areas. While this may be an artifact of the question asked, school librarians appeared to have some difficulty articulating the outcomes of library initiatives in terms of specific curriculum standards / goals. There were few responses to the survey that provided specific evidence-based claims of specific gains in knowledge and skills. It is a question of precision and specificity. Secondly, a substantial number of school librarians did not focus on student outcomes, rather, they articulated (often at length) what they did, identifying instructional inputs and processes, rather than clarifying outcomes from the perspective of the learner. There is an assumption that through articulating what is done, i.e., the inputs, some kind of outcomes are enabled, even if they are not identified. This is a case of the elusive outcomes that may be present, but are not documented, evaluated, and communicated. Accordingly, it is recommended that all school librarians undertake further professional development in relation to evidence-based practice to develop their skills at identifying, documenting, and disseminating student learning outcomes enabled by the school library program, particularly emphasizing curriculum outcomes and knowledge outcomes, rather than library-based outcomes.

A7. The findings show that there is a high level of state certified school librarians in New Jersey. All the research clearly and unequivocally points to the fact that the presence of a certified school librarian in every school is a fundamental starting point to school libraries playing a key role in students effectively learning through complex and diverse information resources. Such a high level of staffing enables development of the necessary intellectual scaffolds that help school librarians use information meaningfully to build knowledge and understanding in diverse content areas. This baseline finding parallels the richness of the school librarians’ contributions to the intellectual life of the school, as presented further on in the data report. Given the finding that 31% of the sample possess associate certification level (having completed 18 graduate credits), and given the importance of the instructional role of the school librarian, we would recommend that all school librarians strive to meet the state Department of Education’s master’s level School Library Media Specialist certification requirements, enabling them to undertake a stronger

instructional role in the school.

A8. More than half of the school librarians do not speak at parent and community organizations. This suggests a missed opportunity to share with significant audiences the role of the school library in achievement and literacy development. It may be argued that they are not actively invited to participate, or the nature of parent and community organization meetings do not lend themselves to participation. On the other hand, given multiple calls on budgets across any school, the current climate of educational accountability, and the vital importance of significant audiences knowing the central role of the school library (an essential element in sustained commitment), it is important that school librarians take a proactive stance. This may also signal an opportunity for the professional association to provide some development in terms of how and what to communicate to interested audiences, and to learn how to engage in evidence-based advocacy. The findings also show opportunity for increasing participation in district and school committee meetings. While it is acknowledged that it may be difficult to get representation on these and other committees identified in this survey, the results highlight the challenge and need for school librarians to convey the message of the learning dynamics of their role and the significant learning outcomes that they enable, even though they are not represented on these committees. The importance of school librarians being proactive in their participation in various school forums is stressed. This pro-action may take several forms such as presentation of reports which highlight the school library's contribution to learning, summaries of learning outcomes of collaboratively taught curriculum units, requests to be on the agenda to raise important library issues and initiatives, and presentations of summaries of significant research findings in relation to information literacy and reading engagement.

A9. The findings show a substantial number of school librarians are involved in cooperations, coordinations and collaborations with classroom teachers. This is highly commendable. An extensive body of educational research concludes that quality teachers and quality teaching have the most significant effect on student achievement. We believe that instructional collaborations should be the key feature of the role of the school librarian. We recommend that in the ongoing professional development of school librarians in New Jersey attention needs to be given to continuing to develop library-classroom teaching partnerships so that contextualized information literacy instruction targeted to curriculum standards can take place, with a focus on knowledge development. The Guided Inquiry based framework, underpinned by the Information Search Process developed by Kuhlthau, and explicated in Kuhlthau, Maniotes & Caspari (2007) is recommended as the research-based and research-validated approach. We would recommend that NJASL establish an instructional policy underpinned by a Guided Inquiry approach and provide professional development centering on Guided Inquiry.

A10. It is recommended that all school libraries establish a strong web presence, both within the school and as part of a broader learning-centered advocacy program. Such websites should, in the long term, provide access to electronic resources and databases both onsite and remotely. These websites should highlight the collaborative instructional partnerships, identify learning outcomes enabled in the school through the school library, and provide access to research guides, learning techniques and knowledge building strategies and tools, with guidance and online support for their development.

A11. School librarians in New Jersey clearly take a strong instructional role in providing students with the intellectual and technical scaffolds to engage with information technology in efficient and productive ways. Teaching search strategies in relation to the World Wide Web, specialized databases, library catalogs, and directories, is given the most widespread emphasis. School librarians are bringing to the school community a unique set of information technology capabilities related to accessing and using information technology, not just for finding and evaluating resources, but for using technology tools to create innovative representation of knowledge. It is particularly encouraging to see the early adoption and integration of a range of Web 2.0 technologies, tools, and techniques to support curriculum content standards. School librarians show considerable capacity to lead this important journey in their schools. We recommend that all school librarians are encouraged to negotiate professional development / continuous improvement plans for their schools so that the development information technology competencies for teaching faculty and students are maximized, with particular emphasis on Web 2.0 technologies for content creation and representation.

Part B: School Libraries and Reading

The findings in relation to reading and related activities show a commitment to reading development in schools. The work of school librarians in nurturing reading appears both diverse and sustained. Some key challenges and opportunities for continuous improvement are also posed by the findings. First, school librarians seem to be in the old paradigm as book/information providers. The reading motivation activities that are most typically undertaken are primarily passive activities. Book display, book promotions, promotion of reading programs may, but do not necessarily engage students. Secondly, the low use of online, visual, and audio media to create and interpret information is of concern. Reading and information literacies are no longer text- or print-based only. Students in current society need to be able to master the use of different media to integrate information and construct knowledge. Finally, findings show that some reading / writing initiatives are more pervasive in the elementary school, and these mostly decline in frequency through middle school and high school. The reduction of certain activities conveys a perception that high school libraries are not about reading for enjoyment and pleasure, and this is a serious issue, especially for literacy development and fostering an ongoing love of reading for pleasure after schooling.

This report consequently makes the following recommendations in relation to reading and related activities:

B1. Active reading: It is recommended that school librarians develop and implement more active or interactive reading programs to engage students. We would encourage all school librarians in New Jersey to plan and implement at least one major reading / writing initiative that engages students actively in thinking, discussing, sharing ideas, reflecting and participating through the use of multiple media, rather than activities where students primarily remain as the passive recipients.

B2. Use of multimedia: It is recommended that school librarians work actively to make use of the new possibilities for interaction created by the media such as magazines, games, music, and videos. Because reading is no longer exclusively book- or print-based, more use of multimedia

and print alternatives in reading programs is encouraged, particularly integration of social networking technologies and tools to create interactive and multiplatform reading communities.

B3. Knowledge construction: Given a central focus in New Jersey on reading for learning, meeting curriculum standards, and reading for comprehension and understanding of curriculum content, it is recommended that school librarians focus some attention on implementing more reading programs and initiatives that involve the creation, integration, and sharing of information to meet curriculum content standards.

B4. Diversity: Data show that elementary schools provide the most diverse reading programs, and such diversity declines through middle school and high school. It is recommended that middle and high schools in particular explore and provide a wider range of reading programs, suited to age, grade and curriculum standards to engage students and maintain a vibrant and active reading culture to support both curriculum-centered reading and personal reading interests.

B5. Writing programs: Research indicates that writing activities are the second most popular literacy practices that young adults do. Given this significant finding, coupled with the central importance of collaborative, team approaches to reading and literacy initiatives, it is recommended that school librarians work in and support programs and / or workshops on creative writing and to support youth publication of creative endeavors across the school. School librarians are encouraged to collaborate with students, teachers, other librarians, and even parents in creating new reading and writing programs. School librarians are encouraged to be on the watch for reading practices that are taking place in other types of libraries or institutions and organizations with interest in reading and writing development. School librarians are encouraged to take steps to model the new reading and writing activities.

Part C: School Library Collections

Three themes emerge from the analysis the *TitleWise* accounts of 298 New Jersey school library collections that are critical for the sustainability of school libraries. Recommendations are structured around issues of sustainability and equity, and are intended for the continuous improvement of these collections.

C1. *The Fiction-Non-Fiction Gap and weaknesses in fiction collections related to size and currency.* To address the Fiction-Non-Fiction Gap, it is recommended that secondary school librarians give priority to building their fiction collections to comprise 50% of the total print collection in middle and high school libraries to support literacy development as foundational to supporting school curriculum. The following criteria are recommended for selecting fiction for the print collection that encourages reading motivation and engagement, particularly for middle and high school students:

- Weed, weed, and weed some more to raise the copyright date of the fiction section, eliminate unused materials, and connect books with other media formats
- Engage in collaborative collection development. Gather input from students and staff to make purchasing decisions and give priority to students' reading interests and behaviors.

Conduct surveys and focus groups to determine what students are reading and want to read;

- Give priority to purchasing fiction books that appeal to boys, ethnic groups specific to the school population, and relevant sub-cultures. Cultivate a strong bilingual collection that reflects community demographics;
- Develop the concept of satellite libraries in classrooms, rotating books on a regular basis. Encourage teachers to designate students to choose books to be checked out to the classrooms and purchase several multiple copies of home-run books. Build a strong collection of paperbacks to support heavy demand from the satellite libraries and allocate a healthy portion of future budgets to updating this section;
- Update the Literature/Rhetoric (800s) section, adding contemporary authors, and connect the literature with the fiction section of the collection and with other media versions of books;
- Monitor use and circulation of short stories, weed and update accordingly, consider labeling these books as “fiction” and integrating them with novels to legitimize this genre as reading that counts;
- Build a strong, integrated collection of fiction and non-fiction Easy Books and validate them as reading that counts by including them in reading lists, summer reading programs, and reading activities;
- Expand alternative print reading materials, e.g., magazines, newspapers, comic books, that appeal to struggling and reluctant readers and validate them as reading materials that count, rather than privileging books only on reading lists and in reading activities;
- Eliminate analog forms of alternative media (audiocassettes, videocassettes) and consider streaming video to increase access to non-print resources;
- Raise the profile and legitimacy of digitized print and diverse, digitized, alternative media;
- Revise the school library Selection Policy to include these criteria and secure Board approval.

C2. *Weaknesses of the non-fiction collections specific to size and currency.* Addresss the weaknesses of the non-fiction collections to raise the average copyright date, eliminate unused materials, avoid duplication of what is available in digital formats, and connect books with other media formats.

- Weed, weed, and weed some more! Decrease Geography/History and Social Sciences in print formats since they are age-sensitive and can be supplemented by free digital sources;

- Increase the size and update Science and Mathematics (500s) books in high school collections;
- Coordinate purchases of all non-fiction with what is available in digital formats, especially in secondary school libraries;
- Re-evaluate Balanced Dewey Comparison (H.W. Wilson and Follett Library Resources) for non-fiction categories of a print collection to reflect digital access. This cost-effective measure releases funds to expand fiction and digital resources.

C3. *Reference books: Too many or too few?* It is recommended that school librarians engage in an active and critical appraisal of the status of their reference collections, with a particular focus on aligning acquisitions with what is available digitally. School librarians are encouraged to:

- Weed, weed, and weed some more! Continue to decrease the number of reference purchases and eliminate duplication, e.g., print and electronic encyclopedias, even though New Jersey school library collections are 14.7% below the Wilson recommendation and 8.6% below the Follett recommendations;
- Give priority to limiting the number of reference books in age-sensitive categories, as identified by the CREW guidelines, and supplement with digital resources;
- Re-evaluate Balanced Dewey Comparisons to align with a more integrated approach to developing print-electronic school library reference collections;
- Increase subscriptions in schools that have no or few databases and coordinate with what is available in digital formats and in the print collection.

C4. *Conceptualize the development of the print collection in the context of a digital world.* Outmoded principles of collection development do not integrate digital resources with print collections. The current model of collection development is struggling with sustainability. Despite healthy school library budgets and certified professional staff, print collections cannot compete with instantaneous and free digital access to informational and recreational media. Isolated from the dynamic world of digital text, print resources are slipping out of the hands of youth and into obscurity as they quietly age on library shelves.

- Develop a vision for a physical-virtual library collection which bridges the print-digital divide with digital forms of narrative text, including emerging genres of literature, as well as informational text. It is not enough to develop print and digital components of a collection in parallel. Their intersection is critical, not only for the sustainability of school library collections, but for the literacy development of youth.
- Harness Internet content as part of a collection development strategy while preserving high standards for authority, accuracy, and appropriateness.

- Envision the school library as a multi-institutional organization, rather than as a stand-alone entity, and explore resource sharing and other cost-effective measures.
- Engage in cooperative collection development with all stakeholders. Adopt radical approaches to building collections, and developing shared collections, policies and procedures.
- Coordinate print and digital resources that are text-based to support student reading to transition between print and digital text, and to develop multiple literacies specific to these formats. An integrated library collection facilitates this kind of literacy support.
- Protect print formats as tools for literacy development and engagement in reading, especially for struggling and reluctant readers. Information users read differently in print and digital contexts, where they skim, scan, and power browse (Rowlands and Nicholas, 2008). The deep and sustained reading that develops comprehension occurs in print environments (Guthrie, J.T., Hoa, A.L.W., Wigfield, A., Tonks, S.M., Humenick, N.M., & Littles, E., 2006).*

*These conclusions are specific to the Internet and may not apply to e-books and reading in digital environments that simulate reading books (e.g., ipads, Kindles, and other digital reading devices.)

C5. Address the inequities in funding school libraries on the national, state, and local levels.

The most vulnerable socioeconomic populations, for whom school libraries may be the only access to the world of reading, rely on smaller and older school library collections that share the same weaknesses related to size and currency as school libraries in districts with higher socioeconomic status. We recommend that:

- NJASL takes a leadership role in advocating for legislative action that eliminates inequities in learning resources so that school libraries in New Jersey across school districts in every county receive per pupil funding as mandated by state legislation to correct inequities among types of schools by grade level and socioeconomic status of school districts. Access to reading materials is too critical for literacy development and learning to depend on local control.
- NJASL works on the state level to develop regional consortia for resource sharing within and among school districts.
- NJASL adopts a statement of concerns about inequities in school library funding on the national level and submits these concerns to the Affiliate Assembly of the American Association of School Librarians through the Regional Director. Concerns should include pro-active initiatives to address inequities in school library funding, including ALA lobbying in Congress;
- NJASL works to raise consciousness among school administrators for including shared learning resources in Race to the Top applications for funding;

- NJASL works to identify Title I and other funding for supporting the development of multiple modes of literacy through school libraries;
- NJASL works to identify funding for technology to support the shift from non-fiction print to digital resources that requires technology equipment;
- NJASL forms alliances with professional reading and technology organizations on the national level to promote awareness of the role of school libraries in their respective missions.

DATA REPORT

This section of the report provides the analysis of both the quantitative and qualitative data from which the findings, as reported in the executive summary, are derived. It includes cross-analyses based on a range of variables, particularly school type, and presents the statistical data of inferential statistical testing. Boxed statements in this section highlight key findings.

The survey instrument has seven parts and gathered data on the following themes:

Part 1: Contact information and school details

Part 2: School library staff

Part 3: Teaching activities in the school library, and professional activities

Part 4: Reading and related activities in the school library

Part 5: Administration of the school library

Part 6: School library access

Part 7: School library budget

Part 1: Contact Information and School Details

Questions 1 -2 consisted of consent agreement and school details. Participants were notified that the survey would collect participant details for the purpose of documenting level of participation, and to enable the researchers to contact non-respondents to maximize the sample, as permitted under the Institutional Review Board (IRB) agreement with Rutgers University.

765 participants responded to the survey. This represents 30% of the school libraries in New Jersey, both public and private, according to New Jersey Department of Education

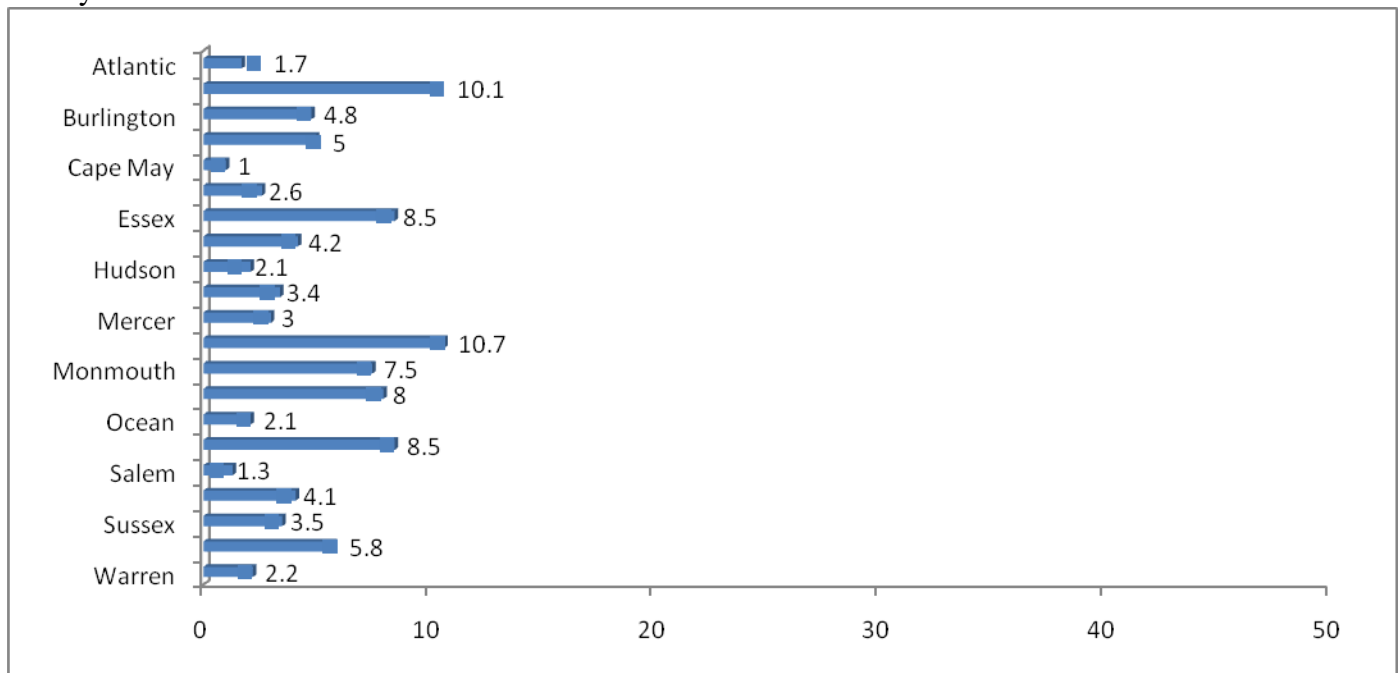
In Questions 4 to 24, the survey asked participants to select the county of their school, and to choose the district from a corresponding drop-down list.

The table below summarizes frequency distribution in percentages by county, with the total response for each county.

| | Frequency (%) |
|-------------------|---------------|
| Atlantic County | 13 (1.7) |
| Bergen County | 77 (10.1) |
| Burlington County | 37 (4.8) |
| Camden County | 38 (5.0) |
| Cape May County | 8 (1.1) |
| Cumberland County | 20 (2.6) |
| Essex County | 65 (8.5) |
| Gloucester County | 32 (4.2) |

| | |
|------------------|-----------|
| Hudson County | 16 (2.1) |
| Hunterdon County | 26 (3.4) |
| Mercer County | 23 (3.0) |
| Middlesex County | 82 (10.7) |
| Monmouth County | 57 (7.5) |
| Morris County | 61 (8.0) |
| Ocean County | 16 (2.1) |
| Passaic County | 65 (8.5) |
| Salem County | 10 (1.3) |
| Somerset County | 31 (4.1) |
| Sussex County | 27 (3.5) |
| Union County | 44 (5.8) |
| Warren County | 17 (2.2) |
| Total | 765 |

The bar graph below shows the various frequency counts and percentages of participation by county.

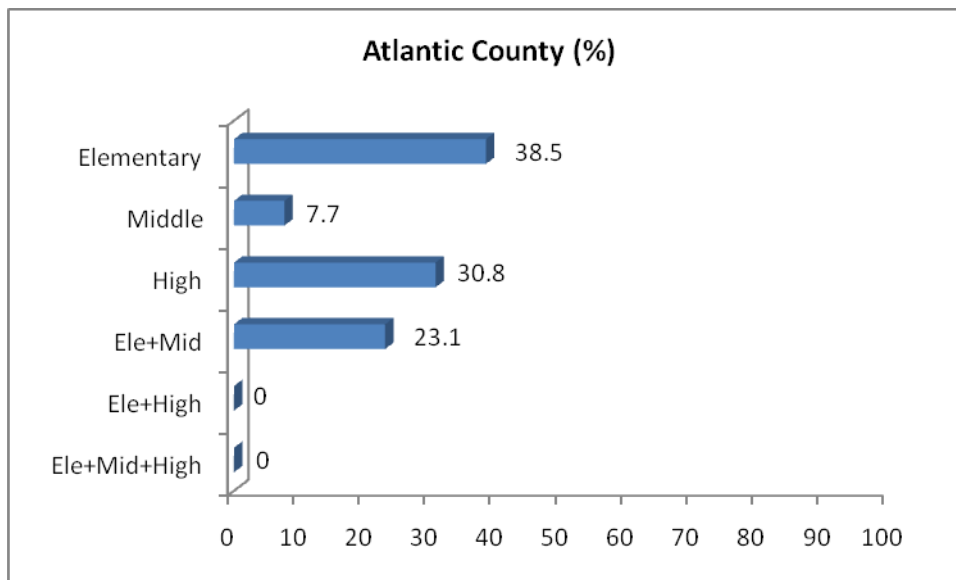


Data were collected from all counties of New Jersey. Middlesex and Bergen Counties provide the highest number of responses – 82 and 77 respectively. Salem and Cape May Counties provide the lowest number of responses – 10 and 8 respectively.

The following tables and bar graphs, based on Questions 4 - 24, show the percentage in each country according to school type, both as frequency and percentage distributions.

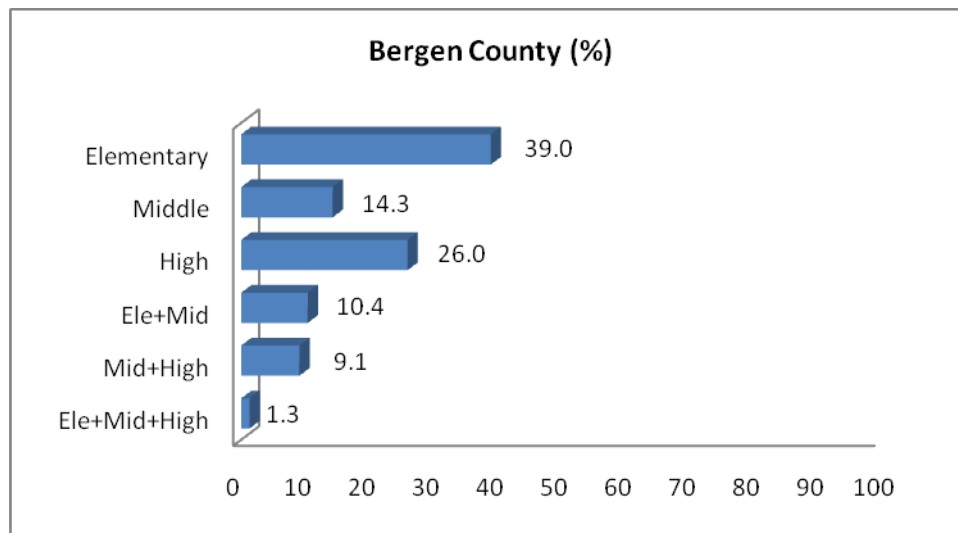
1. Atlantic County

| | Frequency (%) |
|--------------|---------------|
| Elementary | 5 (38.5) |
| Middle | 1 (7.7) |
| High | 4 (30.8) |
| Ele+Mid | 3 (23.1) |
| Mid+High | 0 (0) |
| Ele+Mid+High | 0 (0) |
| Total | 13 |



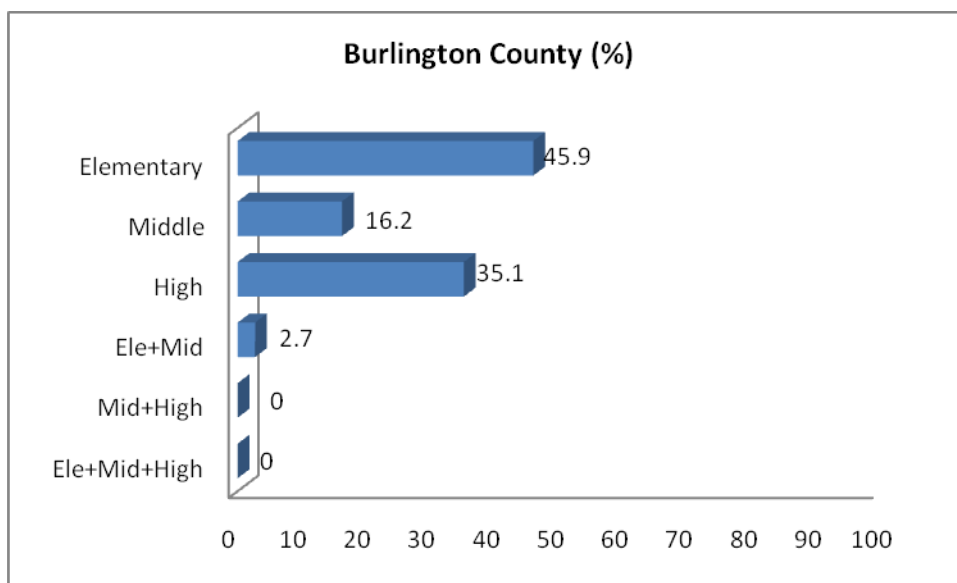
2. Bergen County

| | Frequency (%) |
|--------------|---------------|
| Elementary | 30 (39.0) |
| Middle | 11 (14.3) |
| High | 20 (26.0) |
| Ele+Mid | 8 (10.4) |
| Mid+High | 7 (9.1) |
| Ele+Mid+High | 1 (1.3) |
| Total | 77 |



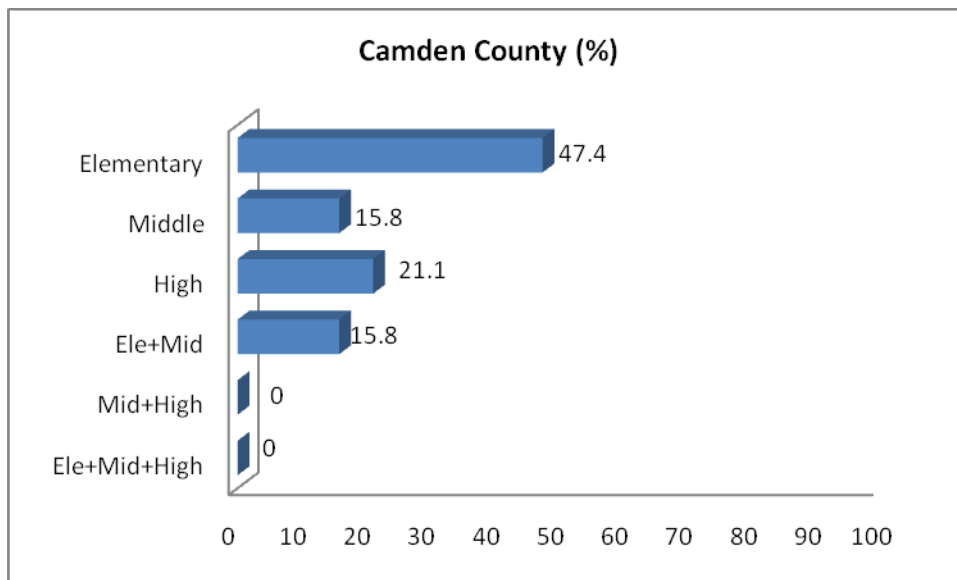
3. Burlington County

| | Frequency (%) |
|--------------|---------------|
| Elementary | 17 (45.9) |
| Middle | 6 (35.1) |
| High | 13 (16.2) |
| Ele+Mid | 1 (2.7) |
| Mid+High | 0 (0) |
| Ele+Mid+High | 0 (0) |
| Total | 37 |



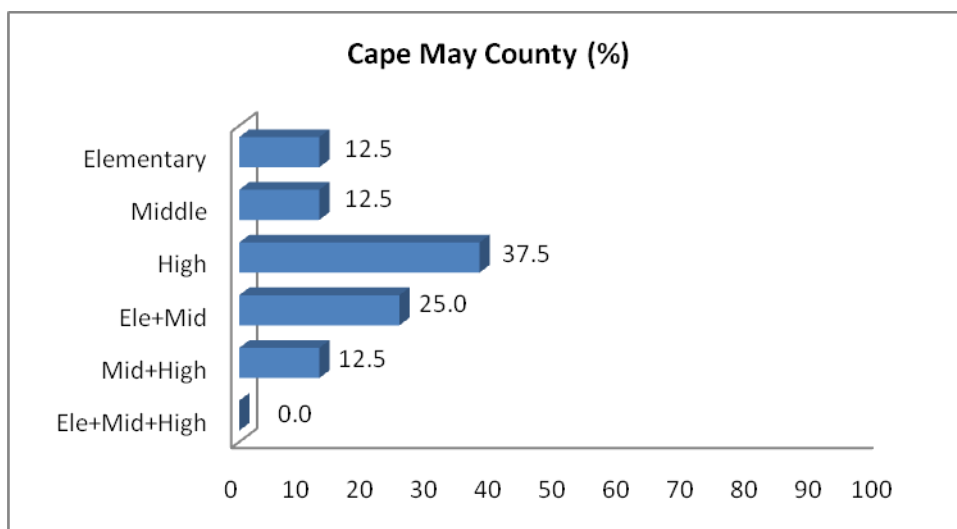
4. Camden County

| | Frequency (%) |
|--------------|---------------|
| Elementary | 18 (47.4) |
| Middle | 6 (15.8) |
| High | 8 (21.1) |
| Ele+Mid | 6 (15.8) |
| Mid+High | 0 (0) |
| Ele+Mid+High | 0 (0) |
| Total | 38 |



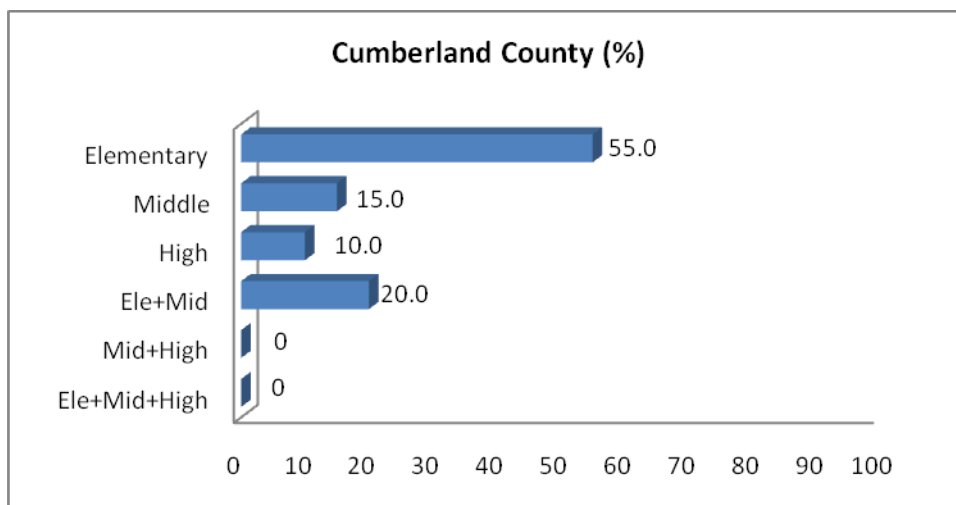
5. Cape May County

| | Frequency (%) |
|--------------|---------------|
| Elementary | 1 (12.5) |
| Middle | 1 (12.5) |
| High | 3 (37.5) |
| Ele+Mid | 2 (25) |
| Mid+High | 1 (12.5) |
| Ele+Mid+High | 0 (0) |
| Total | 8 |



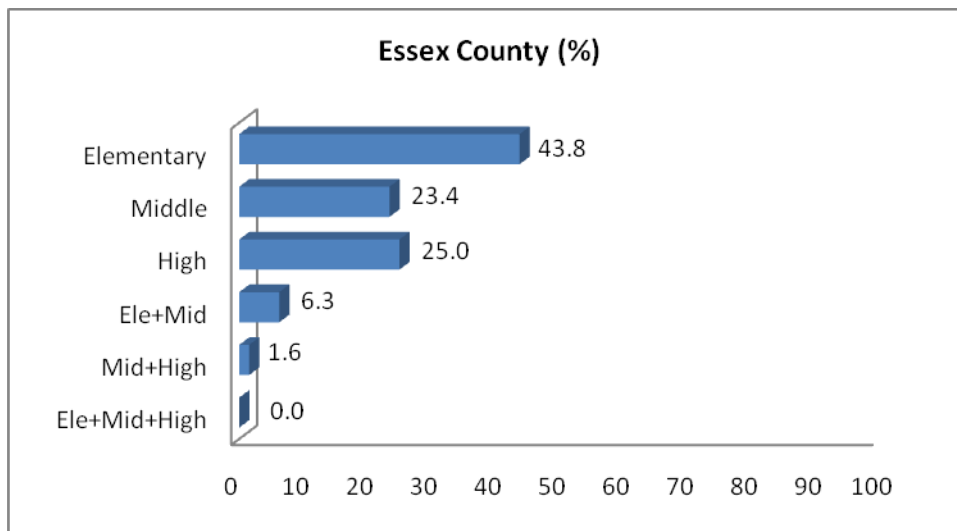
6. Cumberland County

| | Frequency (%) |
|--------------|---------------|
| Elementary | 11 (55.0) |
| Middle | 3 (15.0) |
| High | 2 (10.0) |
| Ele+Mid | 4 (20.0) |
| Mid+High | 0 (0) |
| Ele+Mid+High | 0 (0) |
| Total | 20 |



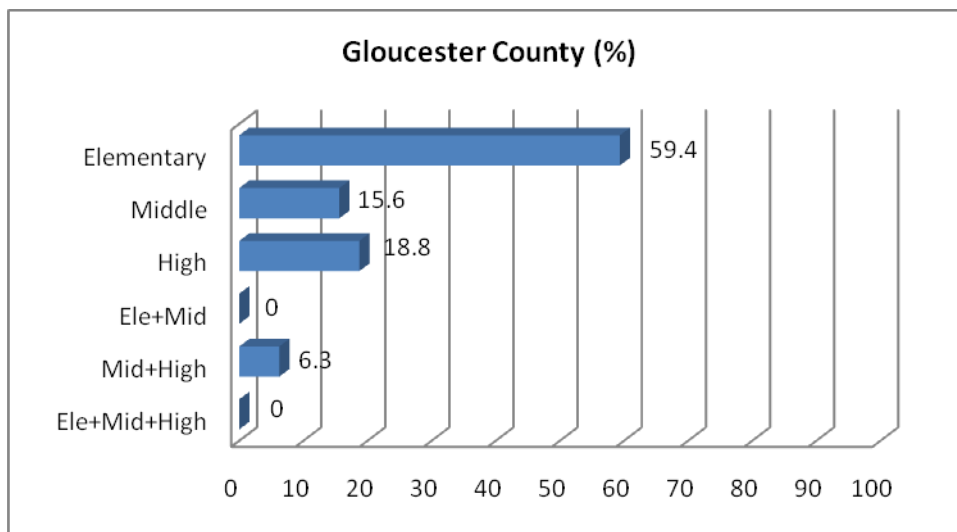
7. Essex County

| | Frequency (%) |
|--------------|---------------|
| Elementary | 28 (43.8) |
| Middle | 15 (23.4) |
| High | 16 (25.0) |
| Ele+Mid | 4 (6.3) |
| Mid+High | 1 (1.6) |
| Ele+Mid+High | 0 (0) |
| Total | 64 |



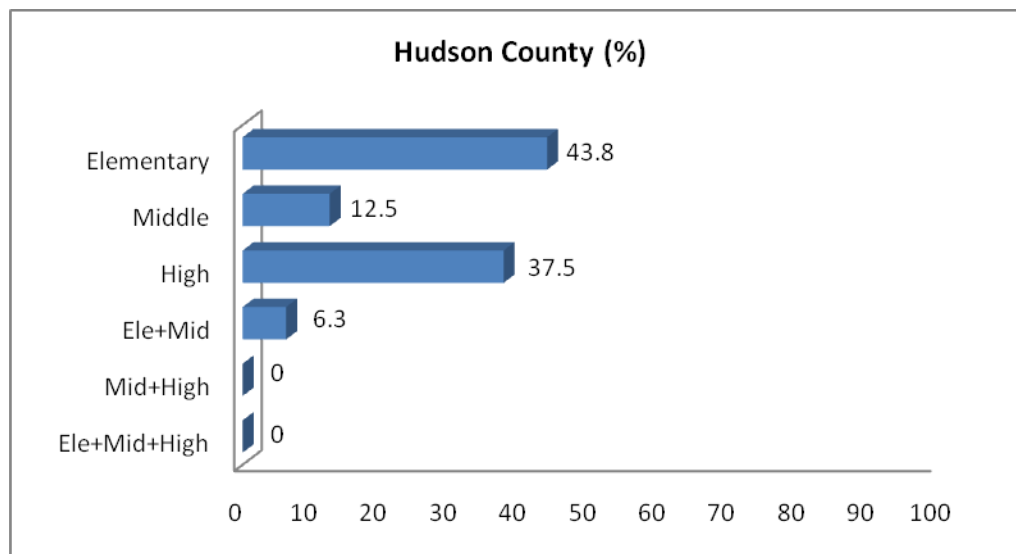
8. Gloucester County

| | Frequency (%) |
|--------------|---------------|
| Elementary | 19 (59.4) |
| Middle | 5 (15.6) |
| High | 6 (18.8) |
| Ele+Mid | 0 (0) |
| Mid+High | 2 (6.3) |
| Ele+Mid+High | 0 (0) |
| Total | 32 |



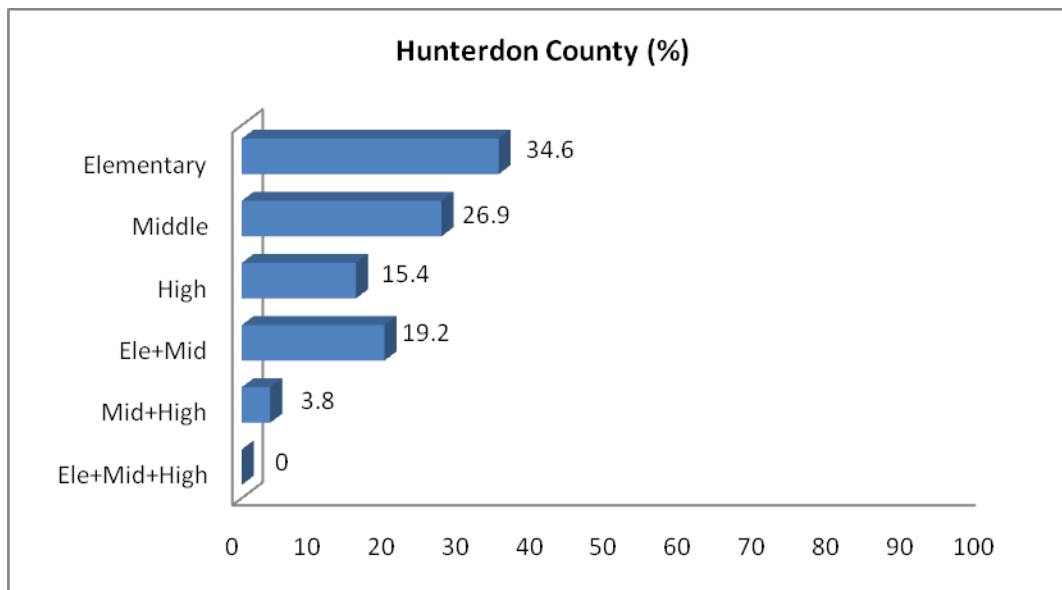
9. Hudson County

| | Frequency (%) |
|--------------|---------------|
| Elementary | 7 (43.8) |
| Middle | 2 (12.5) |
| High | 6 (37.5) |
| Ele+Mid | 1 (6.3) |
| Mid+High | 0 (0) |
| Ele+Mid+High | 0 (0) |
| Total | 16 |



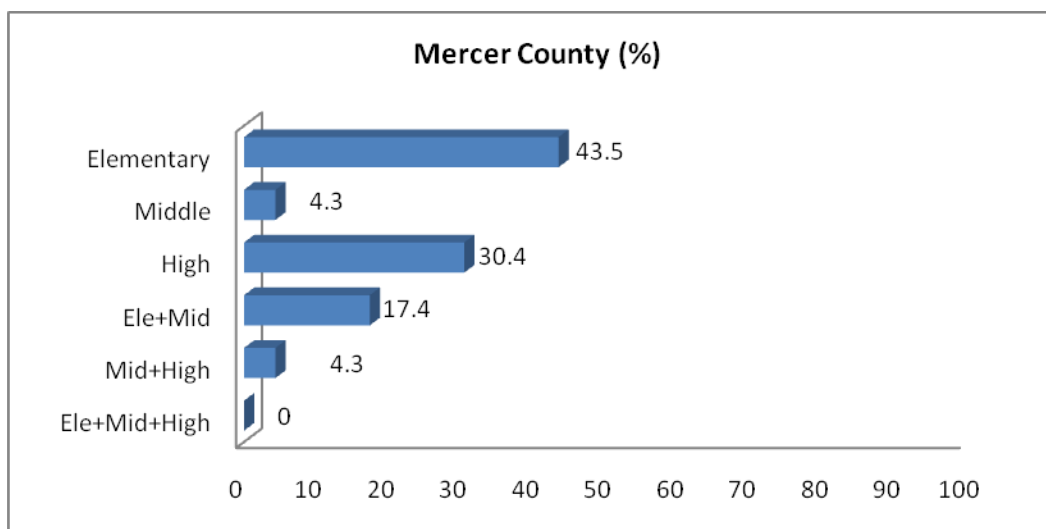
10. Hunterdon County

| | Frequency (%) |
|--------------|---------------|
| Elementary | 9 (34.6) |
| Middle | 7 (26.9) |
| High | 4 (15.4) |
| Ele+Mid | 5 (19.2) |
| Mid+High | 1 (3.8) |
| Ele+Mid+High | 0 (0) |
| Total | 26 |



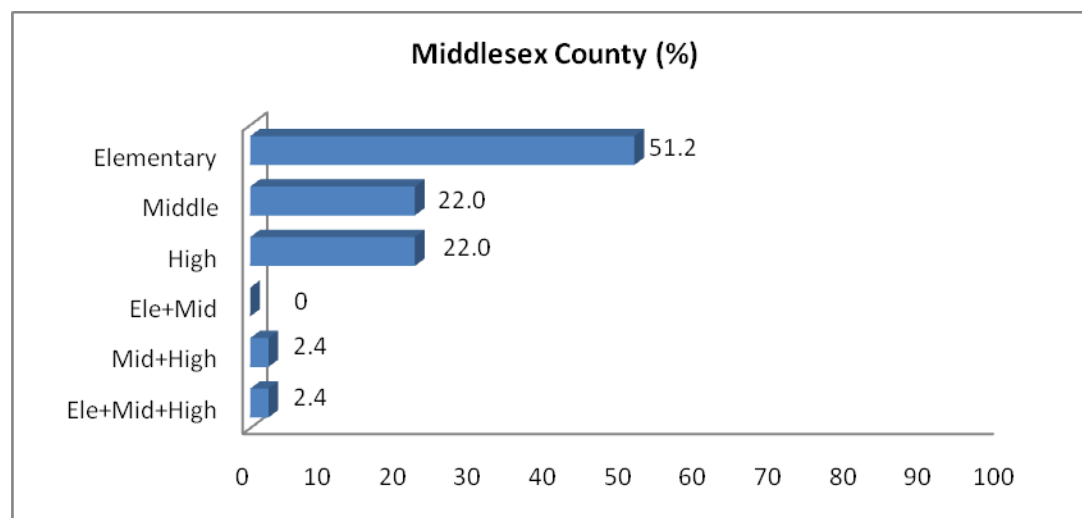
11. Mercer County

| | Frequency (%) |
|--------------|---------------|
| Elementary | 10 (43.5) |
| Middle | 1 (4.3) |
| High | 7 (30.4) |
| Ele+Mid | 4 (17.4) |
| Mid+High | 1 (4.3) |
| Ele+Mid+High | 0 (0) |
| Total | 23 |



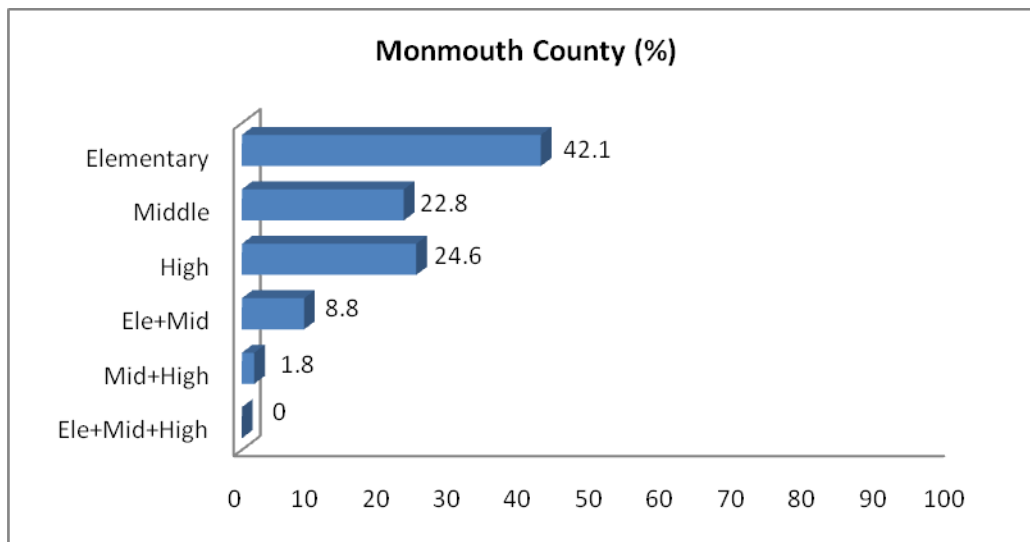
12. Middlesex County

| | Frequency (%) |
|--------------|---------------|
| Elementary | 42 (51.2) |
| Middle | 18 (22.0) |
| High | 18 (22.0) |
| Ele+Mid | 0 (0) |
| Mid+High | 2 (2.4) |
| Ele+Mid+High | 2 (2.4) |
| Total | 82 |



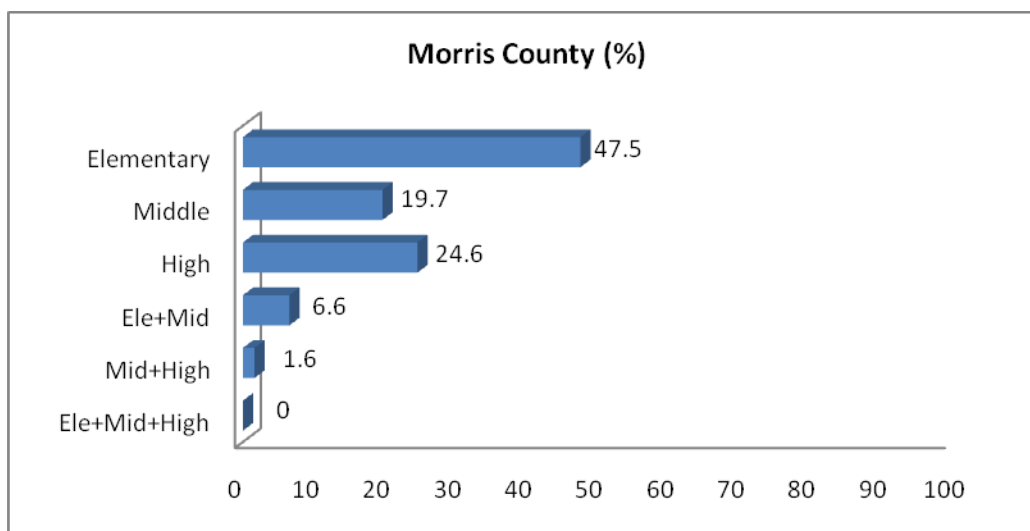
13. Monmouth County

| | Frequency (%) |
|--------------|---------------|
| Elementary | 24 (42.1) |
| Middle | 13 (22.8) |
| High | 14 (24.6) |
| Ele+Mid | 5 (8.8) |
| Mid+High | 1 (1.8) |
| Ele+Mid+High | 0 (0) |
| Total | 57 |



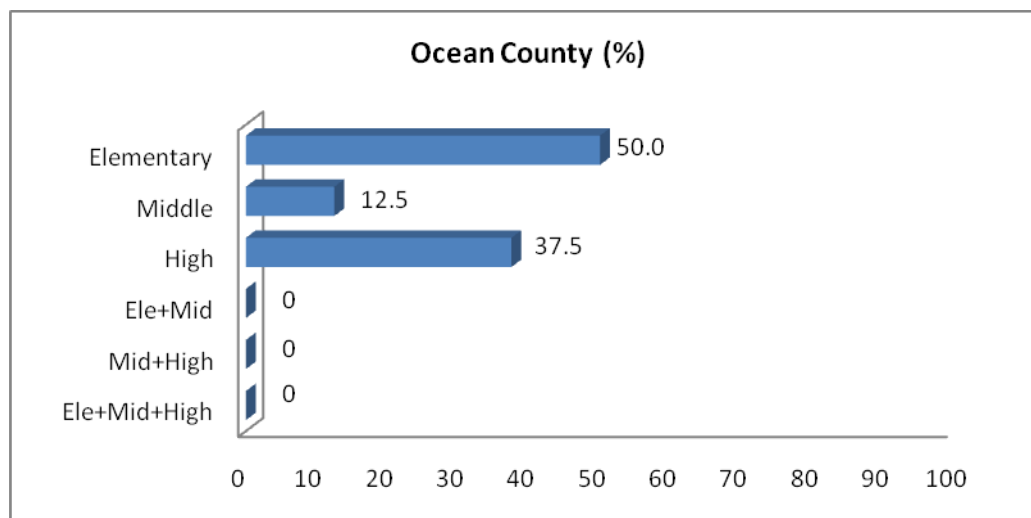
14. Morris County

| | Frequency (%) |
|--------------|---------------|
| Elementary | 29 (47.5) |
| Middle | 12 (19.7) |
| High | 15 (24.6) |
| Ele+Mid | 4 (6.6) |
| Mid+High | 1 (1.6) |
| Ele+Mid+High | 0 (0) |
| Total | 61 |



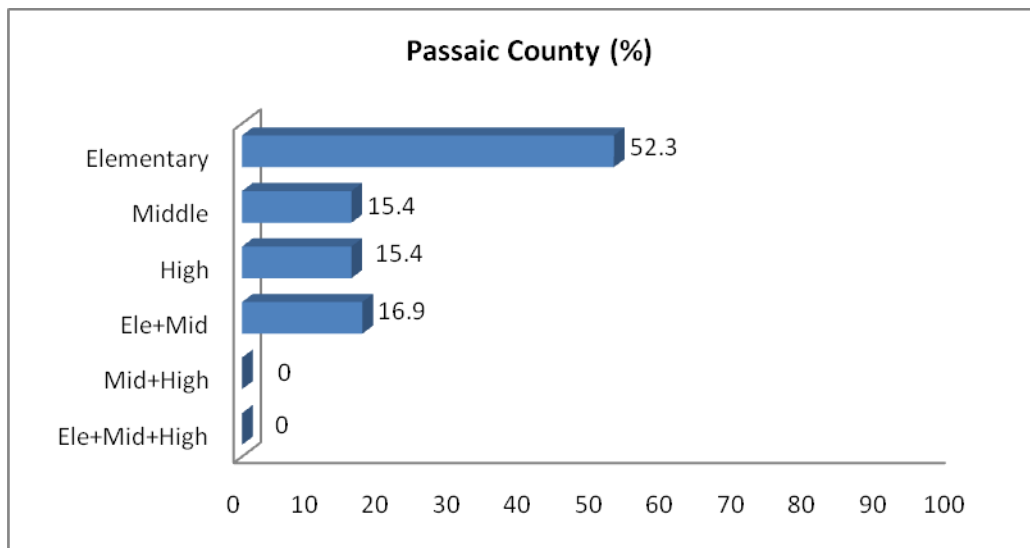
15. Ocean County

| | Frequency (%) |
|--------------|---------------|
| Elementary | 8 (50) |
| Middle | 2 (12.5) |
| High | 6 (6) |
| Ele+Mid | 0 (0) |
| Mid+High | 0 (0) |
| Ele+Mid+High | 0 (0) |
| Total | 16 |



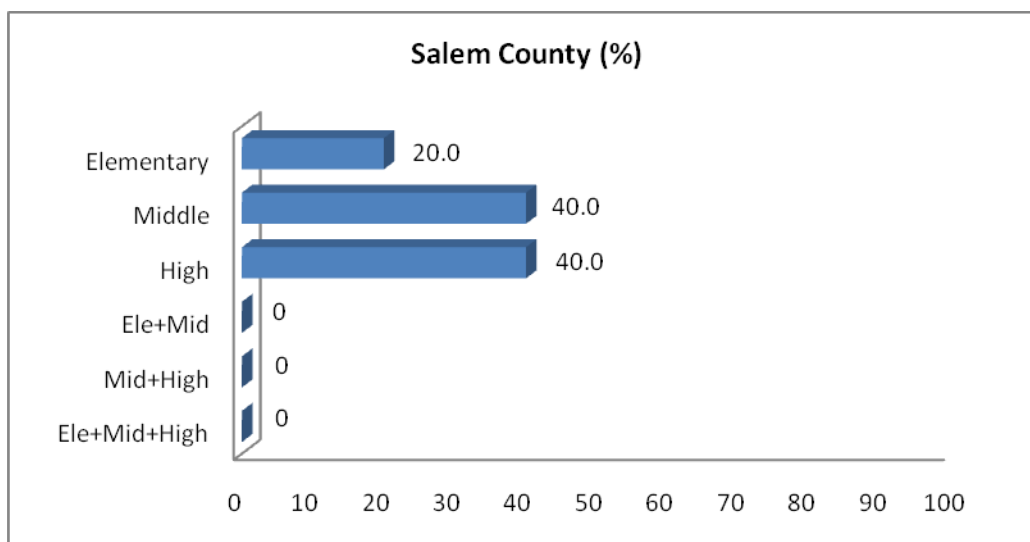
16. Passaic County

| | Frequency (%) |
|--------------|---------------|
| Elementary | 34 (52.3) |
| Middle | 10 (15.4) |
| High | 10 (15.4) |
| Ele+Mid | 11 (16.9) |
| Mid+High | 0 (0) |
| Ele+Mid+High | 0 (0) |
| Total | 65 |



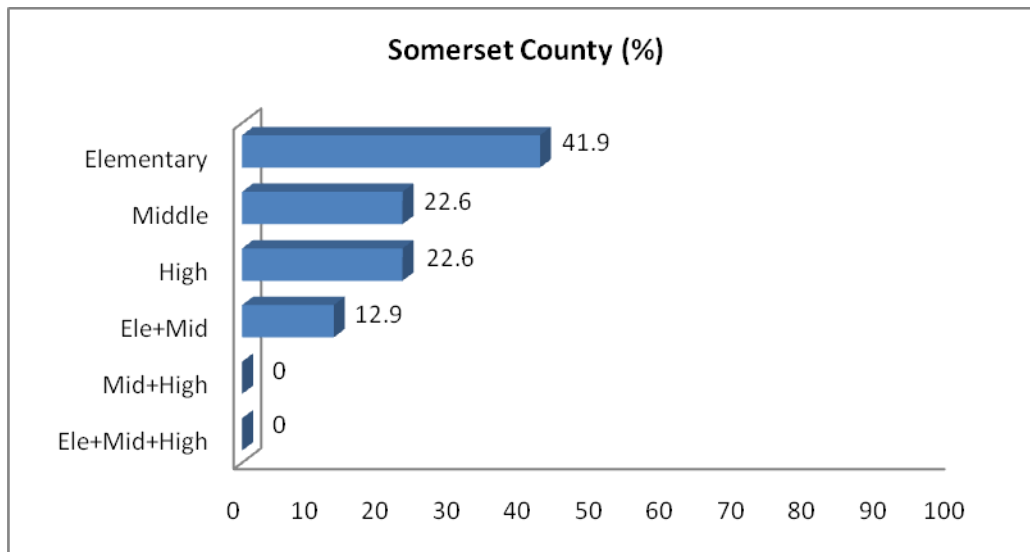
17. Salem County

| | Frequency (%) |
|--------------|---------------|
| Elementary | 2 (20.0) |
| Middle | 4 (40.0) |
| High | 4 (40.0) |
| Ele+Mid | 0 (0) |
| Mid+High | 0 (0) |
| Ele+Mid+High | 0 (0) |
| Total | 10 |



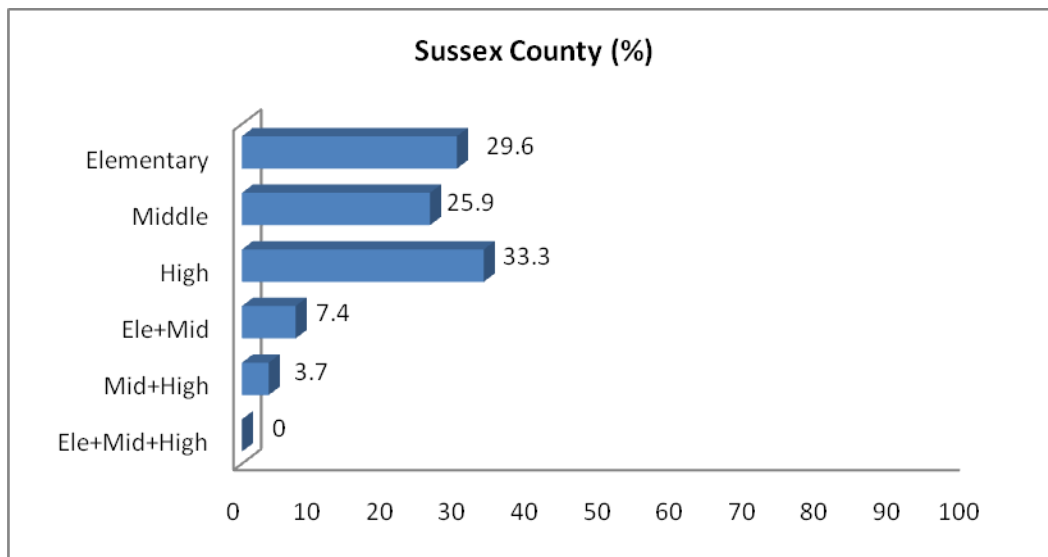
18. Somerset County

| | Frequency (%) |
|--------------|---------------|
| Elementary | 13 (41.9) |
| Middle | 7 (22.6) |
| High | 7 (22.6) |
| Ele+Mid | 4 (12.9) |
| Mid+High | 0 (0) |
| Ele+Mid+High | 0 (0) |
| Total | 31 |



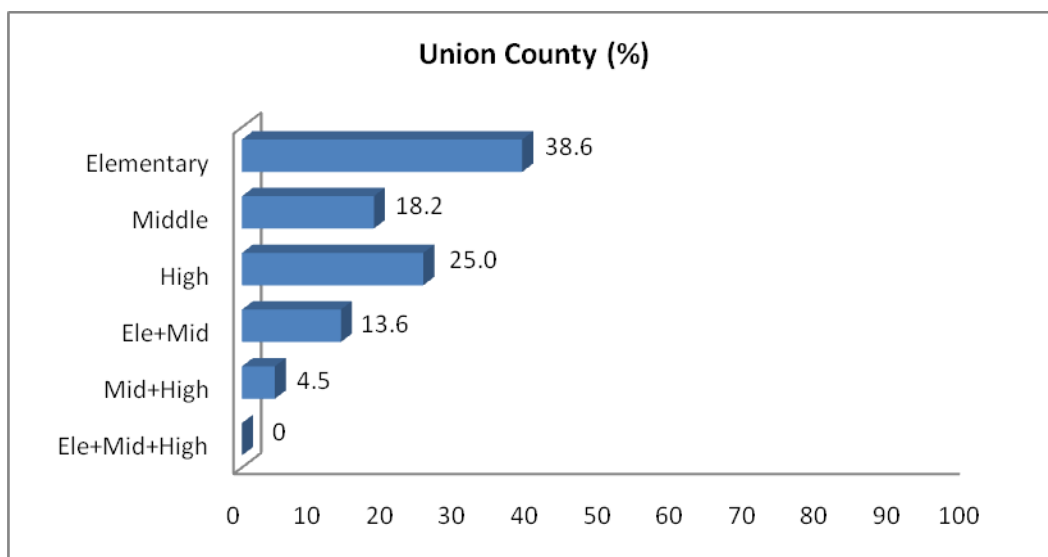
19. Sussex County

| | Frequency (%) |
|--------------|---------------|
| Elementary | 8 (29.6) |
| Middle | 7 (25.9) |
| High | 9 (33.3) |
| Ele+Mid | 2 (7.4) |
| Mid+High | 1 (3.7) |
| Ele+Mid+High | 0 (0) |
| Total | 27 |



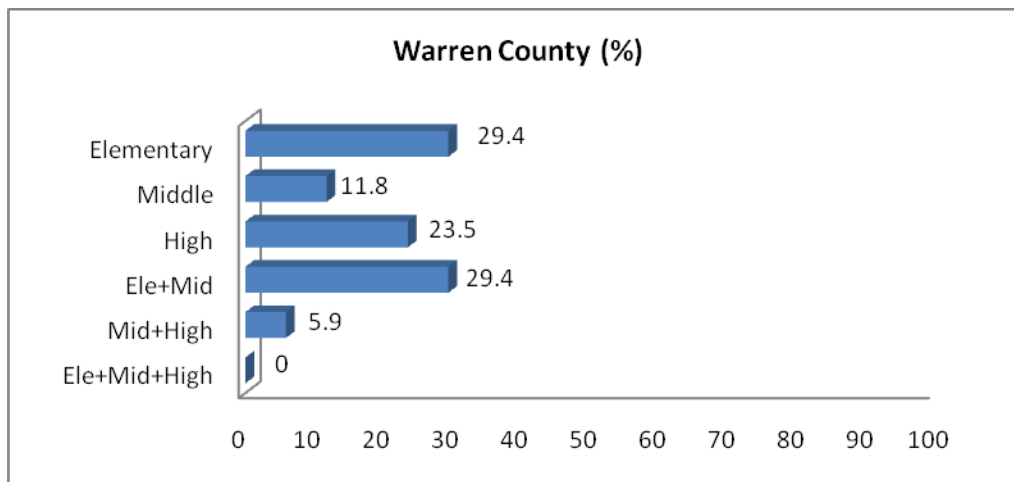
20. Union County

| | Frequency (%) |
|--------------|---------------|
| Elementary | 17 (38.6) |
| Middle | 8 (18.2) |
| High | 11 (25.0) |
| Ele+Mid | 6 (13.6) |
| Mid+High | 2 (4.5) |
| Ele+Mid+High | 0 (0) |
| Total | 44 |



21. Warren County

| | Frequency (%) |
|--------------|---------------|
| Elementary | 5 (29.4) |
| Middle | 2 (11.8) |
| High | 4 (23.5) |
| Ele+Mid | 5 (29.4) |
| Mid+High | 1 (5.9) |
| Ele+Mid+High | 0 (0) |
| Total | 17 |

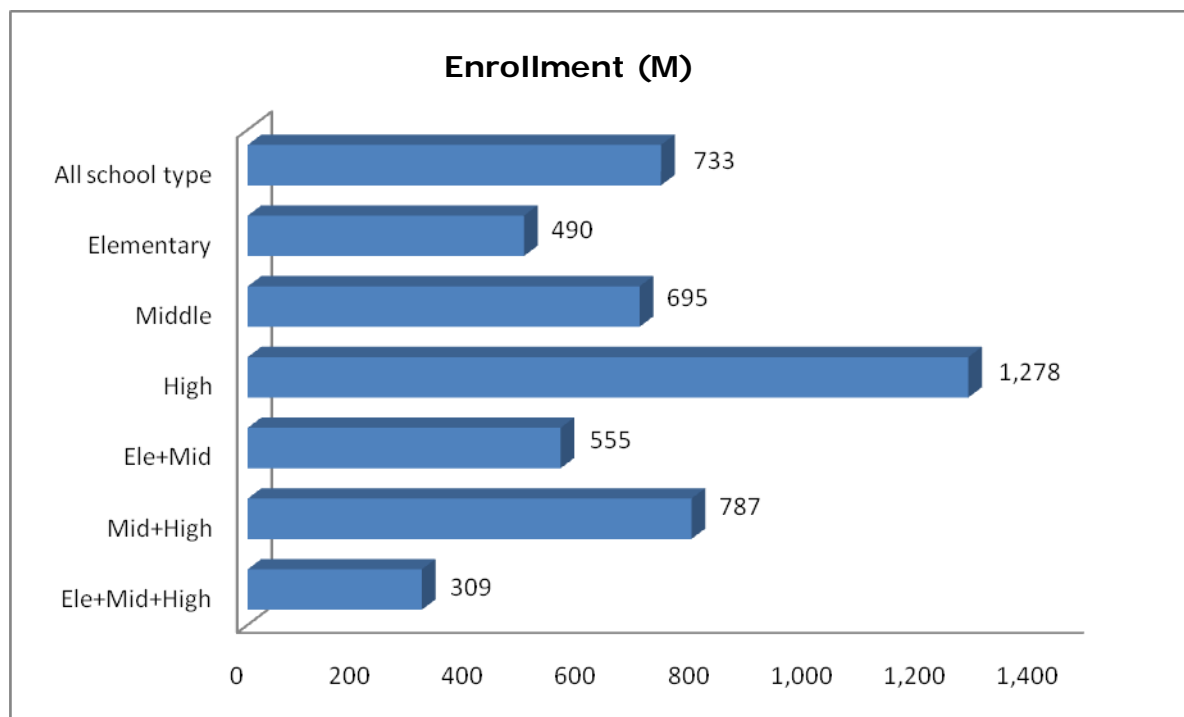


Question 26. School enrollments of participating schools

As shown in the tables and bar graphs below, the average enrollment of participating schools was 733 students. The average enrollment of elementary schools was 490; middle schools was 695, and high schools was 1,278.

Average enrollment of participating schools by school type.

| | Enrollment (<i>M</i>) |
|-----------------|----------------------------|
| All school type | 733 |
| Elementary | 490 |
| Middle | 695 |
| High | 1,278 |
| Ele+Mid | 555 |
| Mid+High | 787 |
| Ele+Mid+High | 309 |



Total number of students enrolled at the participating schools was approximately 560,740 students

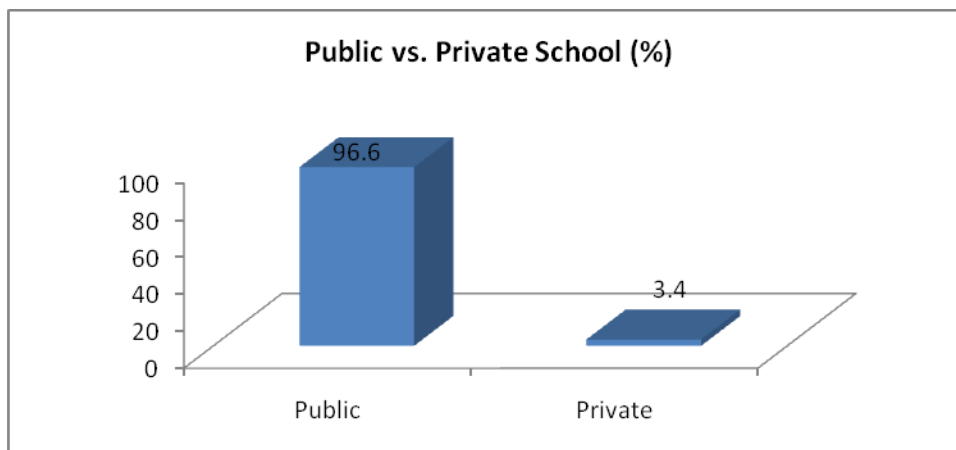
Question 27 gathered data on participating schools by school type.

| School type | Number | Percent |
|-------------------|--------|---------|
| Elementary School | 412 | 53.9 |
| Middle School | 141 | 18.5 |
| High School | 187 | 24.5 |
| Ele+Mid | 21 | 2.7 |
| Ele+Mid+High | 3 | 0.4 |
| Total | 764 | |

53% of the sample of participating schools are elementary schools; 18.5% of participating schools are Middle schools; 24.5% are high schools.

Question 28 gathered data on the distribution of public vs. private schools participating in the survey. This is shown in the table and chart below

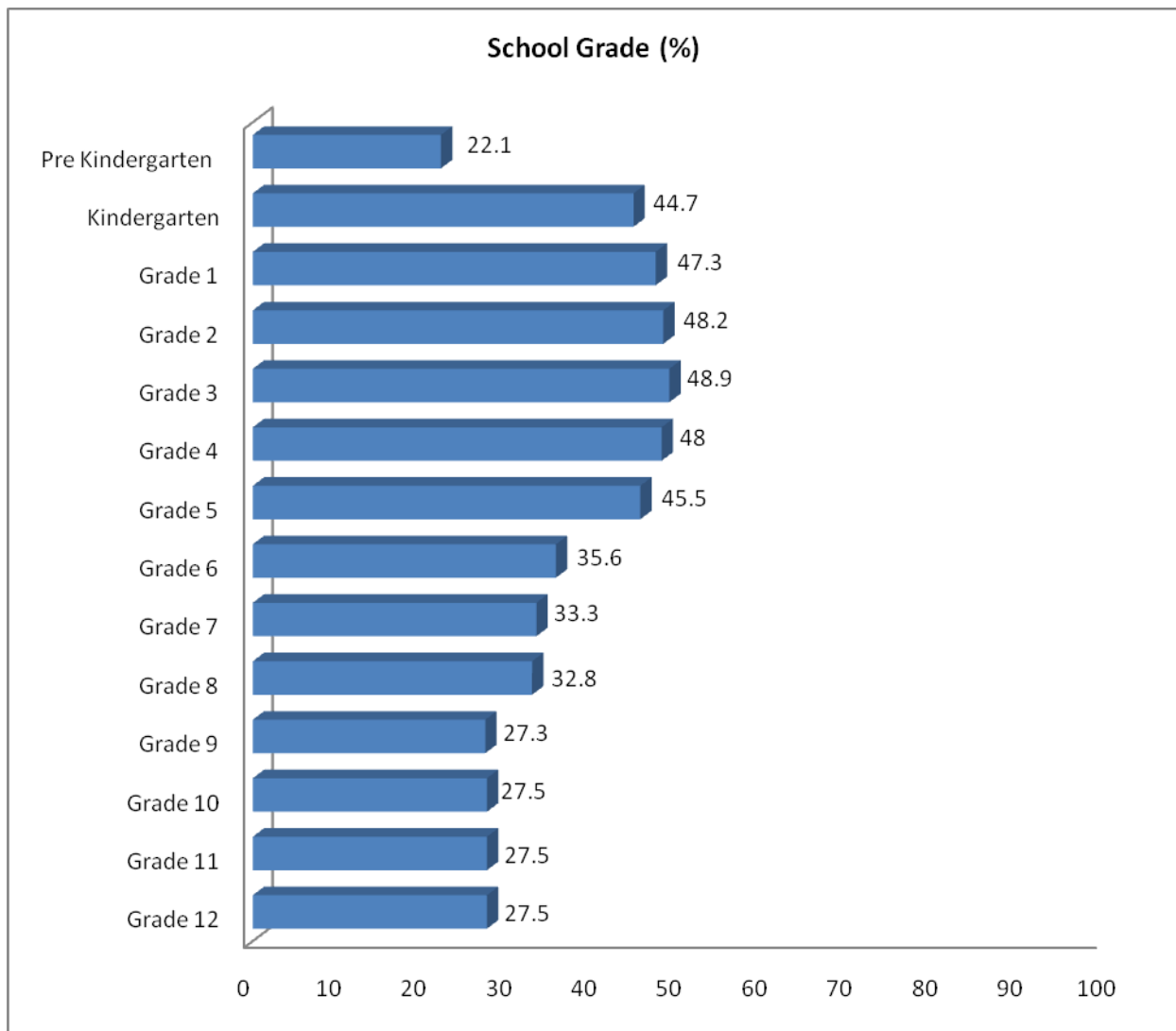
| | Number (%) |
|---------|------------|
| Public | 739 (96.6) |
| Private | 26 (3.4) |
| Total | 765 (100) |



The study shows that there is a small number of private schools participating in the survey. 96.9 % of participating schools are public schools.

Question 29 gathered data on the grade distributions of participating schools. The table and bar graph below show a frequency count of the grades per school represented in the study.

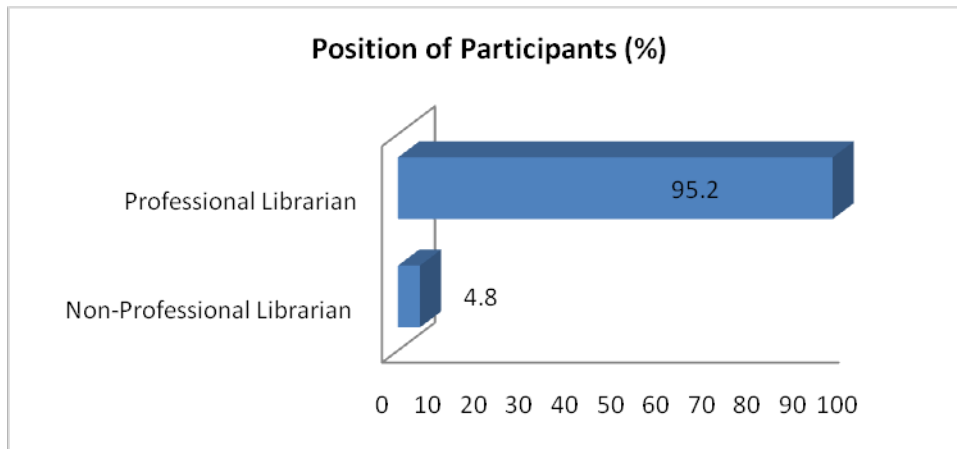
| | Number (%) |
|------------------|------------|
| Pre Kindergarten | 169 (22.1) |
| Kindergarten | 342 (44.7) |
| Grade 1 | 362 (47.3) |
| Grade 2 | 369 (48.2) |
| Grade 3 | 374 (48.9) |
| Grade 4 | 367 (48.0) |
| Grade 5 | 348 (45.5) |
| Grade 6 | 272 (35.6) |
| Grade 7 | 255 (33.3) |
| Grade 8 | 251 (32.8) |
| Grade 9 | 209 (27.3) |
| Grade 10 | 210 (27.5) |
| Grade 11 | 210 (27.5) |
| Grade 12 | 208 (27.2) |



Consistent with distribution of participating school by type, there is a higher representation of elementary grades in the study compared to middle and high schools.

Question 31 gathered data on the job position of participants. The table and bar graph below show the status of the participants.

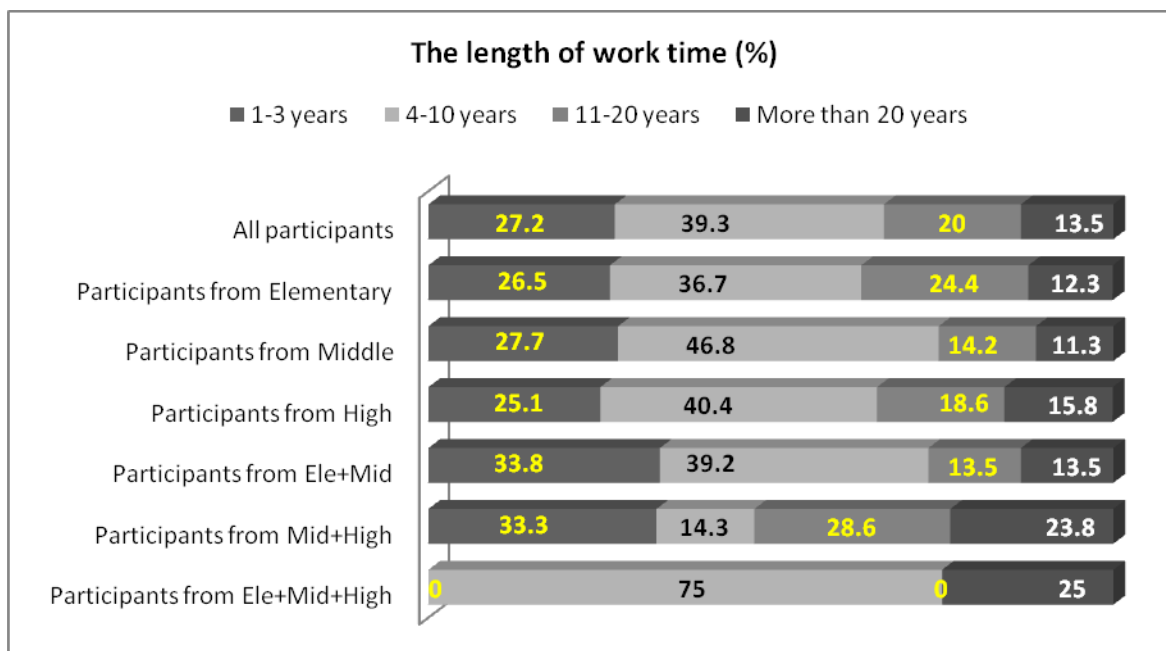
| | Number (%) |
|------------------------|------------|
| Professional Librarian | 728 (95.2) |
| Other | 37 (4.8) |



95.2% of the participants in the study are professional librarians.

Question 32 gathered data on the length of work time in the current position. The table and bar graph below show the distribution of length of experience overall, as well as by school type.

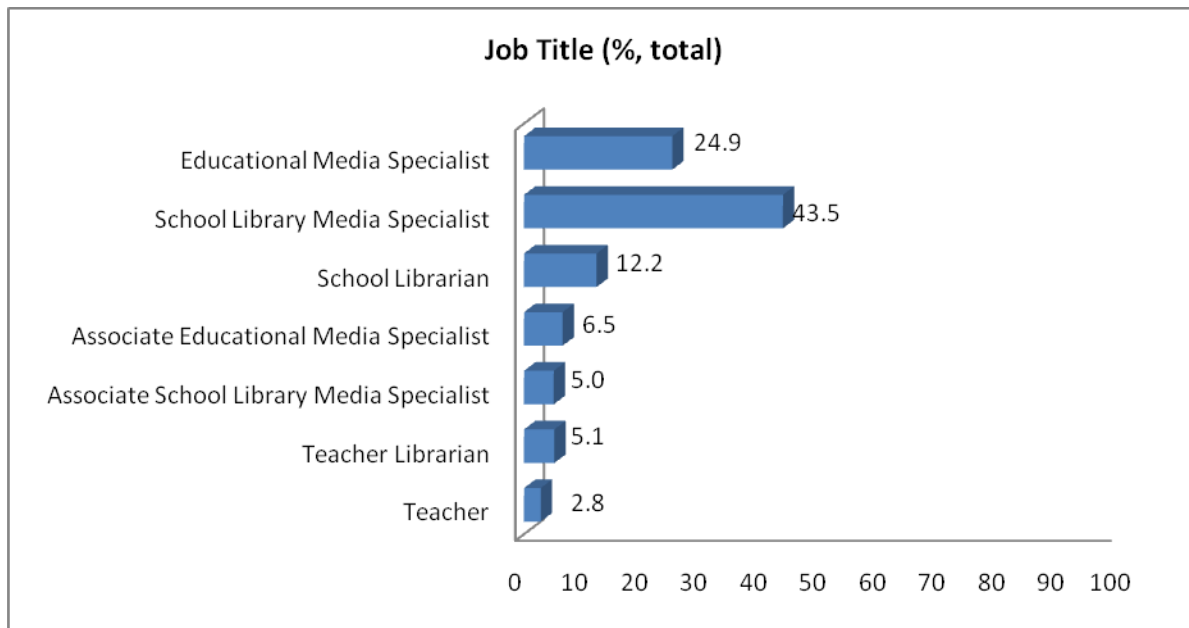
| | 1-3 years (%) | 4-10 years (%) | 11-20 years (%) | More than 20 years (%) | Total |
|-------------------------------------|------------------|-------------------|--------------------|------------------------------|-------|
| All participants | 205 (27.2) | 297 (39.3) | 151 (20.0) | 102 (13.5) | 755 |
| Participants from Elementary school | 88 (26.5) | 122 (36.7) | 81 (24.4) | 41 (12.3) | 332 |
| Participants from Middle school | 39 (27.7) | 66 (46.8) | 20 (14.2) | 16 (11.3) | 141 |
| Participants from High school | 46 (25.1) | 74 (40.4) | 34 (18.6) | 29 (15.8) | 183 |
| Participants from Ele+Mid | 25 (33.8) | 29 (39.2) | 10 (13.5) | 10 (13.5) | 74 |
| Participants from Mid+High | 7 (33.3) | 3 (14.3) | 6 (28.6) | 5 (23.8) | 21 |
| Participants from Ele+Mid+High | 0 (0) | 3 (75) | 0 (0) | 1 (25.0) | 4 |



27.2% of participants have 1 – 3 years experience; 39.3% have 4-10 years experience; 20% have 11-20 years experience; and 13.5% have more than 20 years experience.

Question 34 gathered data on the job title of participants. The table and bar graph below show the distribution and percentage of job titles.

| Job title | Frequency (%) |
|---|---------------|
| Educational Media Specialist | 206 (24.9) |
| School Library Media Specialist | 360 (43.5) |
| School Librarian | 101 (12.2) |
| Associate Educational Media Specialist | 54 (6.5) |
| Associate School Library Media Specialist | 41 (5.0) |
| Teacher Librarian | 42 (5.1) |
| Teacher | 23 (2.8) |
| Total | 827 |



The most common job title is School Library Media Specialist (43.5% of sample). 24.9% of the sample is called Educational Media Specialists. 12.2% of the sample has the official AASL title of School Librarian.

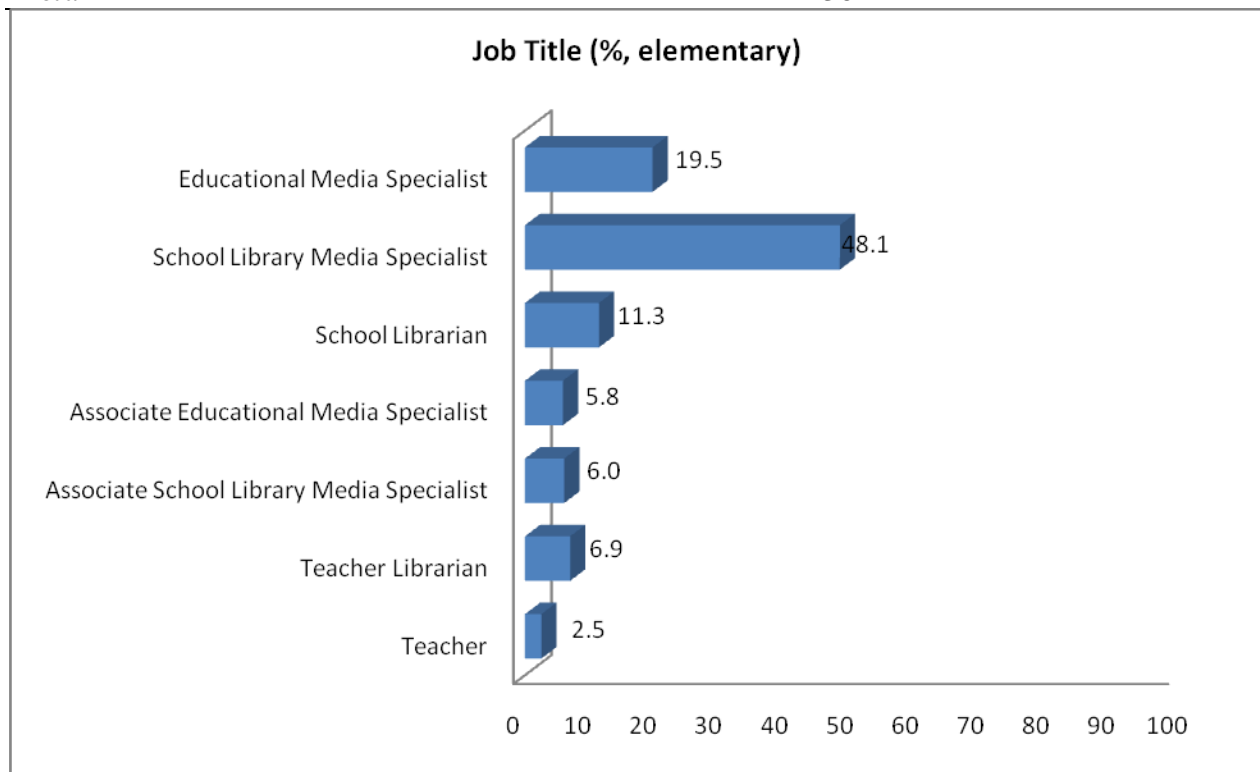
The distribution of job titles by school type is shown in the tables and bar graphs below:

Job Title: Elementary schools

| Job title (only elementary school) | Frequency (%) |
|---|---------------|
| Educational Media Specialist | 71 (19.5) |
| School Library Media Specialist | 175 (48.1) |
| School Librarian | 41 (11.3) |
| Associate Educational Media Specialist | 21 (5.9) |
| Associate School Library Media Specialist | 22 (6.0) |
| Teacher Librarian | 25 (6.9) |
| Teacher | 9 (2.5) |

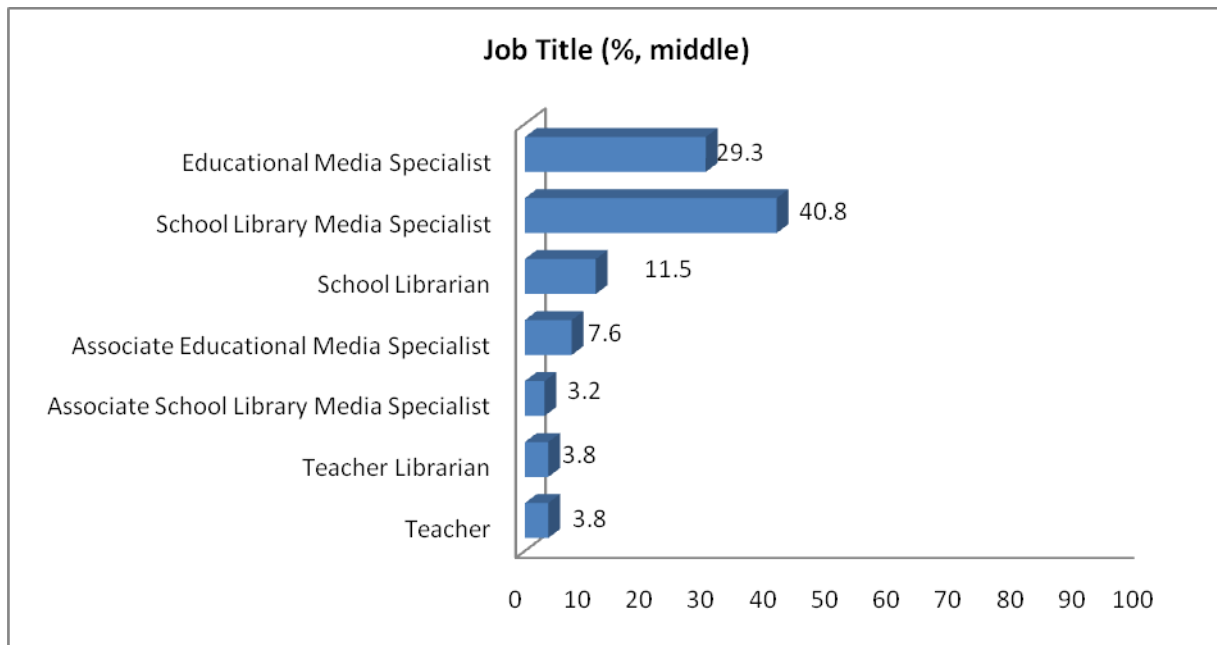
Total

364



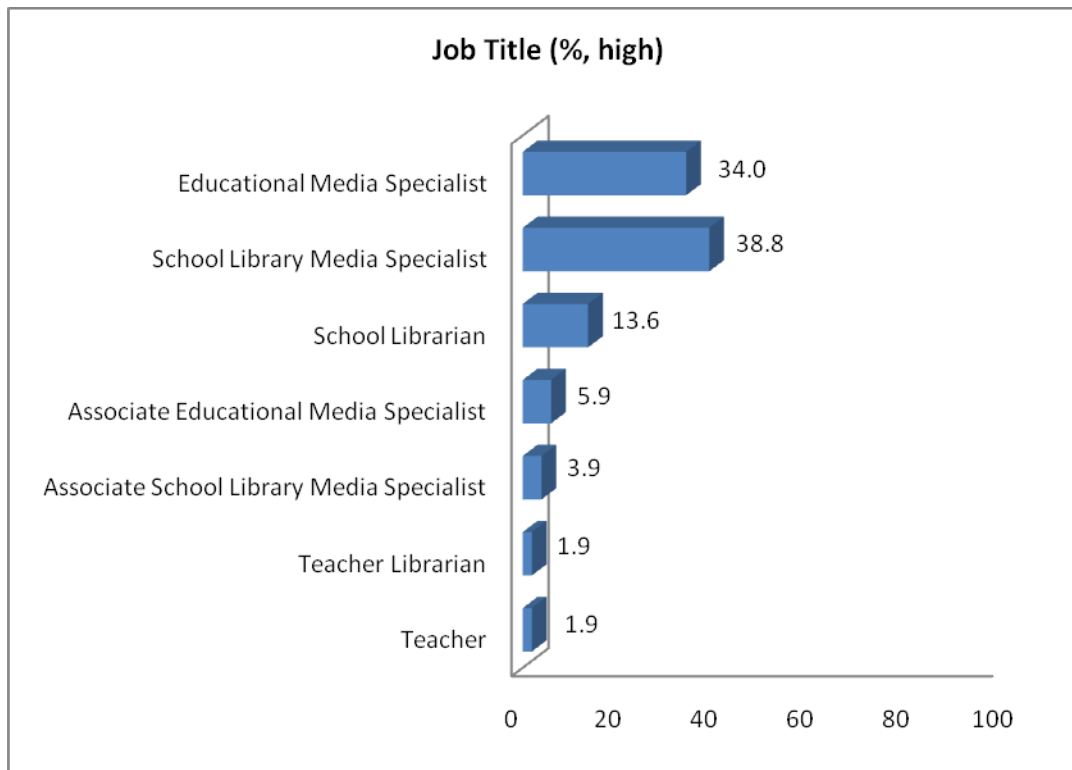
Job Title: Middle Schools

| Job title (only middle school) | Frequency (%) |
|---|---------------|
| Educational Media Specialist | 46 (29.3) |
| School Library Media Specialist | 64 (40.8) |
| School Librarian | 18 (11.5) |
| Associate Educational Media Specialist | 12 (7.6) |
| Associate School Library Media Specialist | 5 (3.2) |
| Teacher Librarian | 6 (3.8) |
| Teacher | 6 (3.8) |
| Total | 157 |



Q34. Job Title: High Schools

| Job title (only high school) | Frequency (%) |
|---|---------------|
| Educational Media Specialist | 70 (34.0) |
| School Library Media Specialist | 80 (38.8) |
| School Librarian | 28 (13.6) |
| Associate Educational Media Specialist | 12 (5.9) |
| Associate School Library Media Specialist | 8 (3.9) |
| Teacher Librarian | 4 (1.9) |
| Teacher | 4 (1.9) |
| Total | 206 |



Question 36 identified the types of certifications of participants.

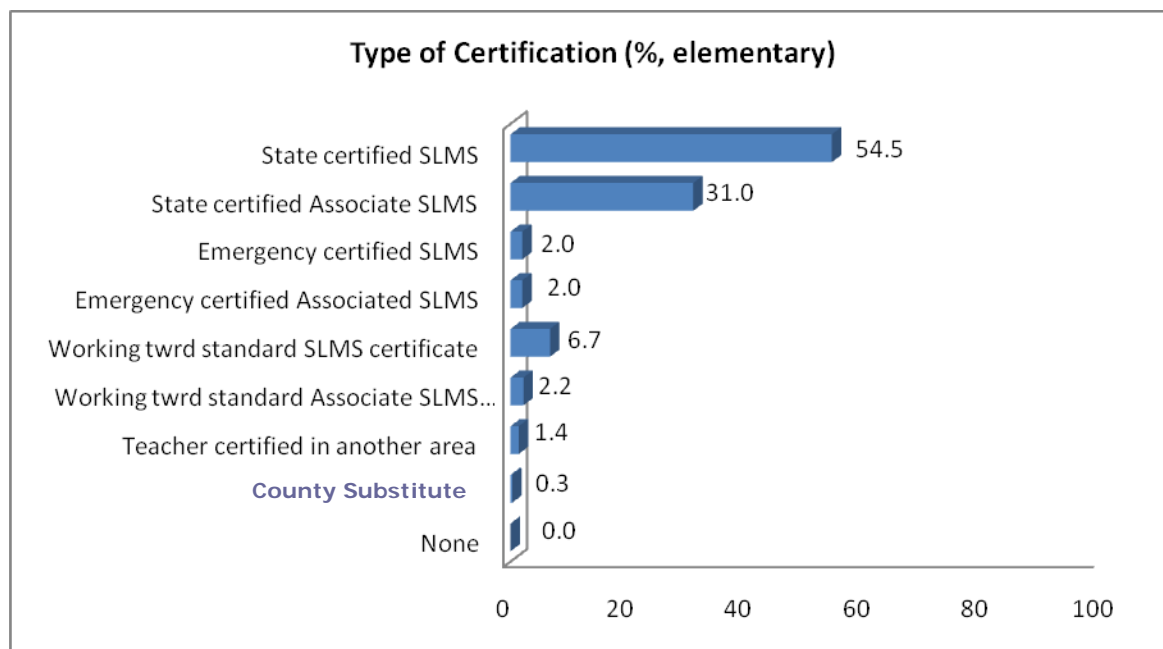
Type of Certification (total)

| | Frequency (%) |
|--|------------------|
| State certified SLMS | 491 (58.9) |
| State certified Associate SLMS | 221 (26.5) |
| Emergency certified SLMS | 18 (2.2) |
| Emergency certified Associated SLMS | 11 (1.3) |
| Working toward standard SLMS certificate | 51 (6.1) |
| Working toward standard Associate SLMS certificate | 16 (1.9) |
| Teacher certified in another area | 15 (1.8) |
| County Substitute | 3 (0.4) |
| None | 8 (1.0) |
| Total | 834 |

The following tables and bar graphs show the distribution and percentage of type of certification by school type.

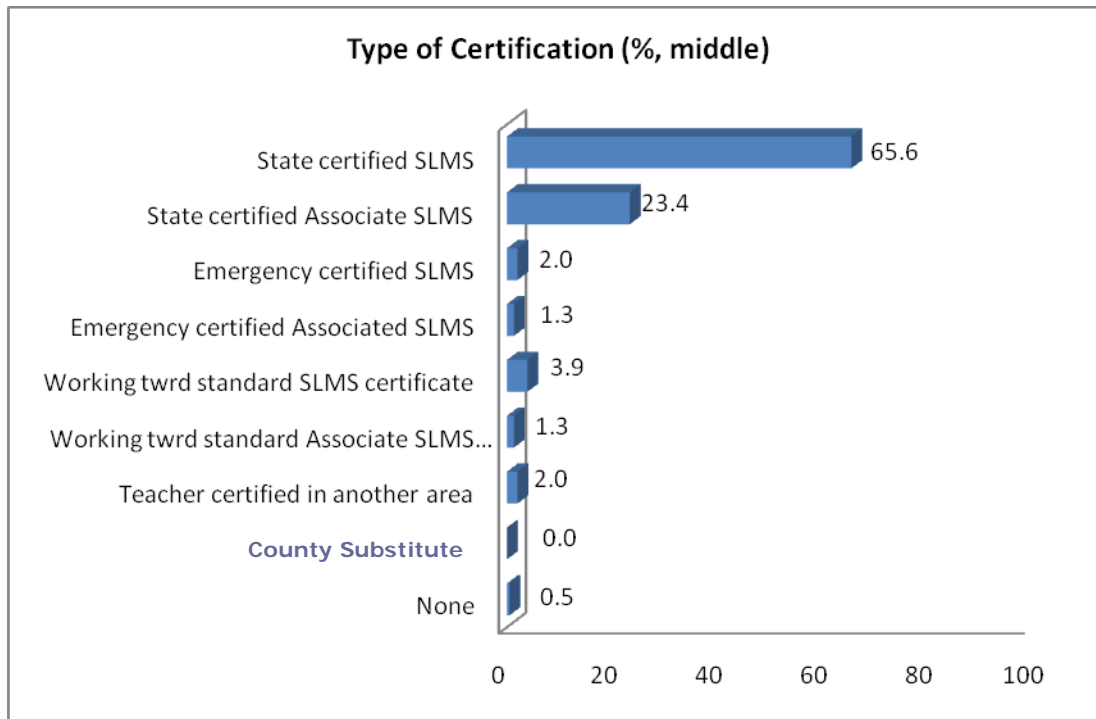
Certification: Elementary School

| | Frequency (%) |
|--|---------------|
| State certified SLMS | 195 (54.5) |
| State certified Associate SLMS | 111 (31.0) |
| Emergency certified SLMS | 7 (2.0) |
| Emergency certified Associated SLMS | 7 (2.0) |
| Working toward standard SLMS certificate | 24 (6.7) |
| Working toward standard Associate SLMS certificate | 8 (2.2) |
| Teacher certified in another area | 5 (1.4) |
| County Substitute | 1 (0.3) |
| None | 0 (1.0) |
| Total | 358 |



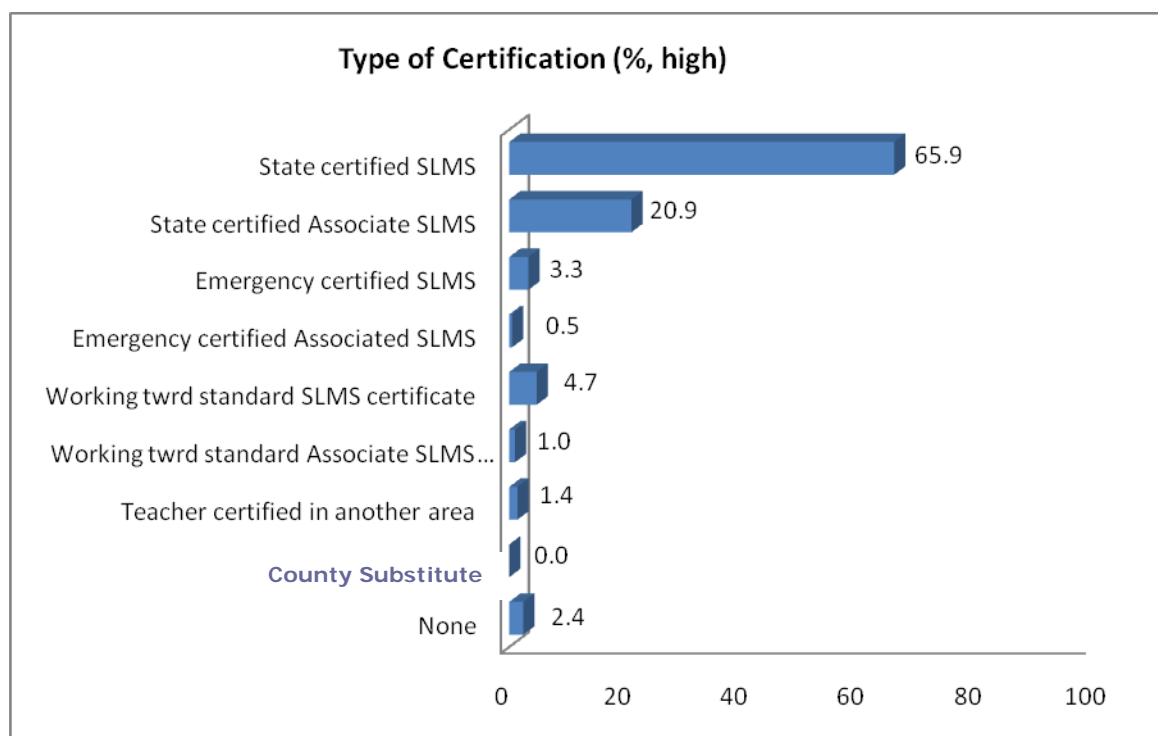
Type of Certification: Middle School

| | Frequency (%) |
|--|---------------|
| State certified SLMS | 101 (65.6) |
| State certified Associate SLMS | 36 (23.4) |
| Emergency certified SLMS | 3 (2.0) |
| Emergency certified Associated SLMS | 2 (1.3) |
| Working toward standard SLMS certificate | 6 (3.9) |
| Working toward standard Associate SLMS certificate | 2 (1.3) |
| Teacher certified in another area | 3 (2.0) |
| County Substitute | 0 (0.0) |
| None | 1 (0.5) |
| Total | 154 |



Type of Certification: High School

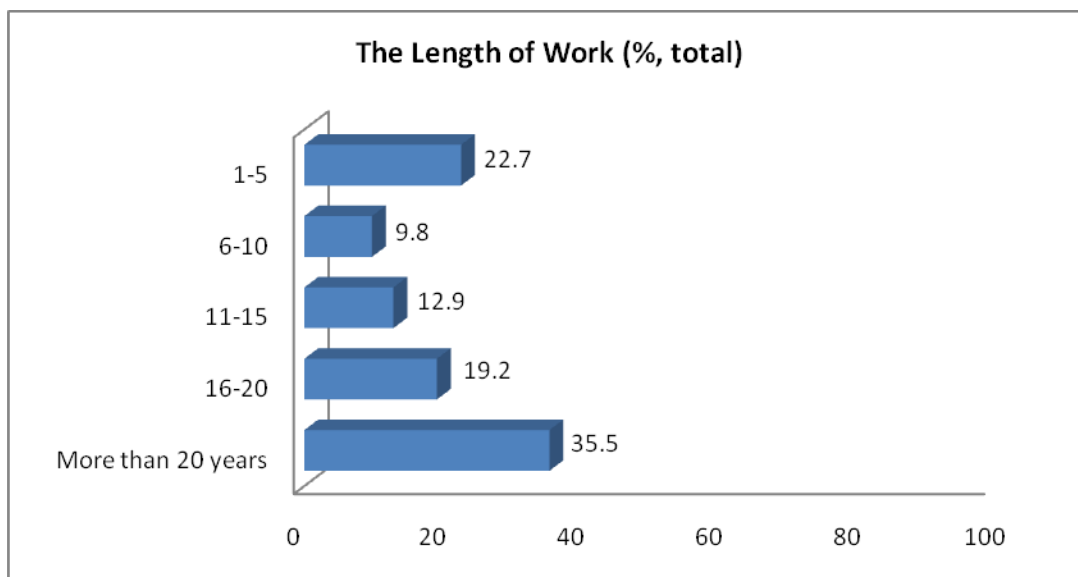
| | Frequency (%) |
|--|---------------|
| State certified SLMS | 139 (65.9) |
| State certified Associate SLMS | 44 (20.9) |
| Emergency certified SLMS | 7 (3.3) |
| Emergency certified Associated SLMS | 1 (0.5) |
| Working toward standard SLMS certificate | 10 (4.7) |
| Working toward standard Associate SLMS certificate | 2 (1.0) |
| Teacher certified in another area | 3 (1.4) |
| County Substitute | 0 (0.0) |
| None | 5 (2.4) |
| Total | 211 |



Of the participating sample, there is a high level of state certified school librarians. Research clearly and unequivocally establishes as fact that the presence of a certified school librarian in a school library results in better performance on state standardized tests. Professional staffing is a fundamental starting point for school libraries to play a key role in students effectively learning through complex and diverse information resources. Professional staff enable students to develop the necessary intellectual scaffolds to use information meaningfully to build knowledge and understanding of their content areas. This baseline finding parallels the richness of the school librarians' contributions to the intellectual life of the school, as presented further on in the data report.

Question 38 provides data on the length of time that certification types have been held. These are shown in the tables and bar graphs below.

| Years | Frequency (%) |
|--|---------------|
| 1-5 | 298 (35.5) |
| 6-10 | 161 (19.2) |
| 11-15 | 108 (12.9) |
| 16-20 | 82 (9.8) |
| More than 20 years | 191 (22.7) |
| Total (Some schools have more than one school librarian) | 840 |

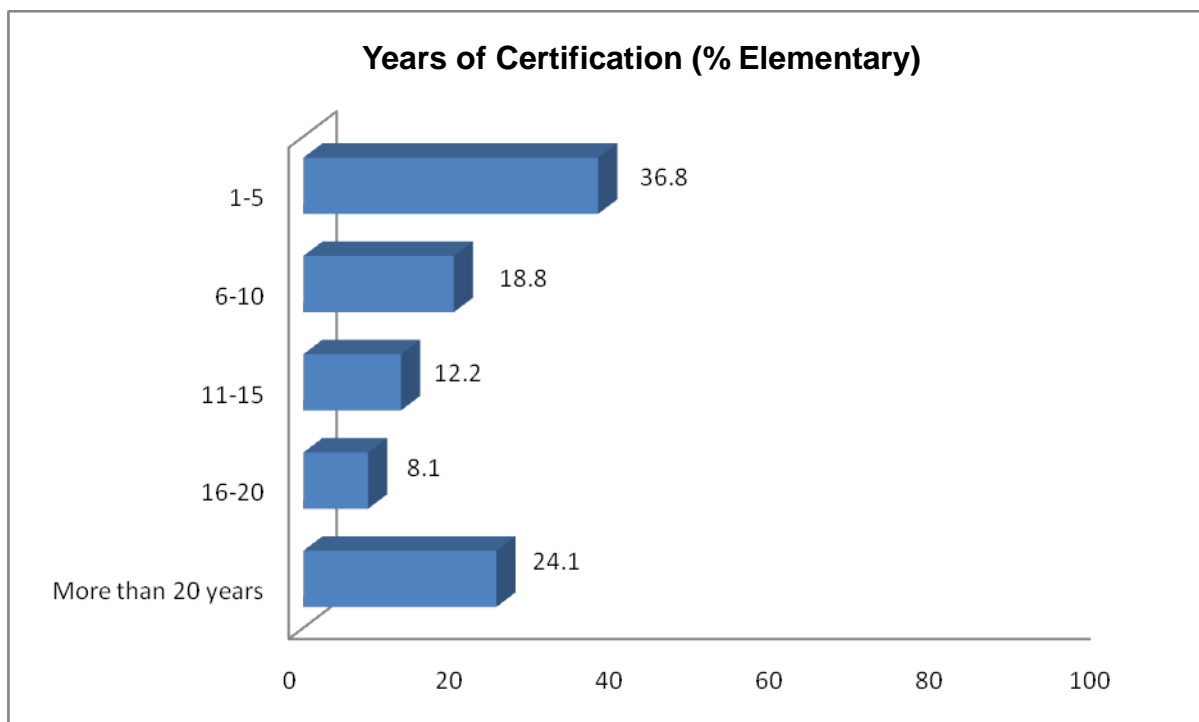


The study shows that more than 50% of participants have acquired certification in the last 10 years. 35.5% of participants have held certification from one to five years.

The following tables and bar graphs show the length of time that certification has been held, by school type.

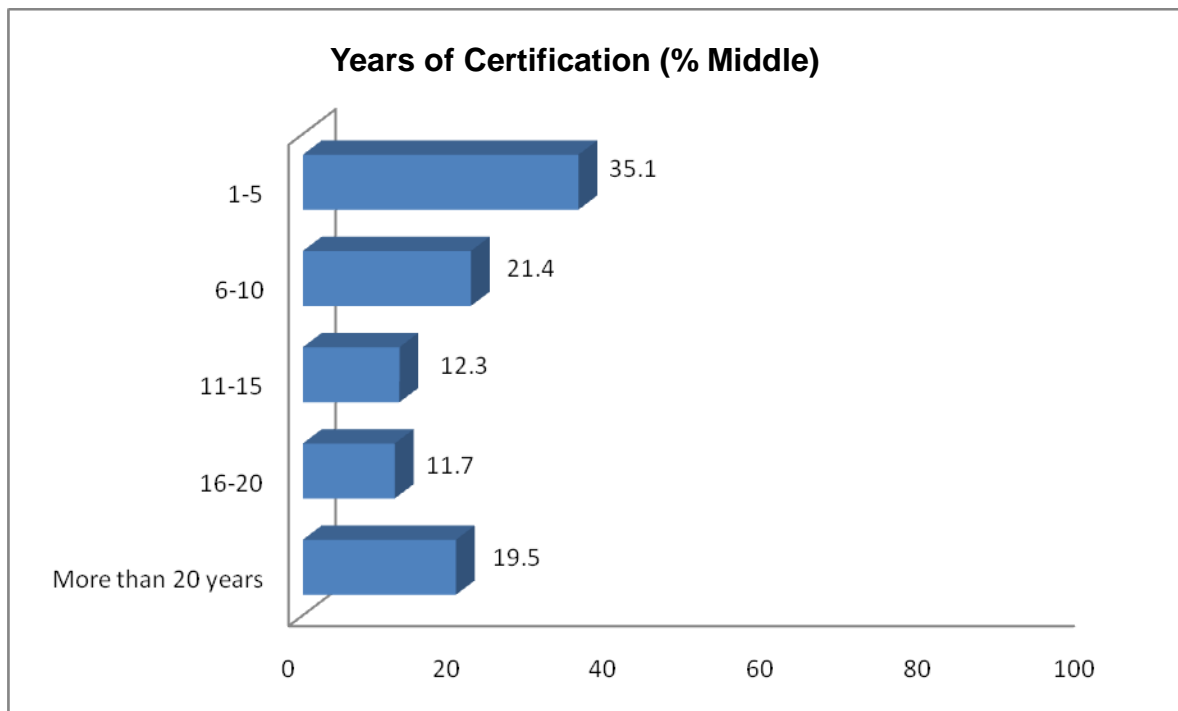
Years of Certification: Elementary Schools

| Years | Frequency (%) |
|--------------------|---------------|
| 1-5 | 127 (36.8) |
| 6-10 | 65 (18.8) |
| 11-15 | 42 (12.2) |
| 16-20 | 28 (8.1) |
| More than 20 years | 83 (24.1) |
| Total | 345 |



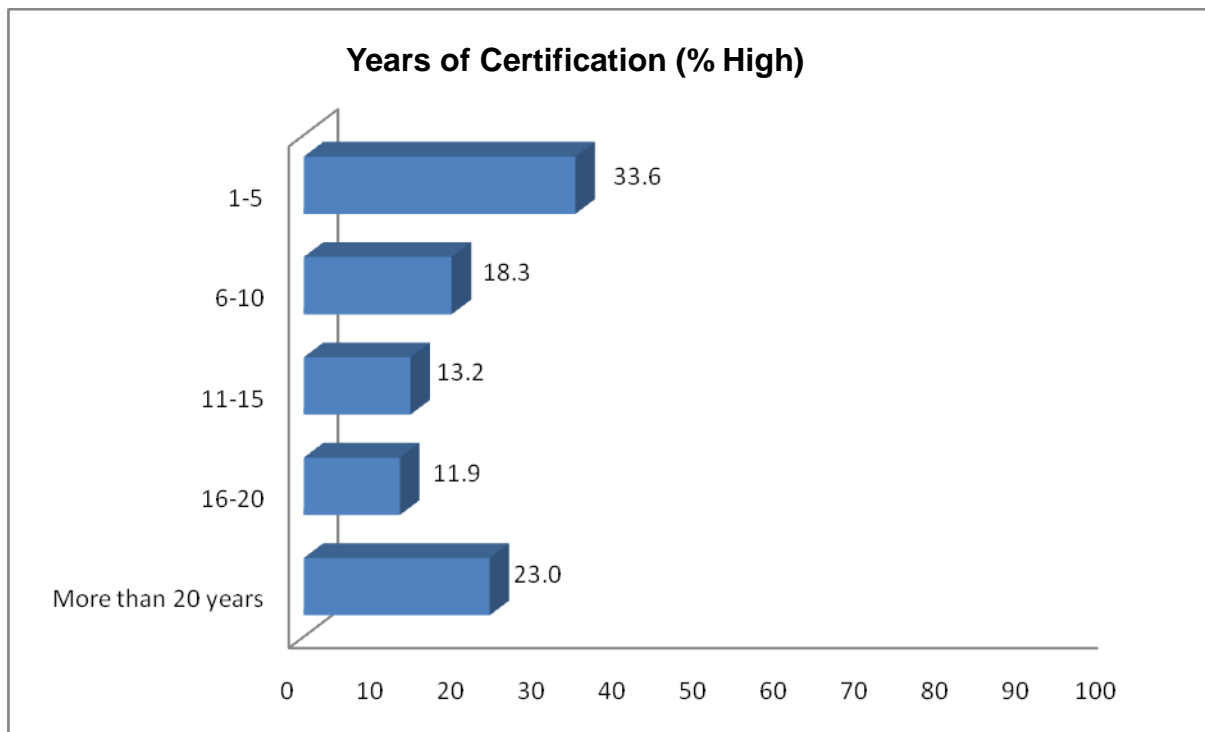
Years of Certification: Middle Schools

| Years | Frequency (%) |
|--------------------|---------------|
| 1-5 | 54 (35.1) |
| 6-10 | 33 (21.4) |
| 11-15 | 19 (12.3) |
| 16-20 | 18 (11.7) |
| More than 20 years | 30 (19.5) |
| Total | 154 |



Years of Certification: High Schools

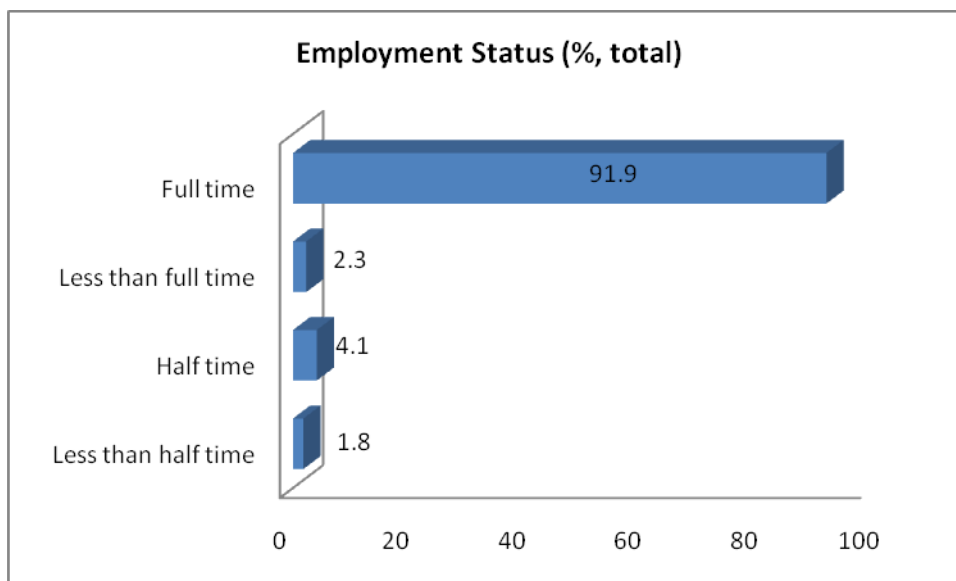
| Years | Frequency (%) |
|--------------------|---------------|
| 1-5 | 79 (33.6) |
| 6-10 | 43 (18.3) |
| 11-15 | 31 (13.2) |
| 16-20 | 28 (11.9) |
| More than 20 years | 54 (23.0) |
| Total | 235 |



An ANOVA test to explore the relationship between the length of certification and school type shows that there is no significant difference in length of certification held and employment in the types of schools – elementary, middle, high.

Question 39 gathered data on the employment status of participants. The table and bar graph below show the frequency distribution and percentage of employment status (total)

| | Frequency (%) |
|---|---------------|
| Full-time | 789 (91.9) |
| Less than full-time | 20 (2.3) |
| Half time | 35 (4.1) |
| Less than half time | 15 (1.8) |
| Total number of school librarian represented in study | 859 |

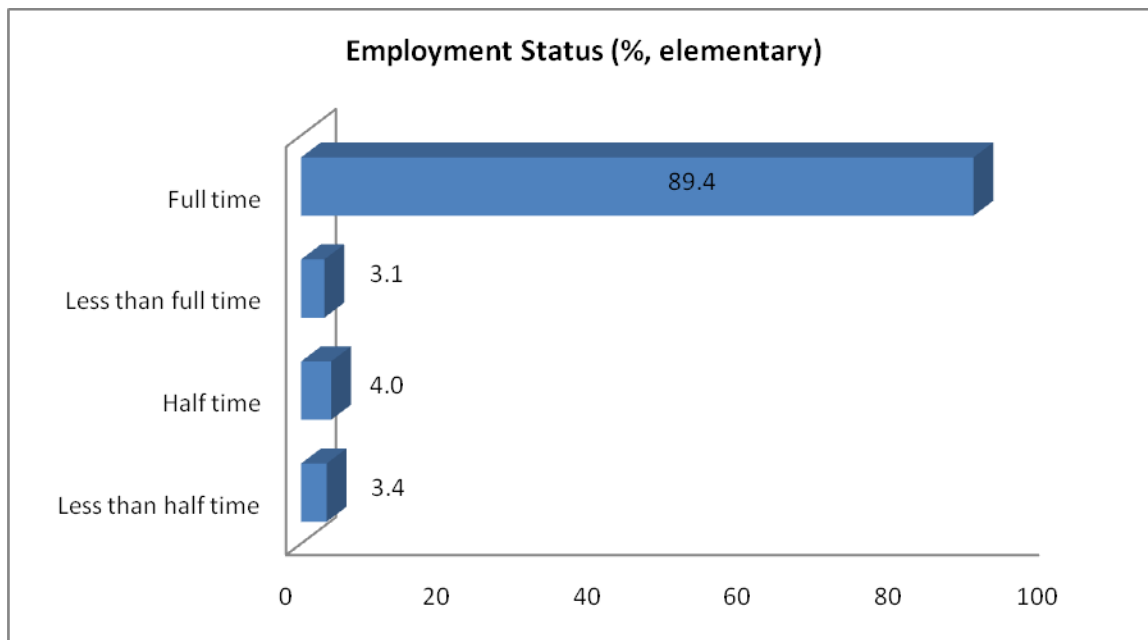


91% of participants in the study have full-time employment.

The following tables and bar graphs show employment status by type of school.

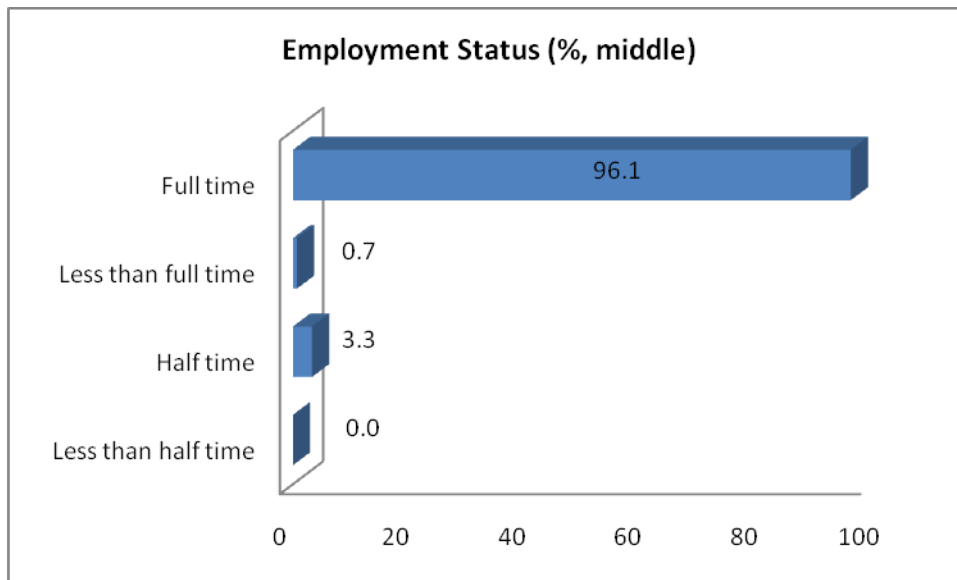
Employment Status: Elementary Schools

| | Frequency (%) |
|---------------------|---------------|
| Full-time | 313 (89.4) |
| Less than full-time | 11 (3.1) |
| Half time | 14 (4.0) |
| Less than half time | 12 (3.4) |
| Total | 350 |



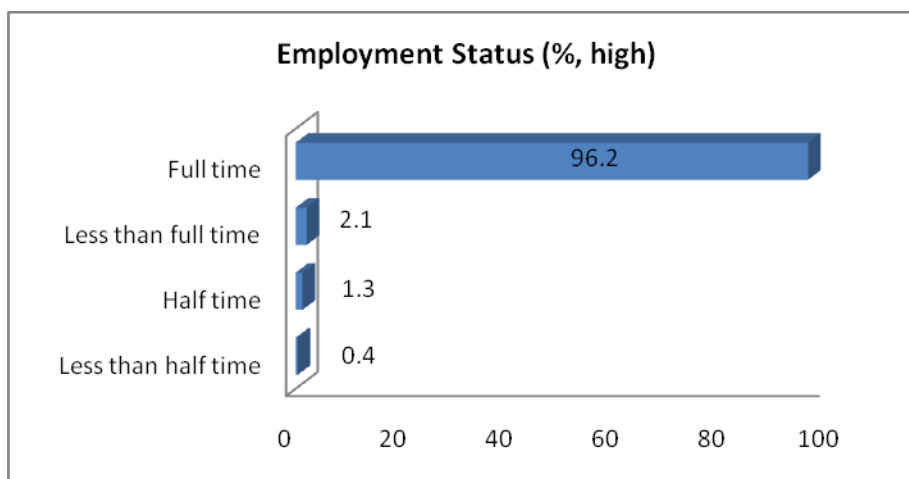
Employment Status: Middle schools

| | Frequency (%) |
|-------------------------------|---------------|
| Full-time | 148 (96.1) |
| Less than full-time | 1 (0.7) |
| Half time | 5 (3.3) |
| Less than half time employees | 0 (0) |
| Total | 154 |



Employment Status: High Schools

| | Frequency (%) |
|---------------------|---------------|
| Full-time | 228 (96.2) |
| Less than full-time | 5 (2.1) |
| Half time | 3 (1.3) |
| Less than half time | 1 (0.4) |
| Total | 237 |

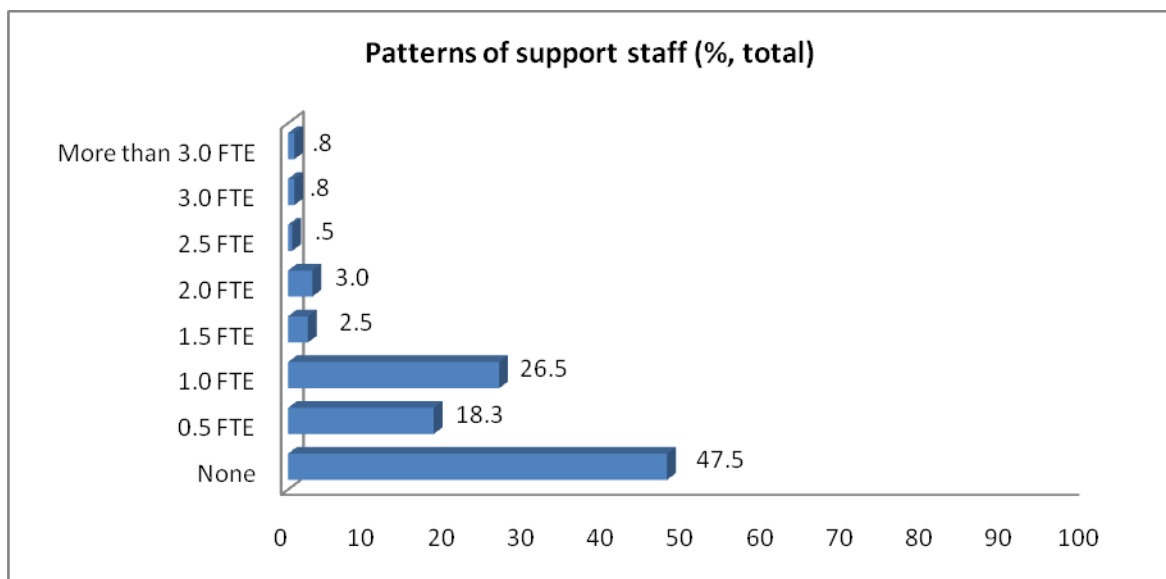


These results show employment status, and not the presence of full time personnel in a particular school building. An ANOVA test to explore a possible relationship between employment and school type showed no significant difference. Open ended survey questions provided data that some participants in elementary and middle schools held full time split positions in two or three schools.

Question 40 gathered data on the presence of support staff in school libraries and is shown in the table and graph below.

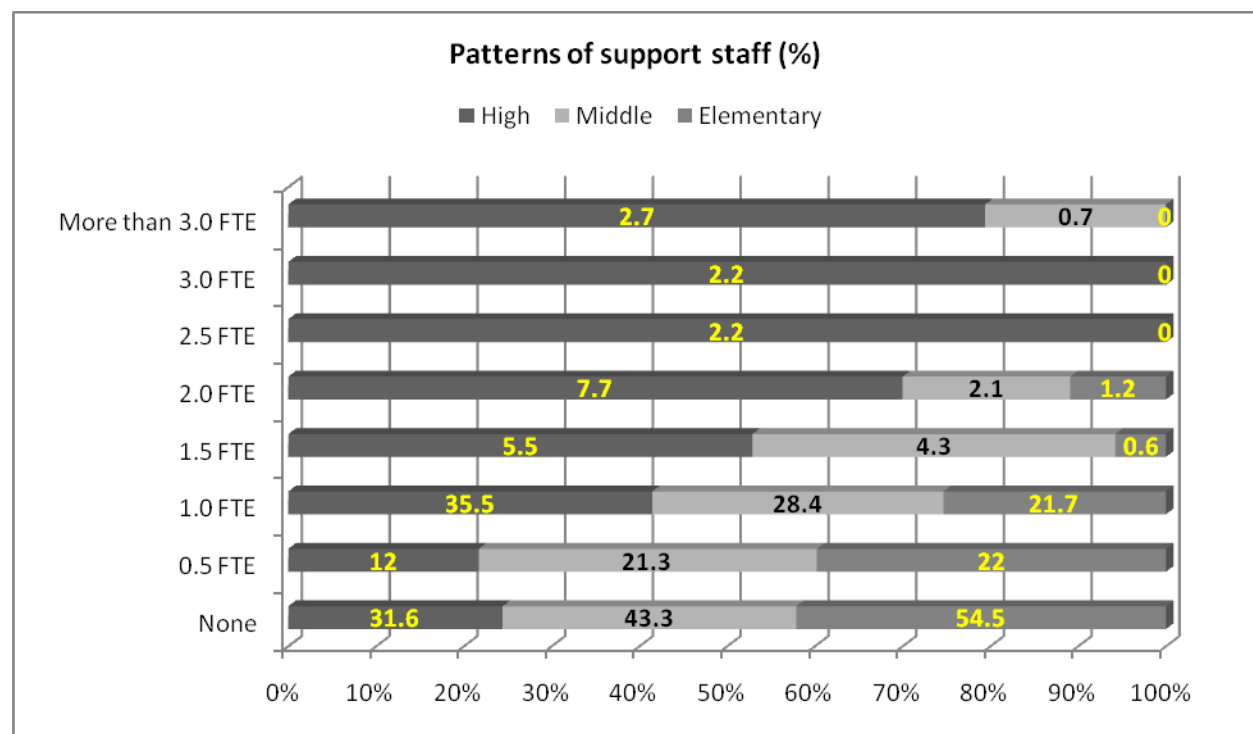
Patterns of support staff (FTE: Full-time Equivalent)

| | Frequency (%) |
|-------------------|---------------|
| More than 3.0 FTE | 6 (0.8) |
| 3.0 FTE | 6 (0.8) |
| 2.5 FTE | 4 (0.5) |
| 2.0 FTE | 23 (3.0) |
| 1.5 FTE | 19 (2.5) |
| 1.0 FTE | 200 (26.5) |
| 0.5 FTE | 138 (18.3) |
| None | 359 (47.5) |
| Total | 755 |



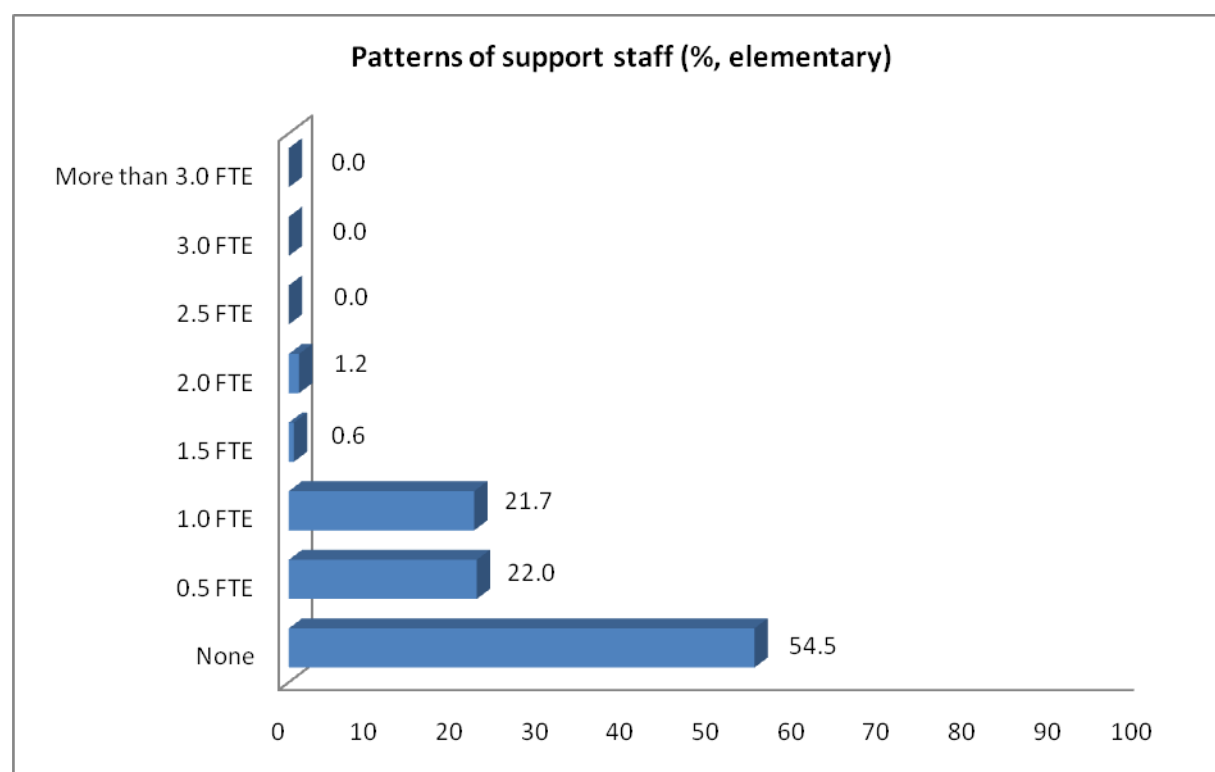
The distribution of support staff by school type is provided in the following tables

| | None | 0.5 FTE | 1.0 FTE | 1.5 FTE | 2.0 FTE | 2.5 FTE | 3.0 FTE | More than 3.0 FTE | Total |
|-------------------------------------|---------------|---------------|---------------|-------------|-------------|------------|------------|-------------------|-------|
| All participants | 359 (47.5) | 138 (18.3) | 200 (26.5) | 19 (2.5) | 23 (3.0) | 4 (0.5) | 6 (0.8) | 6 (0.8) | 755 |
| Participants from Elementary school | 101 (54.5) | 73 (22) | 72 (21.7) | 2 (0.6) | 4 (1.2) | 0 | 0 | 0 | 332 |
| Participants from Middle school | 61 (43.3) | 30 (21.3) | 40 (28.4) | 6 (4.3) | 3 (2.1) | 0 | 0 | 1 (0.7) | 141 |
| Participants from High school | 59 (31.6) | 22 (12) | 65 (35.5) | 10 (5.5) | 14 (7.7) | 4 (2.2) | 4 (2.2) | 5 (2.7) | 183 |



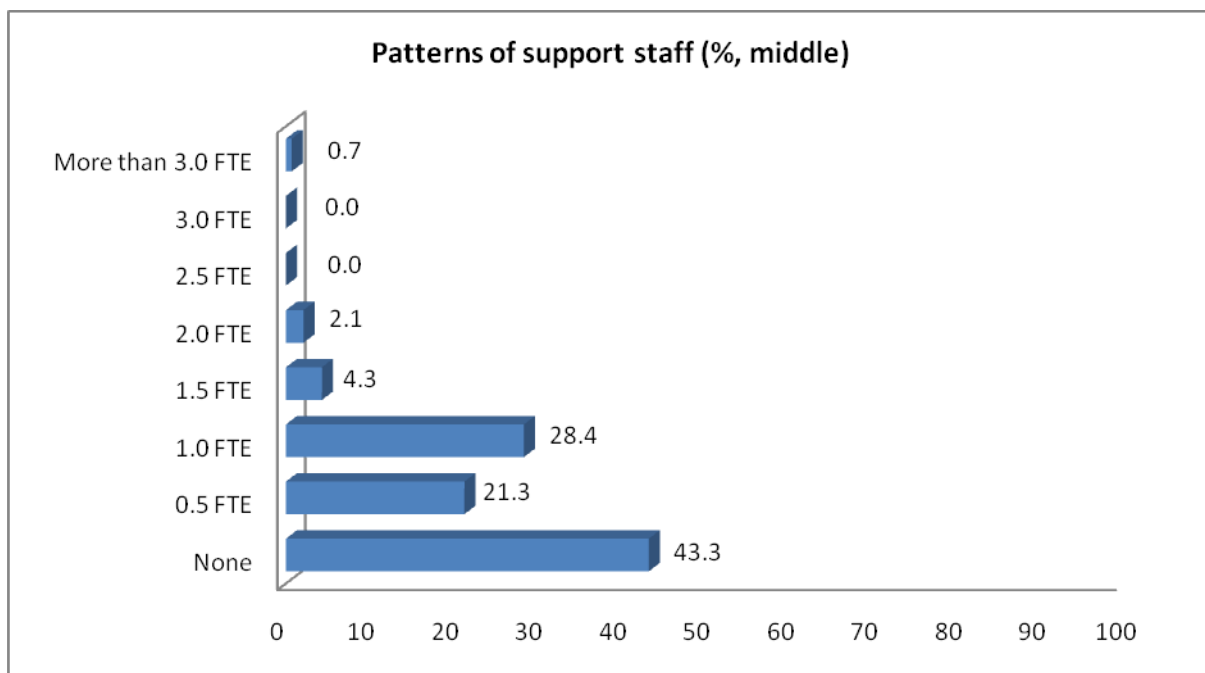
Patterns of support staff: Elementary Schools

| | Frequency (%) |
|-------------------|---------------|
| More than 3.0 FTE | 0 (0) |
| 3.0 FTE | 0 (0) |
| 2.5 FTE | 0 (0) |
| 2.0 FTE | 4(1.2) |
| 1.5 FTE | 2 (0.6) |
| 1.0 FTE | 72 (21.7) |
| 0.5 FTE | 73 (22) |
| None | 101 (54.5) |
| Total | 332 |



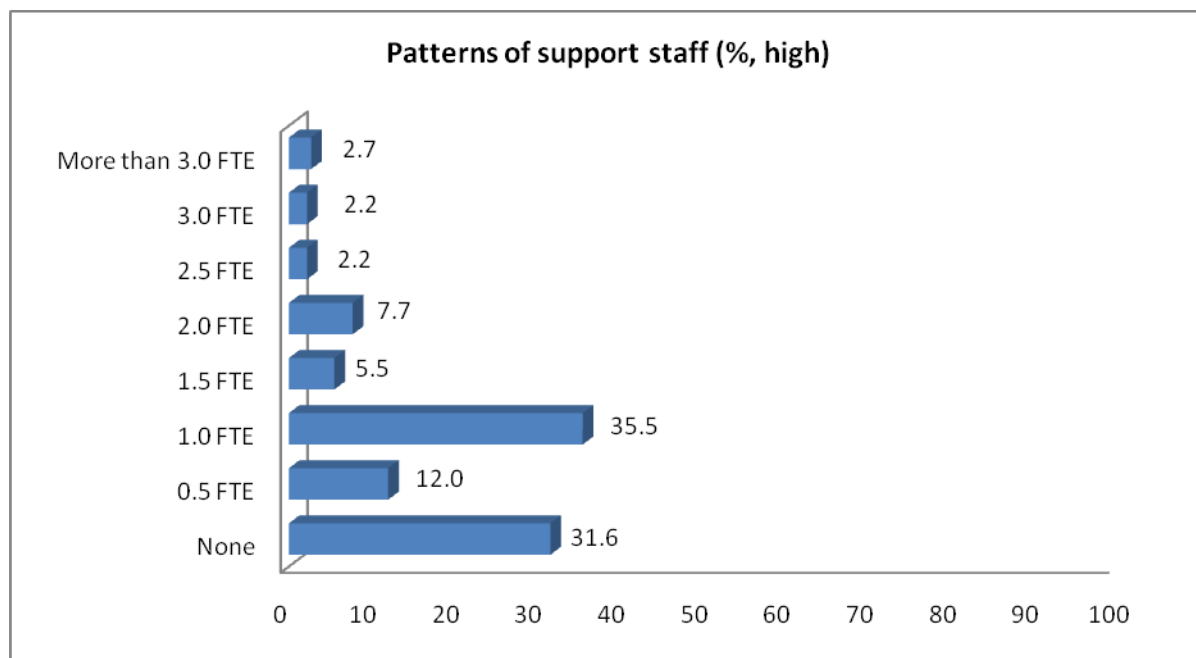
Patterns of support staff: Middle Schools

| | Frequency (%) |
|-------------------|---------------|
| More than 3.0 FTE | 1 (0.7) |
| 3.0 FTE | 0 (0) |
| 2.5 FTE | 0 (0) |
| 2.0 FTE | 3 (2.1) |
| 1.5 FTE | 6 (4.3) |
| 1.0 FTE | 40 (28.4) |
| 0.5 FTE | 30 (21.3) |
| None | 61 (43.3) |
| Total | 141 |



Patterns of support staff: High Schools

| | Frequency (%) |
|-------------------|---------------|
| More than 3.0 FTE | 5 (2.7) |
| 3.0 FTE | 4 (2.2) |
| 2.5 FTE | 4 (2.2) |
| 2.0 FTE | 14 (7.7) |
| 1.5 FTE | 10 (5.5) |
| 1.0 FTE | 65 (35.5) |
| 0.5 FTE | 22 (12) |
| None | 59 (31.6) |
| Total | 183 |



The data show that 52.5% of school libraries in the study have some level of support staff.

An ANOVA test was conducted to determine the relationship between school type and the pattern of support staff. There is a significant difference in the pattern of support staff by school type (by three types), $F(2, 653) = 39.74, p < .001$. The results indicated that the pattern of support staff differed depending on the level of school. In particular, high schools included more full time equivalent staff than elementary and middle schools. There was no significant difference between elementary and middle schools in the pattern of support staff. High schools have more full time equivalent support staff than other types of schools.

The statistical analysis also shows that there is a significant correlation between *patterns of support staff* and *school size* $r(654) = .324, p < .001$. These results indicated that the larger amount of enrollment schools had, the more full time equivalent support staff schools employed.

ANOVA of Pattern of Support Staff by School Type (High, Middle, and Elementary)

| | Sum of Squares | df | Mean Square | F |
|----------------|----------------|-----|-------------|--------|
| Between Groups | 121.06 | 2 | 60.53 | 39.742 |
| Within Groups | 994. 57 | 653 | 1.523 | |
| Total | 1115.63 | 655 | | |

$p < 0.001$

Descriptive information of Pattern of Support Staff by School Type

| | Number | <i>M</i> | <i>SD</i> | <i>SE</i> |
|----------------|--------|----------|-----------|-----------|
| Elementary | 332 | 0.72 | .905 | .050 |
| Middle | 141 | 1.04 | 1.158 | .098 |
| High | 183 | 1.73 | 1.716 | .127 |
| Total | 656 | 1.07 | 1.305 | .051 |
| Model | | | 1.234 | .048 |
| Fixed Effects | | | | |
| Random Effects | | | | .336 |

Correlations between pattern of support staff and the type and size of school

| | Pattern of support staff | School type |
|-------------|--------------------------|-------------|
| School type | .324*** | |
| Enrollment | .475*** | .624*** |

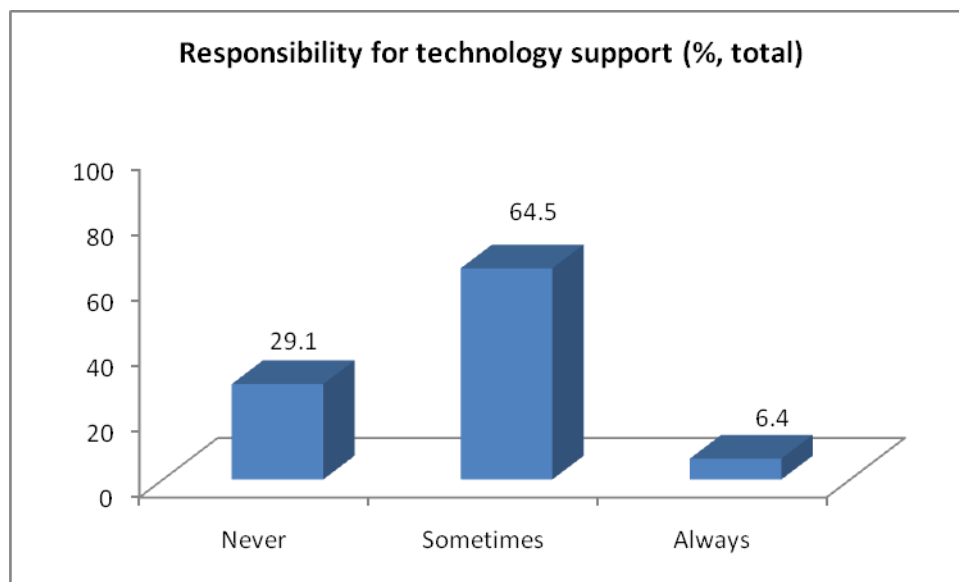
*** $p < .001$

Patterns of Support by County

| Frequency (%) | None | 0.5 FTE | 1.0 FTE | 1.5 FTE | 2.0 FTE | 2.5 FTE | 3.0 FTE | More than 3.0 FTE |
|-------------------|-----------|-----------|-----------|----------|----------|---------|---------|-------------------|
| Atlantic County | 5 (38.5) | 3 (23.1) | 5 (38.5) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 0 (0) |
| Bergen County | 29 (38.2) | 24 (31.6) | 20 (26.3) | 1 (1.3) | 0 (0) | 2 (2.6) | 0 (0) | 0 (0) |
| Burlington County | 11 (31.4) | 7 (20.0) | 13 (37.1) | 0 (0) | 2 (5.7) | 0 (0) | 1 (2.9) | 1 (2.9) |
| Camden County | 21 (55.3) | 8 (21.1) | 7 (18.4) | 0 (0) | 1 (2.6) | 1 (2.6) | 0 (0) | 0 (0) |
| Cape May County | 2 (25.0) | 3 (37.5) | 2 (25.0) | 1 (12.5) | 0 (0) | 0 (0) | 0 (0) | 0 (0) |
| Cumberland County | 4 (21.1) | 5 (26.3) | 10 (52.6) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 0 (0) |
| Essex County | 41 (63.1) | 12 (18.5) | 8 (12.3) | 2 (3.1) | 1 (1.5) | 0 (0) | 1 (1.5) | 0 (0) |
| Gloucester County | 10 (31.3) | 6 (18.8) | 14 (43.8) | 0 (0) | 0 (0) | 1 (3.1) | 0 (0) | 1 (3.1) |
| Hudson County | 11 (68.8) | 1 (6.3) | 3 (18.8) | 0 (0) | 1 (6.3) | 0 (0) | 0 (0) | 0 (0) |
| Hunterdon County | 11 (42.3) | 2 (7.7) | 8 (30.8) | 0 (0) | 4 (15.4) | 0 (0) | 1 (3.8) | 0 (0) |
| Mercer County | 16 (72.7) | 1 (4.5) | 1 (18.2) | 0 (0) | 0 (0) | 1 (4.5) | 0 (0) | 0 (0) |
| Middlesex County | 46 (56.1) | 12 (14.6) | 19 (23.2) | 1 (1.2) | 1 (1.2) | 0 (0) | 1 (1.2) | 2 (2.4) |
| Monmouth County | 20 (35.7) | 12 (21.4) | 16 (28.6) | 4 (7.1) | 4 (7.1) | 0 (0) | 0 (0) | 0 (0) |
| Morris County | 19 (31.7) | 22 (36.7) | 12 (20.0) | 4 (6.7) | 1 (1.7) | 0 (0) | 2 (3.3) | 0 (0) |
| Ocean County | 2 (12.5) | 2 (12.5) | 10 (62.5) | 0 (0) | 1 (6.3) | 0 (0) | 0 (0) | 1 (6.3) |
| Passaic County | 43 (66.2) | 3 (4.6) | 17 (26.2) | 1 (1.5) | 1 (1.5) | 0 (0) | 0 (0) | 0 (0) |
| Salem County | 7 (70.0) | 2 (20.0) | 1 (10.0) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 0 (0) |
| Somerset County | 11 (35.5) | 6 (19.4) | 7 (22.6) | 3 (9.7) | 4 (12.9) | 0 (0) | 0 (0) | 0 (0) |
| Sussex County | 13 (50.0) | 4 (15.4) | 8 (30.8) | 1 (3.8) | 0 (0) | 0 (0) | 0 (0) | 0 (0) |
| Union County | 26 (61.9) | 2 (4.8) | 12 (28.6) | 0 (0) | 2 (4.8) | 0 (0) | 0 (0) | 0 (0) |
| Warren County | 11 (64.7) | 1 (5.9) | 4 (23.5) | 1 (5.9) | 0 (0) | 0 (0) | 0 (0) | 0 (0) |

Question 41 gathered data on participant's responsibility for technical support.

| | Frequency (%) |
|-----------|---------------|
| Never | 220 (29.1) |
| Sometimes | 487 (64.5) |
| Always | 48 (6.4) |
| Total | 755 |

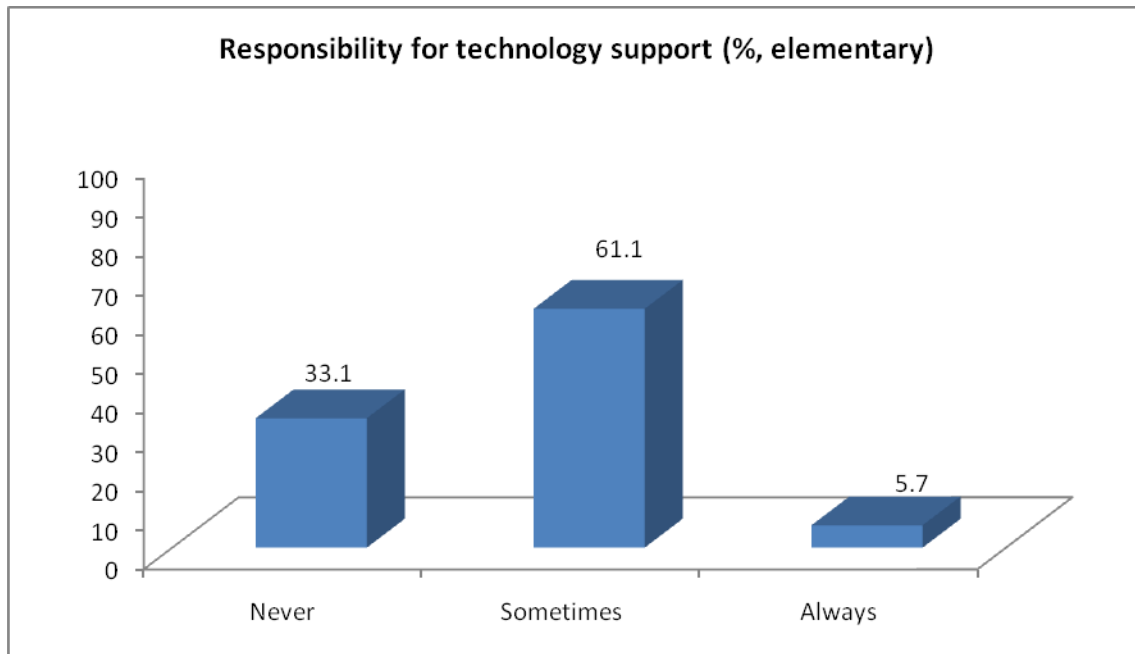


The data show that 70.9% of the participants indicate some level of responsibility for technical hardware support. This may indicate that school librarians are perceived to have expertise with the school library's technology infrastructure.

* There is no statistically significant difference in availability of technology support by school type. The following tables and graphs show the distribution of technical support by type of school

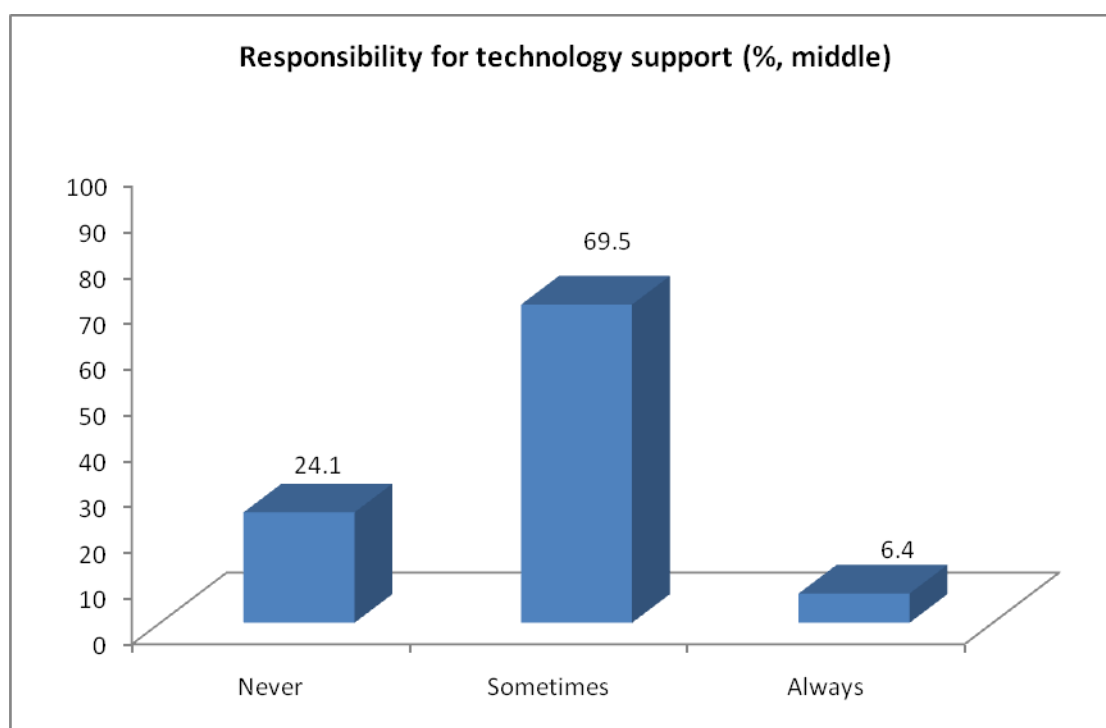
Responsibility for technical support: Elementary schools

| | Frequency (%) |
|-----------|---------------|
| Never | 110 (33.1) |
| Sometimes | 203 (61.2) |
| Always | 19 (5.6) |
| Total | 332 |



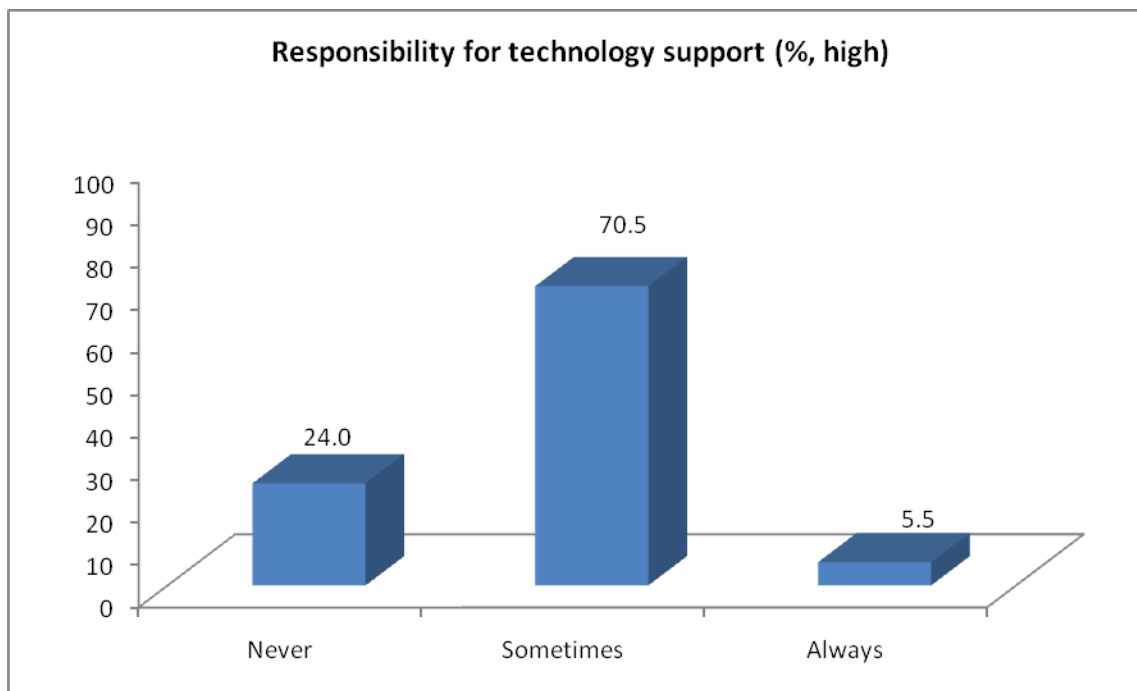
Responsibility for technical support: Middle schools

| | Frequency (%) |
|-----------|---------------|
| Never | 34 (24.1) |
| Sometimes | 98 (69.5) |
| Always | 9 (6.4) |
| Total | 141 |



Responsibility for technical support: High Schools

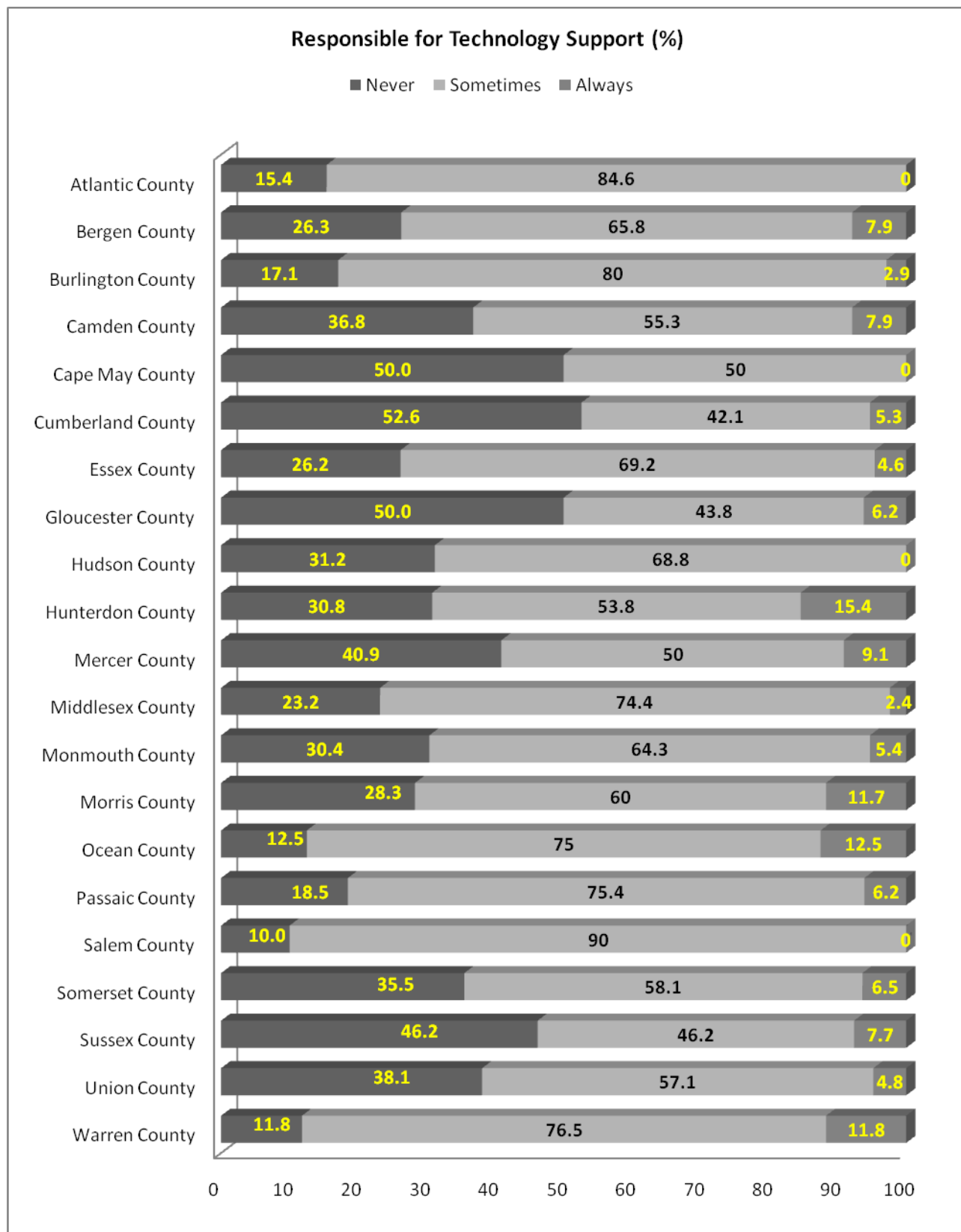
| | Frequency (%) |
|-----------|---------------|
| Never | 44 (24.0) |
| Sometimes | 129 (70.5) |
| Always | 10 (5.5) |
| Total | 183 |



ANOVA analysis shows that there is no statistically significant difference in responsibility for technology support by school type. In other words, librarians in all types of schools provide technical support regardless of school type.

The following table and graph show the responsibility for technical support by county.

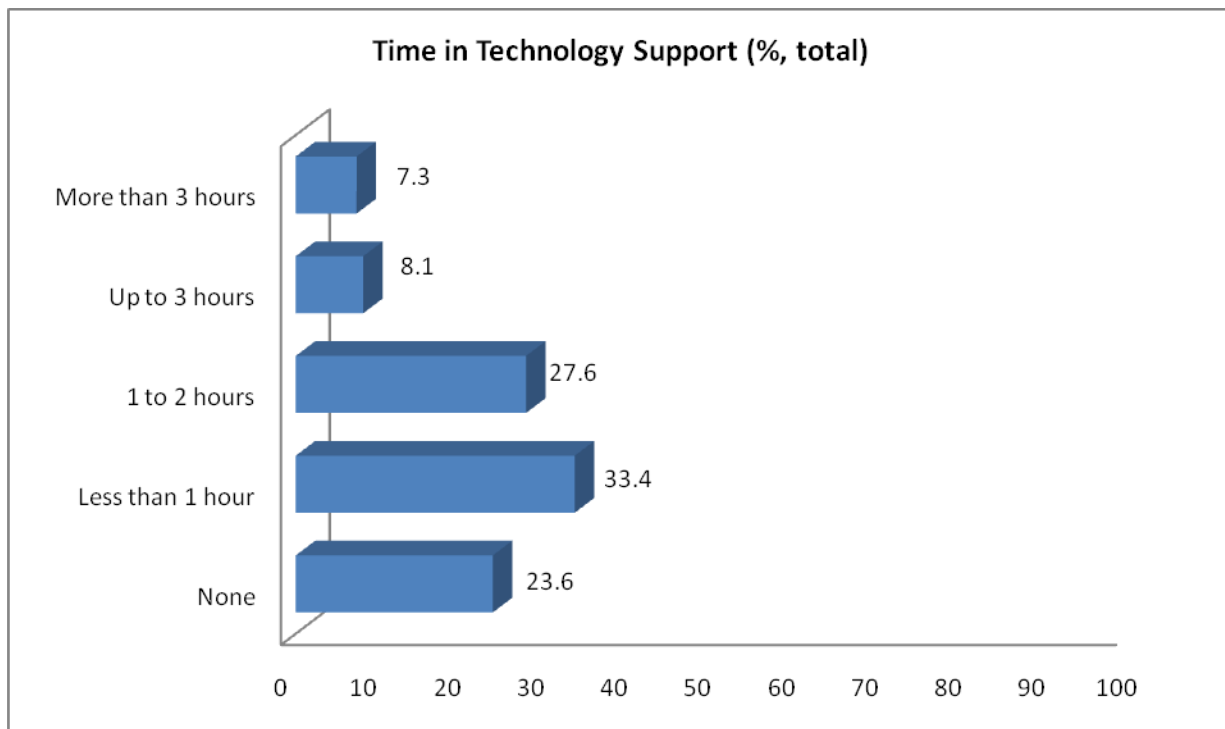
| | Never | Sometimes | Always | Total |
|-------------------|-----------|-----------|----------|-------|
| Atlantic County | 2 (15.4) | 11 (84.6) | 0 (0) | 13 |
| Bergen County | 20 (26.3) | 50 (65.8) | 6 (7.9) | 76 |
| Burlington County | 6 (17.1) | 28 (80.0) | 1 (2.9) | 35 |
| Camden County | 14 (36.8) | 21 (55.3) | 3 (7.9) | 38 |
| Cape May County | 4 (50.0) | 4 (50.0) | 0 (0) | 8 |
| Cumberland County | 10 (52.6) | 8 (42.1) | 1 (5.3) | 19 |
| Essex County | 17 (26.2) | 45 (69.2) | 3 (4.6) | 65 |
| Gloucester County | 16 (50.0) | 14 (43.8) | 2 (6.2) | 32 |
| Hudson County | 5 (31.2) | 11 (68.8) | 0 (0) | 16 |
| Hunterdon County | 8 (30.8) | 14 (53.8) | 4 (15.4) | 26 |
| Mercer County | 9 (40.9) | 11 (50.0) | 2 (9.1) | 22 |
| Middlesex County | 19 (23.2) | 61 (74.4) | 2 (2.4) | 82 |
| Monmouth County | 17 (30.4) | 36 (64.3) | 3 (5.4) | 56 |
| Morris County | 17 (28.3) | 36 (60.0) | 7 (11.7) | 60 |
| Ocean County | 2 (12.5) | 12 (75.0) | 2 (12.5) | 16 |
| Passaic County | 12 (18.5) | 49 (75.4) | 4 (6.2) | 65 |
| Salem County | 1 (10.0) | 9 (90.0) | 0 (0) | 10 |
| Somerset County | 11 (35.5) | 18 (58.1) | 2 (6.5) | 31 |
| Sussex County | 12 (46.2) | 12 (46.2) | 2 (7.7) | 26 |
| Union County | 16 (38.1) | 24 (57.1) | 2 (4.8) | 42 |
| Warren County | 2 (11.8) | 13 (76.5) | 2 (11.8) | 17 |



Question 42 gathered data on the length of the time that participating school librarians spend on providing technical support.

The data show that 42% of participants spend one or more hours providing technical support.

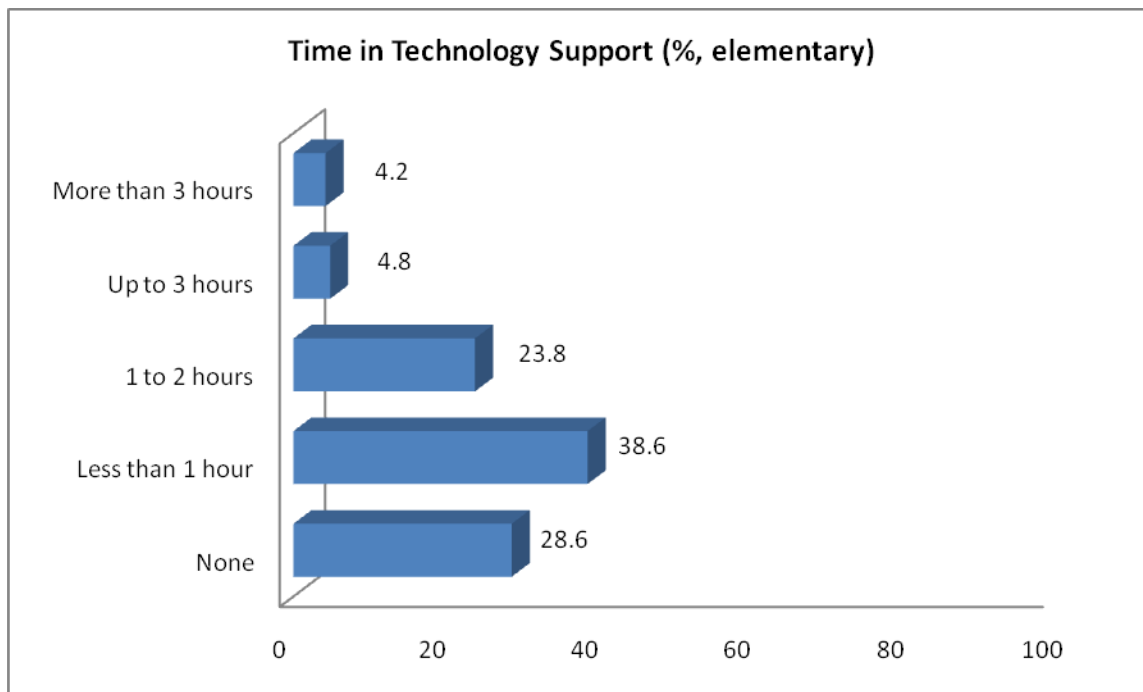
| | Frequency (%) |
|-------------------|---------------|
| None | 178 (23.6) |
| Less than 1 hour | 252 (33.4) |
| 1 to 2 hours | 208 (27.6) |
| Up to 3 hours | 61 (8.0) |
| More than 3 hours | 55 (7.2) |
| Total | 754 |



The following tables and graphs show the time spent on providing technical support by type of school.

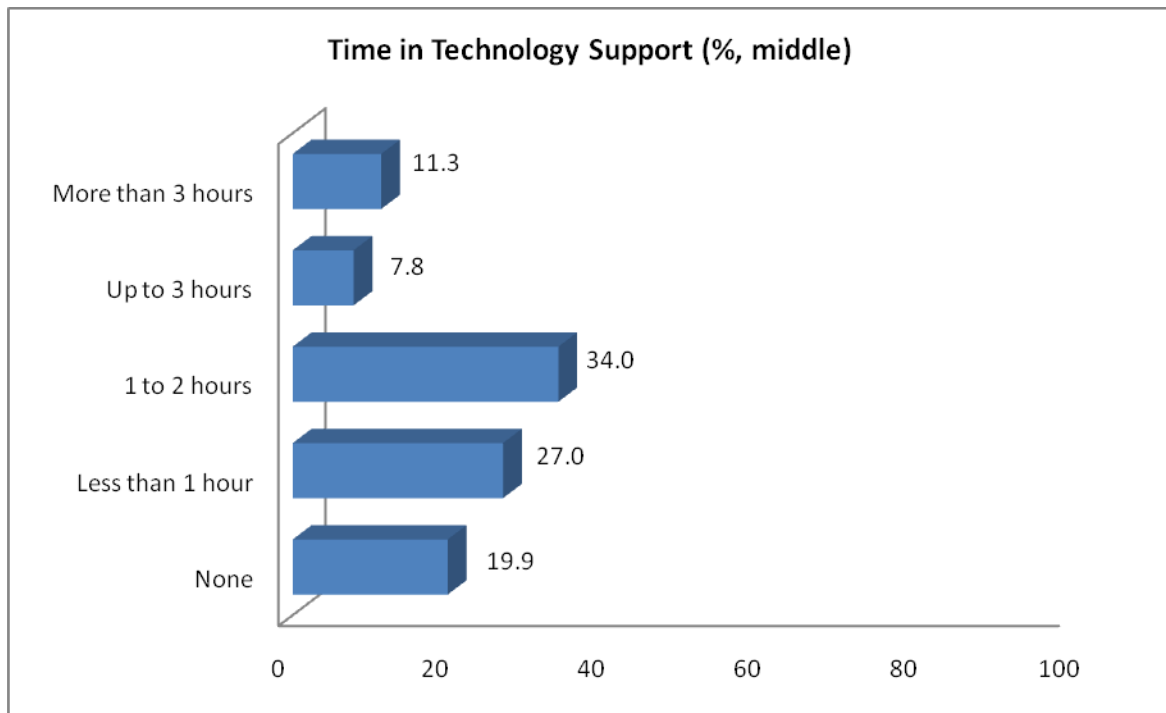
Time in Technology Support: Elementary Schools

| | Frequency (%) |
|-------------------|---------------|
| None | 95 (28.6) |
| Less than 1 hour | 128 (38.6) |
| 1 to 2 hours | 79 (23.8) |
| Up to 3 hours | 16 (4.8) |
| More than 3 hours | 14 (4.2) |
| Total | 332 |



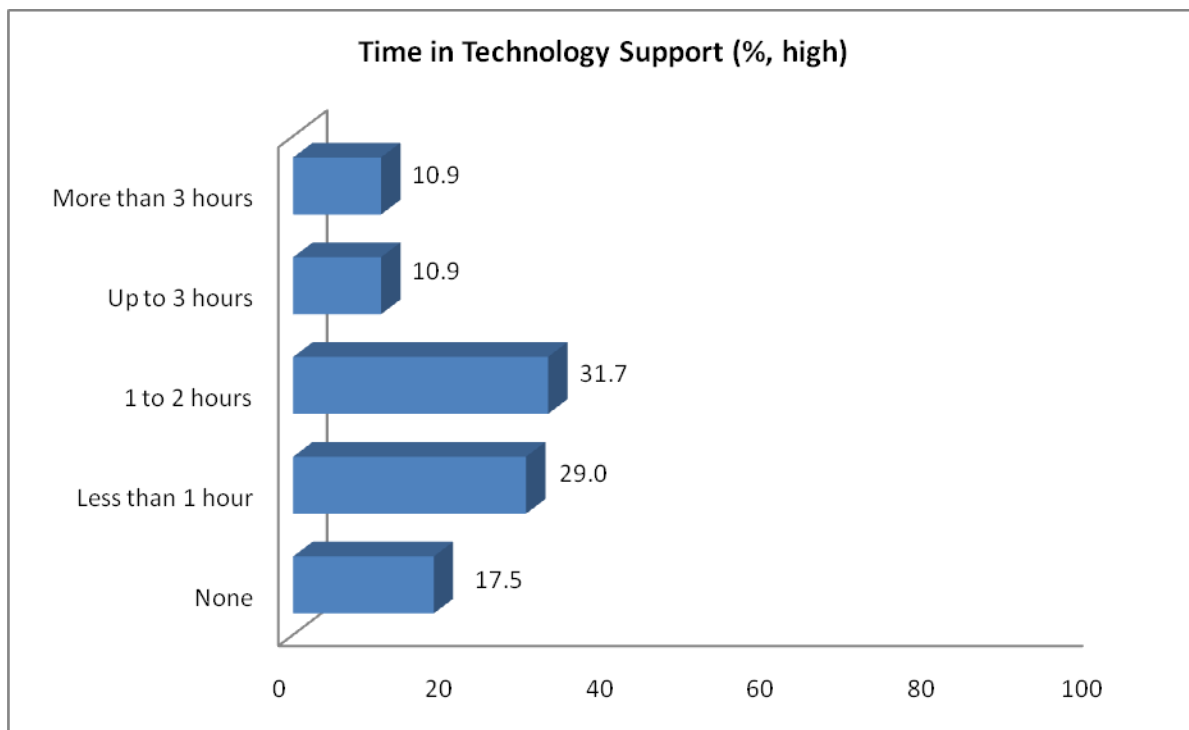
Time in Technology Support: Middle Schools

| | Frequency (%) |
|-------------------|---------------|
| None | 28 (19.9) |
| Less than 1 hour | 38 (27.0) |
| 1 to 2 hours | 48 (34.0) |
| Up to 3 hours | 11 (7.8) |
| More than 3 hours | 16 (11.4) |
| Total | 141 |



Time in Technology Support: High Schools

| | Frequency (%) |
|-------------------|---------------|
| None | 32 (17.5) |
| Less than 1 hour | 53 (29.0) |
| 1 to 2 hours | 58 (31.7) |
| Up to 3 hours | 20 (10.9) |
| More than 3 hours | 20 (10.9) |
| Total | 183 |



A ANOVA was conducted to identify whether significant differences exist in time spent according to type of school. There is a significant difference in time spent on technology support within the school library by school type. $F(2, 653) = 39.89, p < .001$.

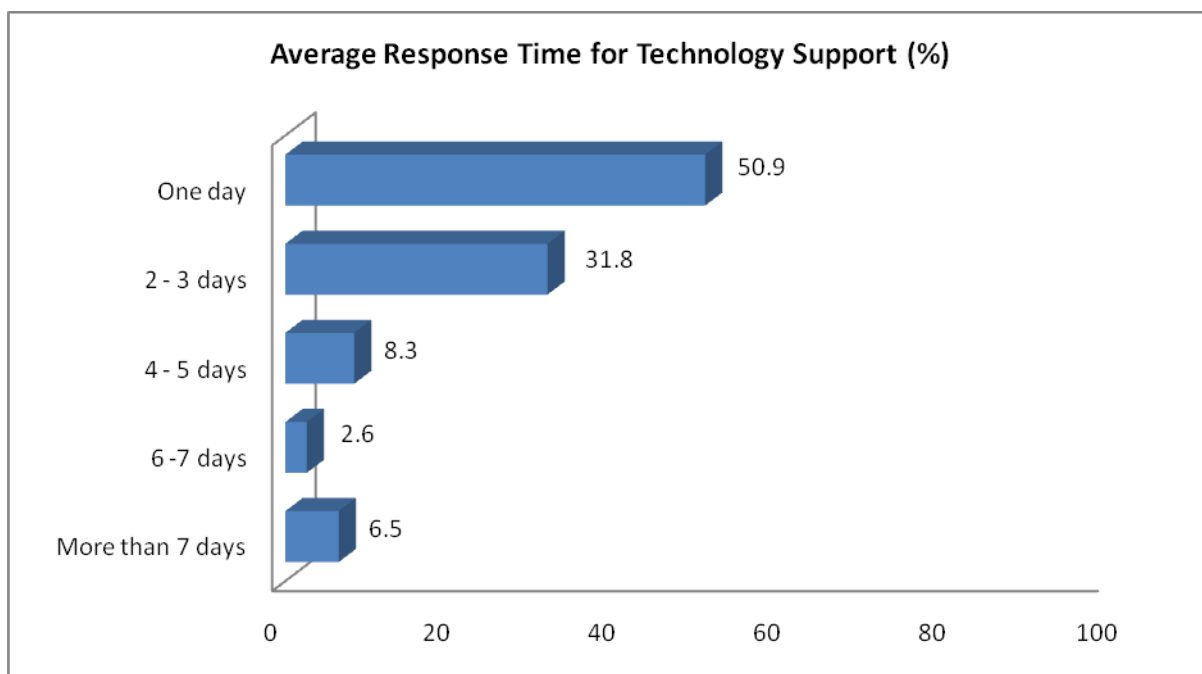
The result indicate that time spent on technology support within the school library differs depending on the school type. Post hoc analysis verified that participants from elementary schools spend less time on technology support than participants from middle and high schools. Although there was no significant difference between middle and high schools in a pairwise comparison, the descriptive information indicated that the higher level of school, the more time school librarians spend on technology support within the school library.

Descriptive information of time in technology support within the school library by school type is found in the table below.

| | Number | <i>M</i> | <i>SD</i> | <i>SE</i> |
|----------------|--------|----------|-----------|-----------|
| Elementary | 332 | 1.17 | 1.034 | .057 |
| Middle | 141 | 1.64 | 1.215 | .102 |
| High | 183 | 1.69 | 1.203 | .089 |
| Total | 656 | 1.42 | 1.148 | .045 |
| Model | | | | |
| Fixed Effects | | | 1.123 | .044 |
| Random Effects | | | | .192 |

Question 43 gathered data on the average response time for technology support. The distribution and percentage of response times are indicated below.

| | Frequency (%) |
|------------------|---------------|
| One day | 354 (50.9) |
| 2 -3 days | 221 (31.8) |
| 4 – 5 days | 58 (8.3) |
| 6 – 7 days | 18 (2.6) |
| More than 7 days | 45 (6.5) |
| Total | 696 |



The data show that 50.9% of requests for technology support are met with in a day, and a further 31.8% are met within two to three days.

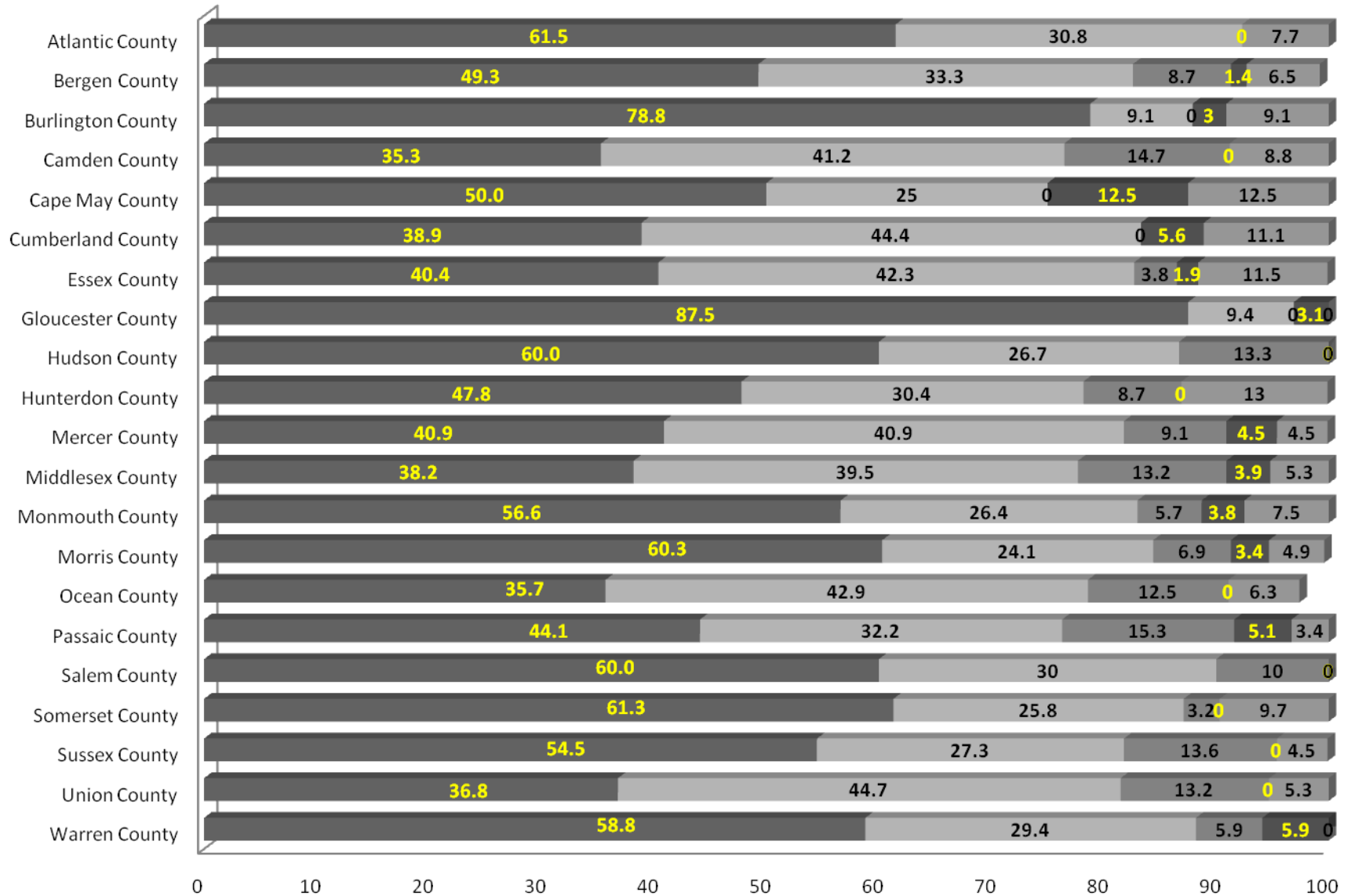
The following table shows the average response time for technology support by county

| | One day (%) | 2-3 days (%) | 4-5 days (%) | 6-7 days (%) | More than 7 days (%) | Total |
|-------------------|----------------|-----------------|-----------------|-----------------|-------------------------|-------|
| Atlantic County | 8 (61.5) | 4 (30.8) | 0 (0) | 0 (0) | 1 (7.7) | 13 |
| Bergen County | 34 (49.3) | 23 (33.3) | 6 (8.7) | 1 (1.4) | 5 (6.5) | 69 |
| Burlington County | 26 (78.8) | 3 (9.1) | 0 (0) | 1 (3.0) | 3 (9.1) | 33 |
| Camden County | 12 (35.3) | 14 (41.2) | 5 (14.7) | 0 (0) | 3 (8.8) | 34 |
| Cape May County | 4 (50.0) | 2 (25.0) | 0 (0) | 1 (12.5) | 1 (12.5) | 8 |
| Cumberland County | 7 (38.9) | 8 (44.4) | 0 (0) | 1 (5.6) | 2 (11.1) | 18 |
| Essex County | 21 (40.4) | 22 (42.3) | 2 (3.8) | 1 (1.9) | 6 (11.5) | 52 |
| Gloucester County | 28 (87.5) | 3 (9.4) | 0 (0) | 1 (3.1) | 0 (0) | 32 |
| Hudson County | 9 (60.0) | 4 (26.7) | 2 (13.3) | 0 (0) | 0 (0) | 15 |

| | | | | | | |
|------------------|-----------|-----------|-----------|---------|----------|----|
| Hunterdon County | 11 (47.8) | 7 (30.4) | 2 (8.7) | 0 (0) | 3 (13.0) | 23 |
| Mercer County | 9 (40.9) | 9 (40.9) | 2 (9.1) | 1 (4.5) | 1 (4.5) | 22 |
| Middlesex County | 29 (38.2) | 30 (39.5) | 10 (13.2) | 3 (3.9) | 4 (5.3) | 76 |
| Monmouth County | 30 (56.6) | 14 (26.4) | 3 (5.7) | 2 (3.8) | 4 (7.5) | 53 |
| Morris County | 35 (60.3) | 14 (24.1) | 4 (6.9) | 2 (3.4) | 3 (4.9) | 58 |
| Ocean County | 5 (35.7) | 6 (42.9) | 2 (12.5) | 0 (0) | 1 (6.3) | 14 |
| Passaic County | 26 (44.1) | 19 (32.2) | 9 (15.3) | 3 (5.1) | 2 (3.4) | 59 |
| Salem County | 6 (60.0) | 3 (30.0) | 1 (10.0) | 0 (0) | 0 (0) | 10 |
| Somerset County | 19 (61.3) | 8 (25.8) | 1 (3.2) | 0 (0) | 3 (9.7) | 31 |
| Sussex County | 12 (54.5) | 6 (27.3) | 3 (13.6) | 0 (0) | 1 (4.5) | 22 |
| Union County | 14 (36.8) | 17 (44.7) | 5 (13.2) | 0 (0) | 2 (5.3) | 38 |
| Warren County | 10 (58.8) | 5 (29.4) | 1 (5.9) | 1 (5.9) | 0 (0) | 17 |

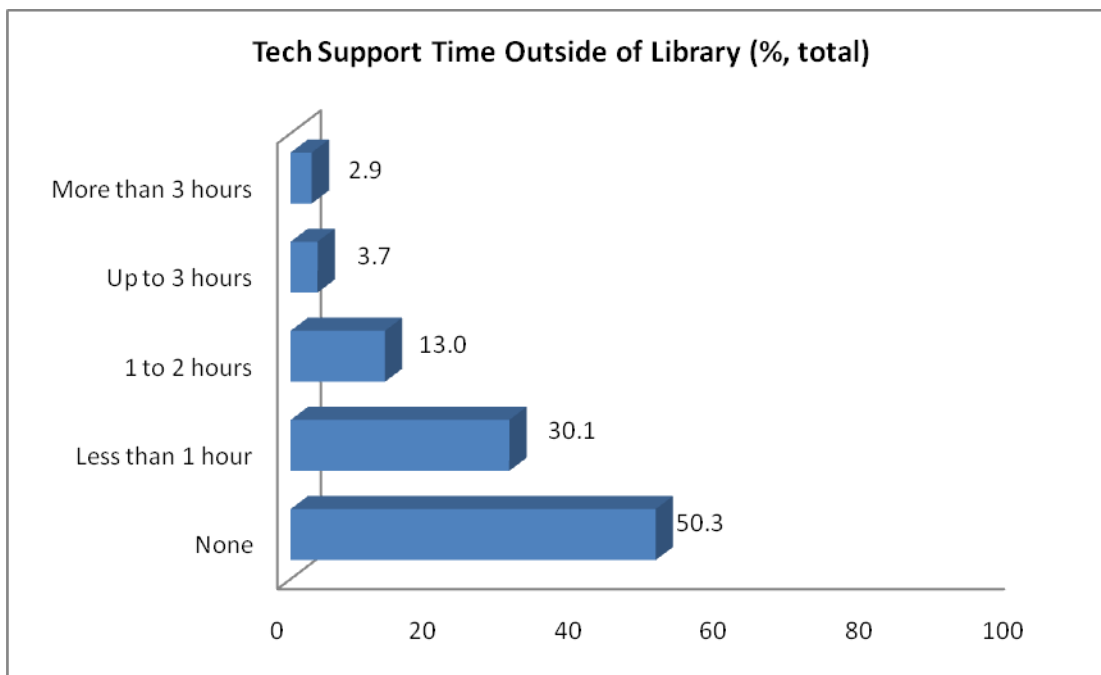
Average Response Time for Technology Support (%)

■ One day ■ 2-3 days ■ 4-5 days ■ 6-7 days ■ More than 7 days



Question 44 sought to identify the extent to which school library personnel provide technical support to other areas in the school, beyond the school library, per week. The distribution of amount of time is shown below.

| Technical Support (per week) | Frequency (%) |
|------------------------------|---------------|
| None | 379 (50.3) |
| Less than 1 hour | 227 (30.1) |
| 1 to 2 hours | 98 (13.0) |
| Up to 3 hours | 28 (3.7) |
| More than 3 hours | 22 (2.9) |
| Total | 754 |

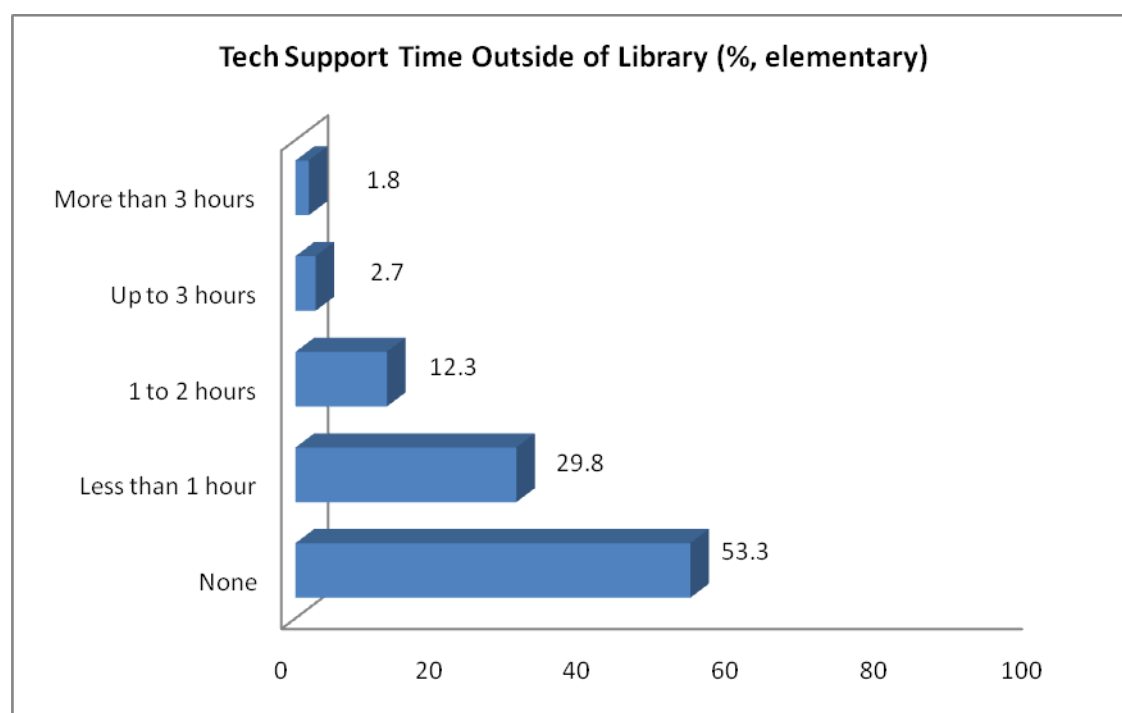


The data show that 50% of participants in the study provide some level of technical support outside of the school library each week

The following tables show the distribution of time that participants spent on providing technical support outside of the school library, by school type.

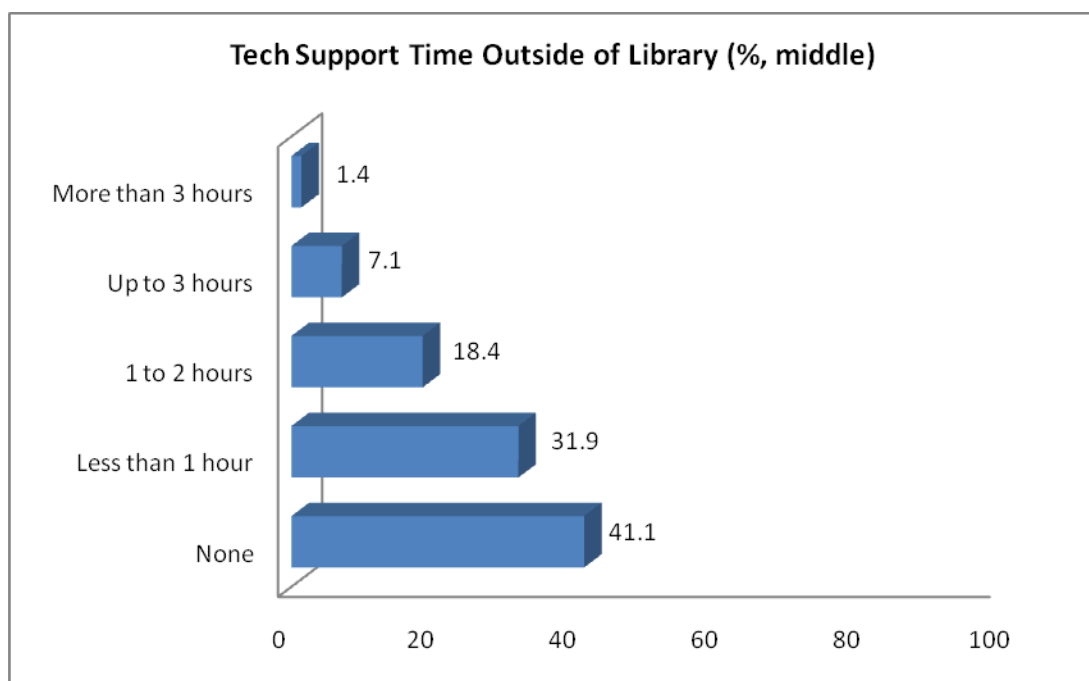
Provision of technical support outside the school library: Elementary Schools

| | Frequency (%) |
|-------------------|---------------|
| None | 177 (53.3) |
| Less than 1 hour | 99 (29.8) |
| 1 to 2 hours | 41 (12.4) |
| Up to 3 hours | 9 (2.7) |
| More than 3 hours | 6 (1.8) |
| Total | 332 |



Provision of technical support outside the school library: Middle Schools

| | Frequency (%) |
|-------------------|---------------|
| None | 58 (41.1) |
| Less than 1 hour | 45 (31.9) |
| 1 to 2 hours | 26 (18.4) |
| Up to 3 hours | 10 (7.1) |
| More than 3 hours | 2 (1.4) |
| Total | 141 |



Provision of technical support outside the school library: High Schools

| | Frequency (%) |
|-------------------|---------------|
| None | 93 (50.39) |
| Less than 1 hour | 56 (30.6) |
| 1 to 2 hours | 15 (8.2) |
| Up to 3 hours | 8 (4.4) |
| More than 3 hours | 11 (6.0) |
| Total | 183 |

An ANOVA test was conducted to evaluate the relationship between time in technology support outside of the school library and school type. There is a significant relationship for all three types of schools. $F(2, 653) = 3.59, p < .01$.

The result of ANOVA indicated that the three school types have different amounts of time spent on technology support outside of the school library. In the pairwise comparisons, participants in middle schools spent significantly more time supporting technology outside of the school library than elementary schools, yet the rest of pairwise comparisons (between elementary and high and between middle and high) did not present any significant differences.

The table below provides descriptive statistics on time spent on technology support outside of the school library by school type.

| | Number | <i>M</i> | <i>SD</i> | <i>SE</i> |
|----------------|--------|----------|-----------|-----------|
| Elementary | 332 | .07 | .916 | .050 |
| Middle | 141 | .96 | 1.006 | .085 |
| High | 183 | .84 | 1.135 | .084 |
| Total | 656 | .79 | 1.005 | .039 |
| Model | | | | |
| Fixed Effects | | | 1.001 | .039 |
| Random Effects | | | | .080 |

PART 3 TEACHING ACTIVITIES IN THE SCHOOL LIBRARY, AND PROFESSIONAL ACTIVITIES

Part 3 of the survey sought to identify teaching activities in the school library, and professional activities. The national guidelines for school libraries, *Empowering Learners: Guidelines for School Library Media Centers* (AASL, 2009) and the *Standards for 21st Century the Learner* (2007) present the school library as an active agent of learning, rather than merely as an agency of information exchange. Central to this learning role is the school librarian actively working as an information-learning specialist in shared and collaborative ways with classroom teachers to ensure the effective integration information literacy skills to enable students to meaningfully connect, interact, and use information efficiently and meaningfully to build their deep understanding and deep knowledge of curriculum content.

The following categories were used in this study to identify the level of interaction with the school community to characterize how school librarians impart their information-learning expertise:

Cooperation: The teacher and the school librarian may communicate informally about a short term project, but work independently.

Coordination: The teacher and the school librarian may meet together to discuss a lesson/unit of study. However, the individual goal setting, learning experience design, teaching, and evaluation are done independently.

Instructional Collaboration: The teacher and school librarian jointly set goals, design learning experiences, teach, and evaluate a comprehensive unit of study.

Questions 45 to 48 sought to gather data on the total and average numbers of coordinations, cooperations, and collaborations undertaken by participants. The totals are shown in the table below, based on data from 412 elementary schools, 141 middle schools and 187 high schools.

| | Cooperations | Coordinations | Collaborations |
|--------------|--------------|---------------|----------------|
| Total number | 19,320 | 11,179 | 3,916 |
| Average | 27 | 15 | 5 |

The following tables show the total number and average number of coordinations, cooperations, and collaborations by school type.

Elementary Schools

| | Cooperations | Coordinations | Collaborations |
|--------------|--------------|---------------|----------------|
| Total number | 5,915 | 2,343 | 1,092 |
| Average | 14 | 6 | 3 |

Middle Schools

| | Cooperations | Coordinations | Collaborations |
|----------------|--------------|---------------|----------------|
| Total number | 5,000 | 2,850 | 1,140 |
| <i>Average</i> | 35 | 20 | 8 |

High schools

| | Cooperations | Coordinations | Collaborations |
|----------------|--------------|---------------|----------------|
| Total number | 8,415 | 5,986 | 1,684 |
| <i>Average</i> | 45 | 32 | 9 |

The analysis of curriculum / subject areas, based on the New Jersey Core Curriculum Content Standards (2004) shows the following patterns:

| New Jersey Core Curriculum Content | Percentage |
|---|------------|
| Language Arts Literacy | 31.3% |
| Social Studies | 27.9% |
| Science | 15.4% |
| Comprehensive Health and Physical Education | 4.2% |
| World Languages | 3.9% |
| Technological Literacy | 3.7% |
| Visual and Performing Arts | 3.3% |
| Mathematics | 2.5% |
| Career Education and Consumer, Family and Life Skills | 0.8% |
| Other: (e.g., Special Education, Gifted and Talented, English Language Learning). | 7.0% |

The data show that school librarians in New Jersey engage actively with New Jersey Core Curriculum Content Standards through a substantial number of cooperations, coordinations and collaborations. Instructional collaborations typically take place in Language Arts Literacy, Social Studies, and Science.

Questions 49 – 61 sought to provide an overview of the range of professional activities in which school librarians have engaged in the 2008-9 academic year.

Overall, the data show that many school librarians in New Jersey have actively participated in many different school and community forums. There is some variation according to the type of activity and school type (elementary, middle and high)

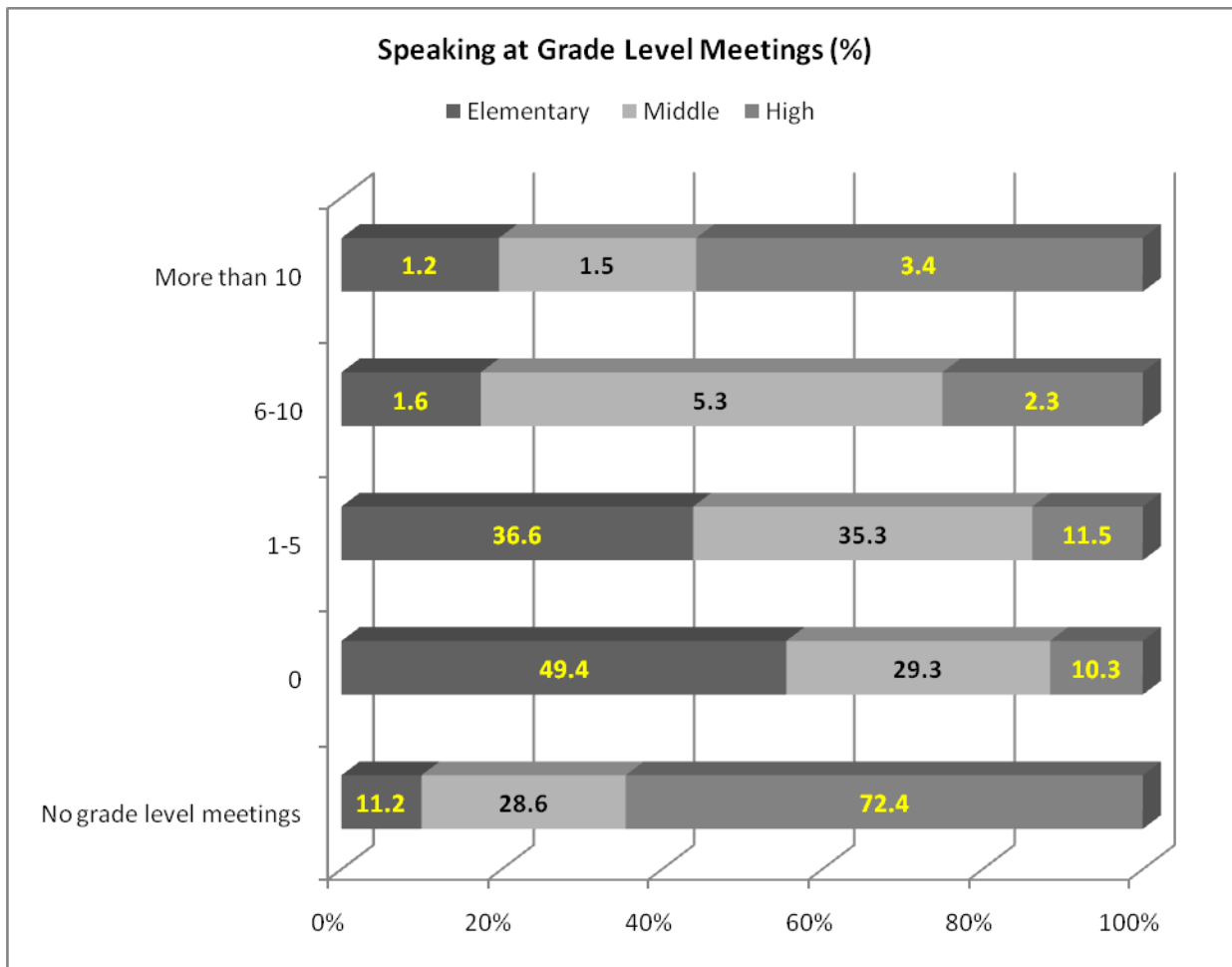
Question 49. Speaking at Grade Level Meetings

The table below shows the frequency and distribution of school librarians speaking at grade level meetings.

| | Frequency (%) |
|---|---------------|
| No grade level meetings (718 responses) | 221 (30.8) |
| Total number of responses with level of participation | 497 |
| 0 | 256 (51.5) |
| 1-5 | 207 (41.6) |
| 6-10 | 20 (4.1) |
| More than 10 | 14 (2.8) |

The following table and graph show the frequency and percentage of participants speaking at Grade Level Meetings by School Type

| | Frequency (%) | | |
|----------------------------|---------------|-----------|------------|
| Q49 | Elementary | Middle | High |
| No grade level meetings | 36 (11.2) | 38 (28.6) | 126 (72.4) |
| 0 | 158 (49.4) | 39 (29.3) | 18 (10.3) |
| 1-5 | 117 (36.6) | 47 (35.3) | 20 (11.5) |
| 6-10 | 5 (1.6) | 7 (5.3) | 4 (2.3) |
| More than 10 | 4 (1.2) | 2 (1.5) | 6 (3.4) |
| Total Overall distribution | 320 | 133 | 174 |



An ANOVA was conducted to evaluate the relationship between speaking at grade level meetings and school type. There were significant differences by school type. $F(2, 624) = 46.79, p < .001$.

According to the results of ANOVA, there is a relationship between school type and the number of times school librarians speak at grade level meetings. The results of pairwise comparisons showed a significant difference between high schools and other elementary and middle schools in providing opportunities for school librarians to make presentations at grade level meetings. There was no significant difference between elementary and middle schools.

Descriptive information of speaking at grade level meetings by school type

| | Number | M^a | SD | SE |
|----------------|--------|-------|-------|------|
| Elementary | 320 | 1.32 | .742 | .042 |
| Middle | 133 | 1.22 | .972 | .084 |
| High | 174 | .54 | 1.018 | .077 |
| Total | 627 | 1.08 | .939 | .037 |
| Model | | | | |
| Fixed Effects | | | .877 | .035 |
| Random Effects | | | | .266 |

^a The scale ranged as follows: 0= no meetings in school, 1= 0 2= 1 to 5 times, 3= 6 to 10 times, 4= more than 10 times

48.5% of school librarians interact with classroom teachers at grade level meetings.

Question 50 gathered data on the extent to which participants speak at team level meetings in their schools.

| | Frequency (%) |
|---|---------------|
| No team level meetings | 320 (44.6) |
| Total number of responses where team level meetings took place in a school, with level of participation | 398 |
| 0 | 197 (49.5) |
| 1-5 | 169 (42.5) |
| 6-10 | 17 (4) |
| More than 10 | 15 (4) |
| Total | 718 |

51.5% of school librarians interact with classroom teachers at team level meetings.

An ANOVA was conducted to evaluate the relationship between speaking at team level meetings and school type. There was a significant difference by school type. $F(2, 624) = 38.47, p < .001$.

According to the results of ANOVA, school type affects the number of times school librarians speak at team level meetings. The following tests displayed that all pairwise comparisons are significant. The results indicate that the higher the school level the more opportunities school librarians had to speak at team level meetings.

Descriptive information of *Speaking at Team Level Meetings* by *School Type*

| | Number | M^a | SD | SE |
|----------------|--------|-------|------|------|
| Elementary | 320 | .82 | .900 | .050 |
| Middle | 133 | 1.47 | .942 | .082 |
| High | 174 | .56 | .940 | .071 |
| Total | 627 | .88 | .974 | .039 |
| Model | | | | |
| Fixed Effects | | | .920 | .037 |
| Random Effects | | | | .253 |

^a The scale range is as follows: 0= no meetings in school, 1= 0, 2= 1 to 5 times, 3= 6 to 10 times, 4= more than 10 times

Question 51 gathered data from participants in relation to speaking at Department Meetings

| | Frequency (%) |
|---|---------------|
| No department meetings | 207 (28.8) |
| Total number of responses where department level meetings took place in a school, with level of participation | 511 |
| 0 | 218 (42) |
| 1-5 | 256 (50) |
| 6-10 | 26 (6) |
| More than 10 | 11 (2) |
| Total | 718 |

An ANOVA was conducted to evaluate the relationship between speaking at department level meetings and school type. There is a significant difference by school type. $F(2, 624) = 64.71, p < .001$.

According to the results of ANOVA, school type affects the number of times school librarians speak at department level meetings. The following tests displayed that all pairwise comparisons are significant. The results indicate that the higher the school level the more opportunities school librarians have to

make presentations at department level meetings.

Descriptive information of *Speaking at Department Level Meetings* by School Type

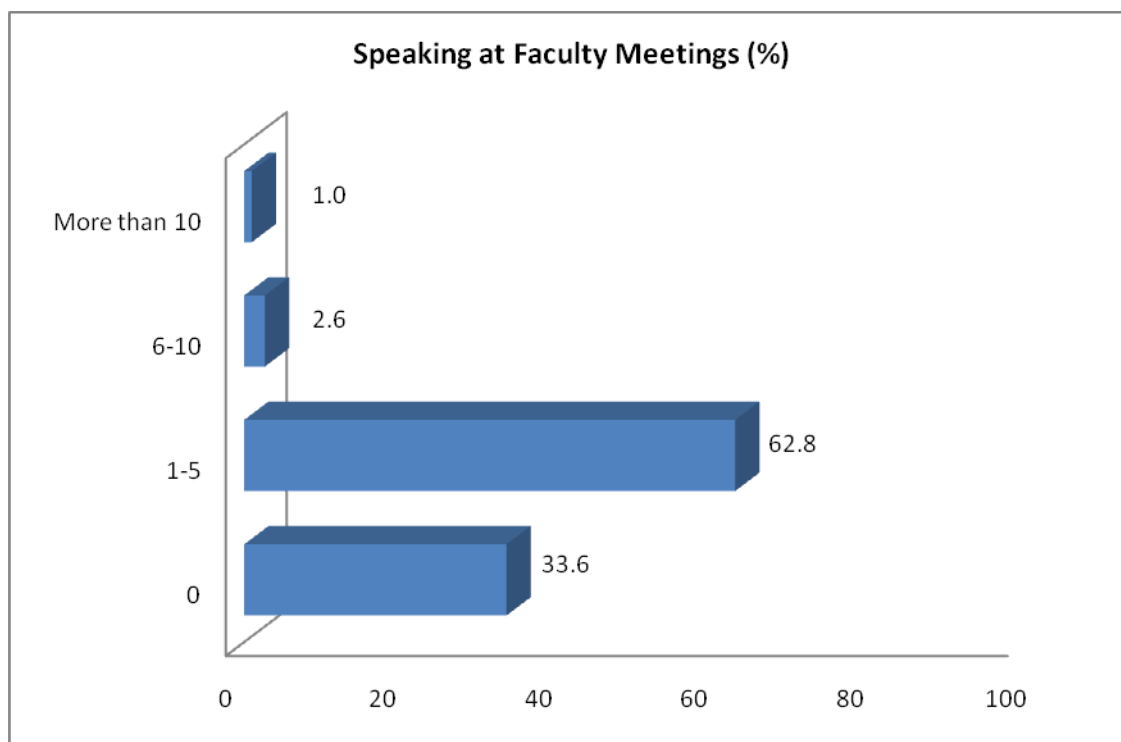
| | Number | M^a | SD | SE |
|----------------|--------|-------|------|------|
| Elementary | 320 | .85 | .872 | .049 |
| Middle | 133 | 1.43 | .932 | .081 |
| High | 174 | 1.75 | .815 | .062 |
| Total | 627 | 1.22 | .954 | .038 |
| Model | | | | |
| Fixed Effects | | | .870 | .035 |
| Random Effects | | | | .311 |

^a The scale range is as follows: 0= no meetings in school, 1= 0, 2= 1 to 5 times, 3= 6 to 10 times, 4= more than 10 times

58% of participants in the study interact with classroom teachers at department level meetings (when the school is departmentalized). The results indicate that the higher the school level, the more opportunities school librarians have to make presentations at department level meetings.

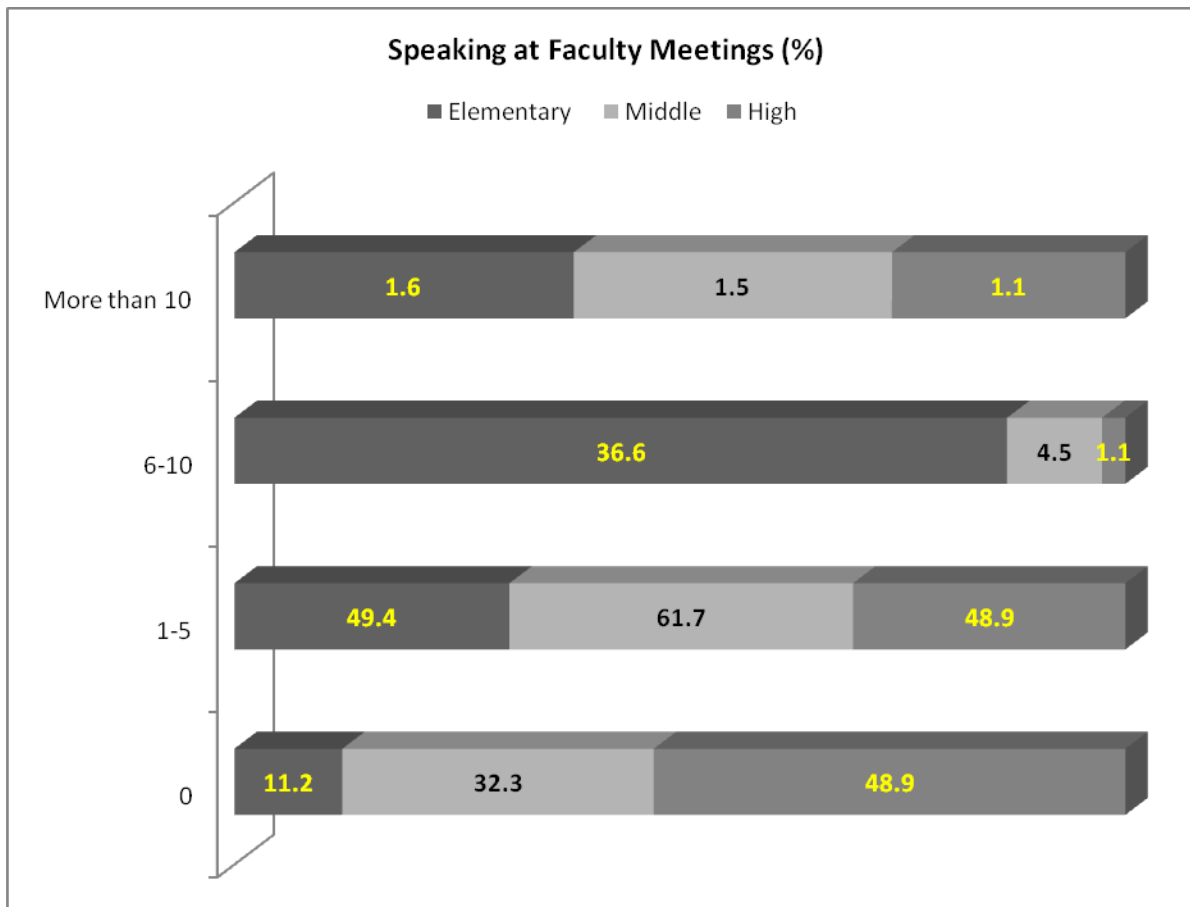
Question 52 gathered data on the number of times that participants speak at faculty meetings in their schools.

| Number of times | Frequency (%) |
|-----------------|---------------|
| 0 | 241 (33.6) |
| 1-5 | 451 (62.8) |
| 6-10 | 19 (2.6) |
| More than 10 | 7 (1.0) |
| Total | 718 |



Number of Times Speaking at Faculty Meetings by School Type

| Number of Times | Frequency (%) | | |
|-----------------|---------------|-----------|-----------|
| | Elementary | Middle | High |
| 0 | 87 (11.2) | 43 (32.3) | 85 (48.9) |
| 1-5 | 221 (49.4) | 82 (61.7) | 85 (48.9) |
| 6-10 | 9 (36.6) | 6 (4.5) | 2 (1.1) |
| More than 10 | 3 (1.6) | 2 (1.5) | 2 (1.1) |
| Total | 320 | 133 | 174 |



An ANOVA was conducted to evaluate the relationship between speaking at faculty meetings and school type. There was significant difference by school type. $F(2, 624) = 9.78, p < .001$.

According to the results of ANOVA, there is a relationship between school type and the number of times school librarians speak at faculty meetings. The results of pairwise comparisons show that there was a significant difference in the number of times school librarians make presentations at faculty meetings compared with middle and/or elementary schools. There is no significant difference between elementary and middle schools.

Descriptive information of *Speaking at Faculty Meetings* by *School Type*

| | Number | M^a | SD | SE |
|------------|--------|-------|------|------|
| Elementary | 320 | 1.78 | .536 | .030 |
| Middle | 133 | 1.75 | .608 | .053 |
| High | 174 | 1.55 | .585 | .044 |

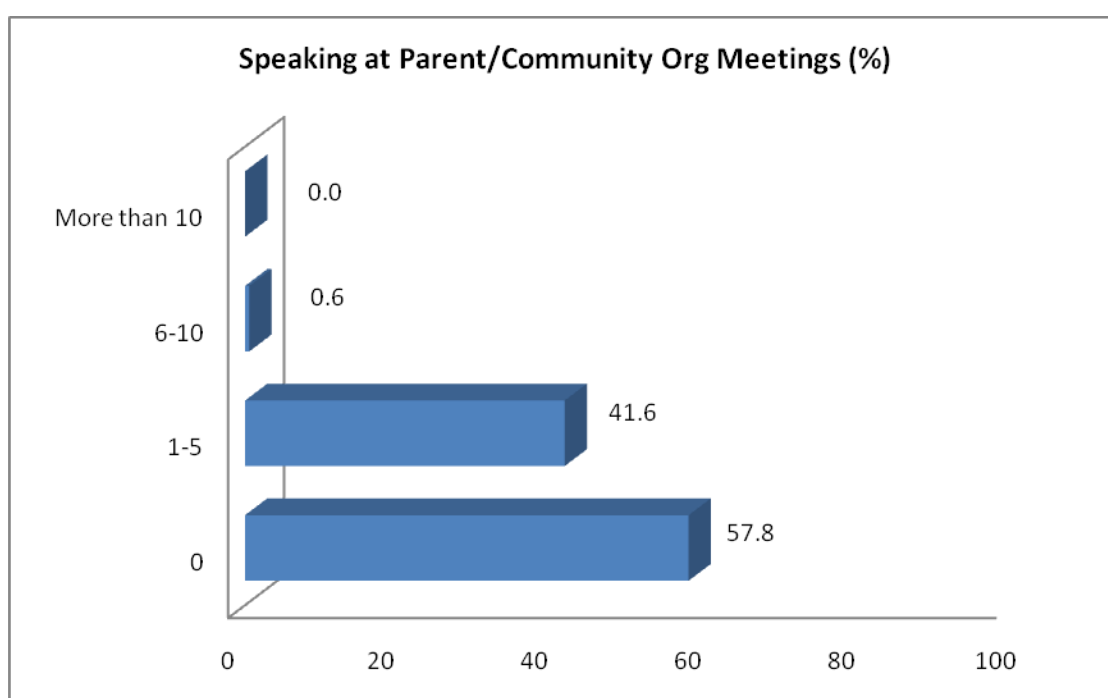
| | | | | |
|-------|----------------|------|------|------|
| Total | 627 | 1.71 | .574 | .023 |
| Model | Fixed Effects | | .566 | .023 |
| | Random Effects | | | .078 |

^a The scale range is as follows: 1= 0, 2= 1 to 5 times, 3= 6 to 10 times, 4= more than 10 times

66.4% of participants in the study interact with school colleagues at faculty level meetings. The results indicate that the higher the school level the more presentations school librarians make at faculty level meetings.

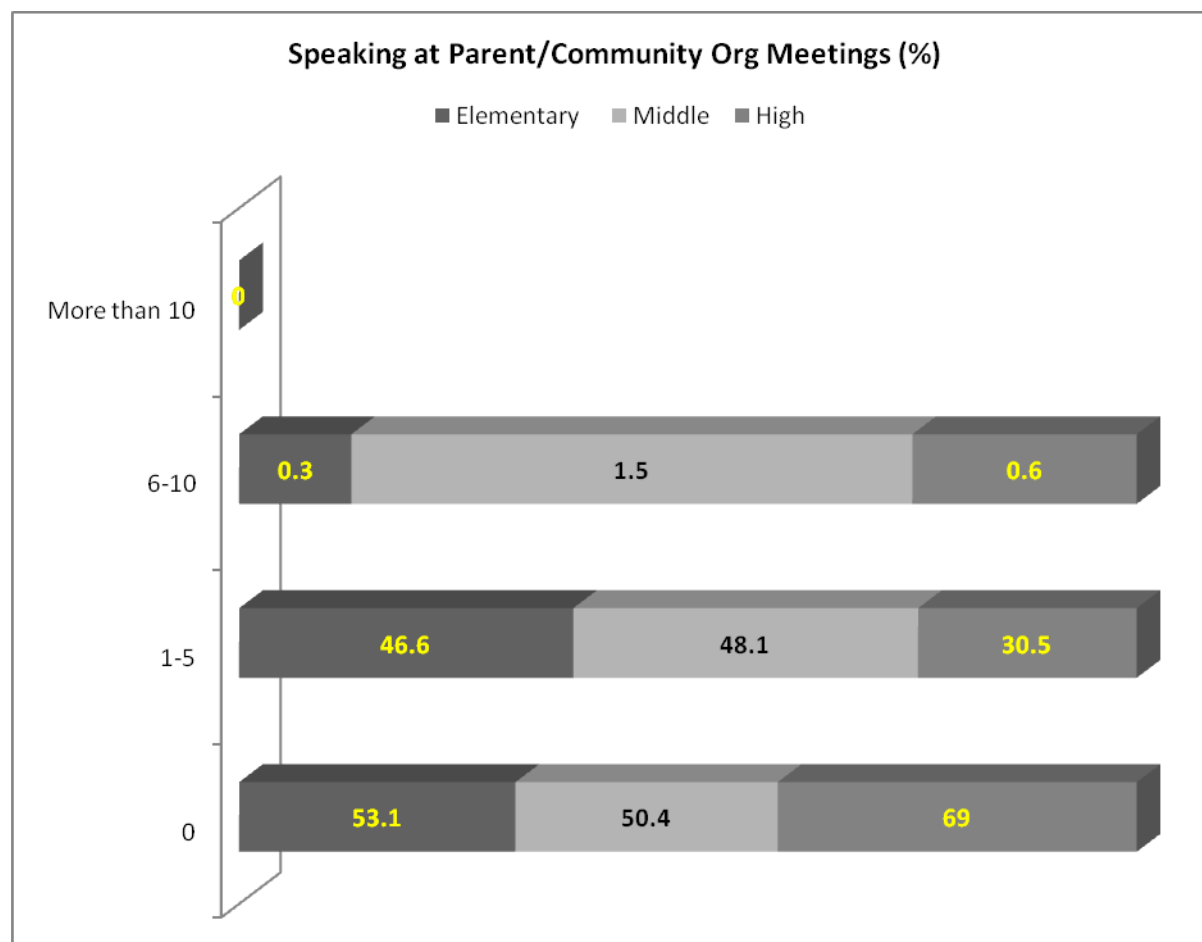
Question 53 gathered data on the frequency of participants speaking at parent/community organization meetings

| | Frequency (%) |
|--------------|---------------|
| 0 | 415 (54.3) |
| 1-5 | 299 (39.1) |
| 6-10 | 4 (0.5) |
| More than 10 | 0 (0) |
| Total | 718 |



The following tables show the frequency of school librarians speaking at parent/community organization meetings by school type.

| Q53 | Frequency (%) | | |
|--------------|---------------|-----------|------------|
| | Elementary | Middle | High |
| 0 | 170 (53.1) | 67 (50.4) | 120 (69.0) |
| 1-5 | 149 (46.6) | 64 (48.1) | 53 (30.5) |
| 6-10 | 1 (0.3) | 2 (1.5) | 1 (0.6) |
| More than 10 | 0 (0) | 0 (0) | 0 (0) |
| Total | 320 | 133 | 174 |



An ANOVA was conducted to evaluate the relationship between speaking at parent/community organization meetings and school type. There are significant differences by school type. $F(2, 624) = 7.21, p < .01$. According to the results of ANOVA, there is a relationship between school type and the number of times school librarians speak at parent/community organization meetings. The results of pairwise comparisons showed that school librarians made presentations at high school parent/community organization meetings significantly more than school librarians at middle and/or elementary schools. There was no significant difference between elementary and middle schools.

Descriptive information for speaking at parent/community organization meetings by school type

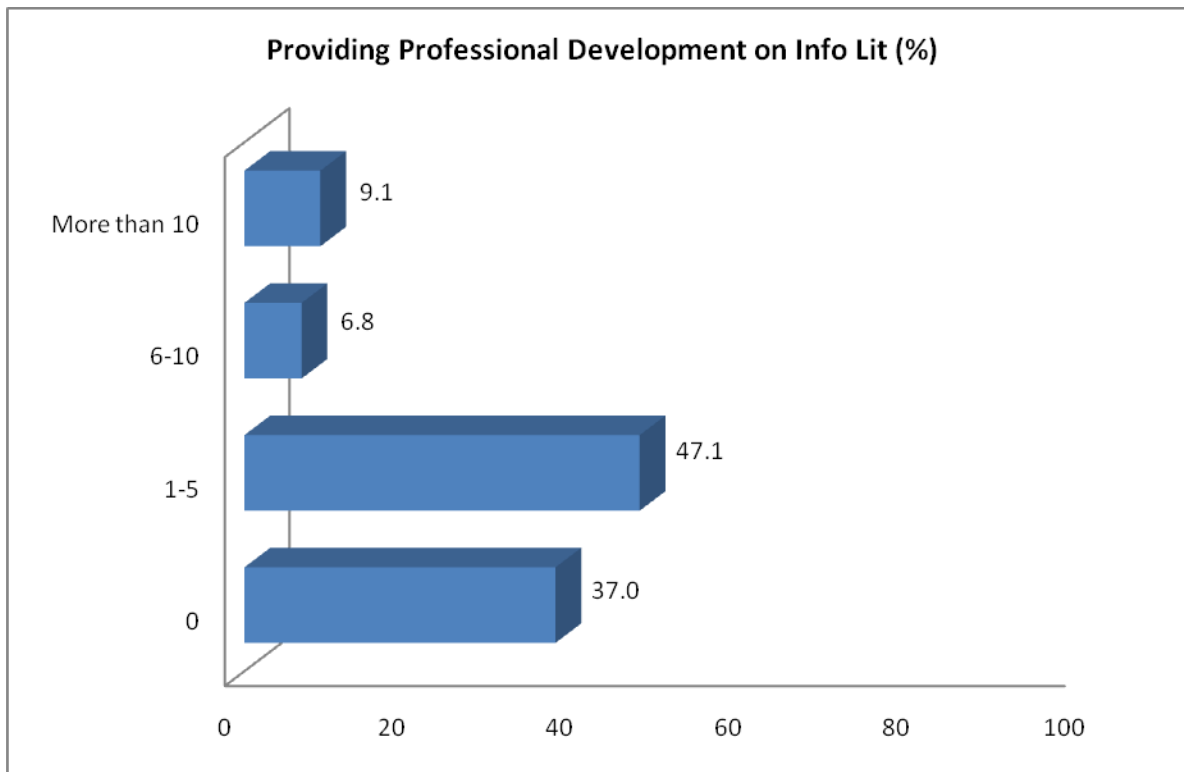
| | Number | M^a | SD | SE |
|----------------|--------|-------|------|------|
| Elementary | 320 | 1.47 | .506 | .028 |
| Middle | 133 | 1.51 | .531 | .046 |
| High | 174 | 1.32 | .479 | .036 |
| Total | 627 | 1.44 | .509 | .020 |
| Model | | | | |
| Fixed Effects | | | .504 | .020 |
| Random Effects | | | | .059 |

^a The scale range is as follows: 1= 0, 2= 1 to 5 times, 3= 6 to 10 times, 4= more than 10 times

45.7% of participants in the study interact with school colleagues at faculty level meetings. The results indicate that the higher the school level the more frequently school librarians make presentations at faculty level meetings.

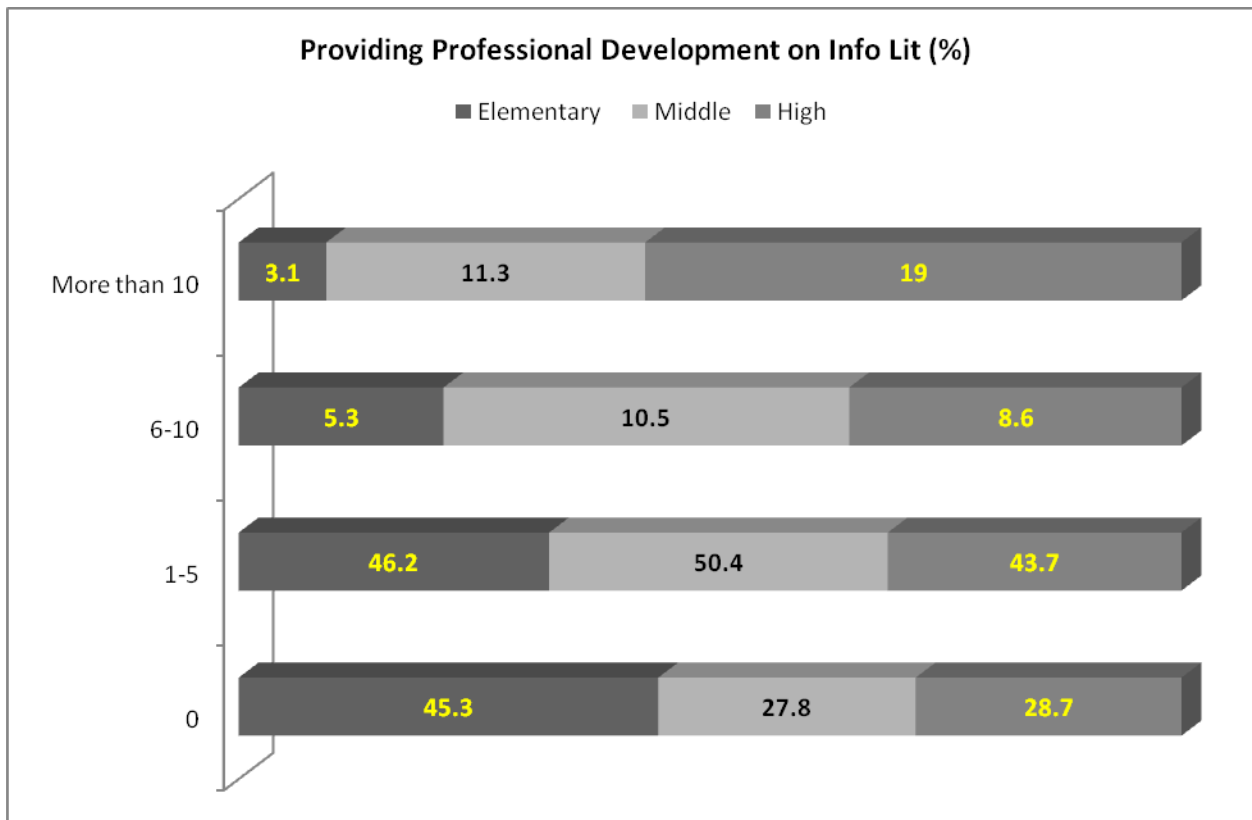
Question 54 gathered data on the frequency of provision of professional development on information literacy, either formally or informally, during the school year.

| Frequency: Number of times | Frequency (%) |
|----------------------------|---------------|
| 0 | 266 (37.0) |
| 1-5 | 338 (47.1) |
| 6-10 | 49 (6.8) |
| More than 10 | 65 (9.1) |
| Total | 718 |



Frequency of provision of professional development on information literacy by school type is shown in the table and graph below.

| Information Literacy Professional Development: number of times | Frequency (%) | | |
|--|---------------|-----------|-----------|
| | Elementary | Middle | High |
| 0 | 145 (45.3) | 37 (27.8) | 50 (28.7) |
| 1-5 | 148 (46.2) | 67 (50.4) | 76 (43.7) |
| 6-10 | 17 (5.3) | 14 (10.5) | 15 (8.6) |
| More than 10 | 10 (3.1) | 15 (11.3) | 33 (19.0) |
| Total | 320 | 133 | 174 |



An ANOVA was conducted to evaluate the effect of school type on the number of times school librarians provide professional development on information literacy. There were significant differences by school type. $F(2, 624) = 23.03, p < .001$.

According to the results of ANOVA, school type affects the number of times professional development on information literacy is provided. The results of pairwise comparisons showed that in elementary schools school librarians provided formal/informal professional development on information literacy fewer times than in middle and/or high schools. There was no significant difference between middle and high schools.

Descriptive information of providing development on information literacy school type

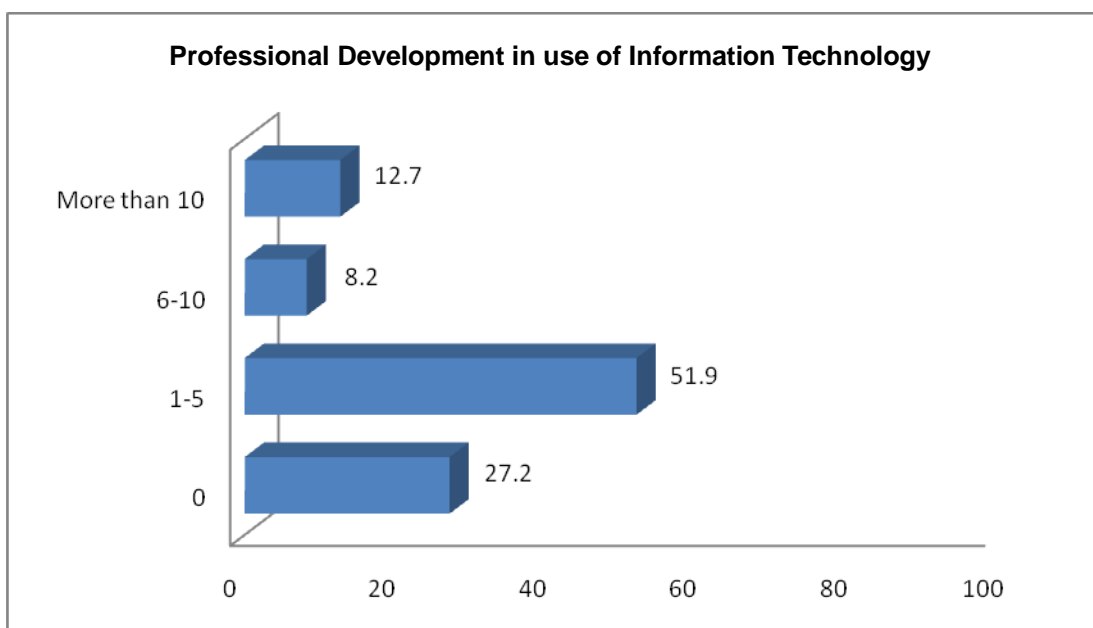
| | Number | M^a | SD | SE |
|----------------|--------|-------|-------|------|
| Elementary | 320 | 1.66 | .720 | .040 |
| Middle | 133 | 2.05 | .915 | .079 |
| High | 174 | 2.18 | 1.052 | .080 |
| Total | 627 | 1.89 | .896 | .036 |
| Model | | | | |
| Fixed Effects | | | .866 | .035 |
| Random Effects | | | | .184 |

^a The scale range is as follows: 1= 0, 2= 1 to 5 times, 3= 6 to 10 times, 4= more than 10 times

63% of participants are involved in the provision of professional development in relation to information literacy in their schools. Elementary school librarians provide formal/informal professional development on information literacy fewer times than in middle and/or high schools. There was no significant difference between middle and high schools in terms of the frequency of provision.

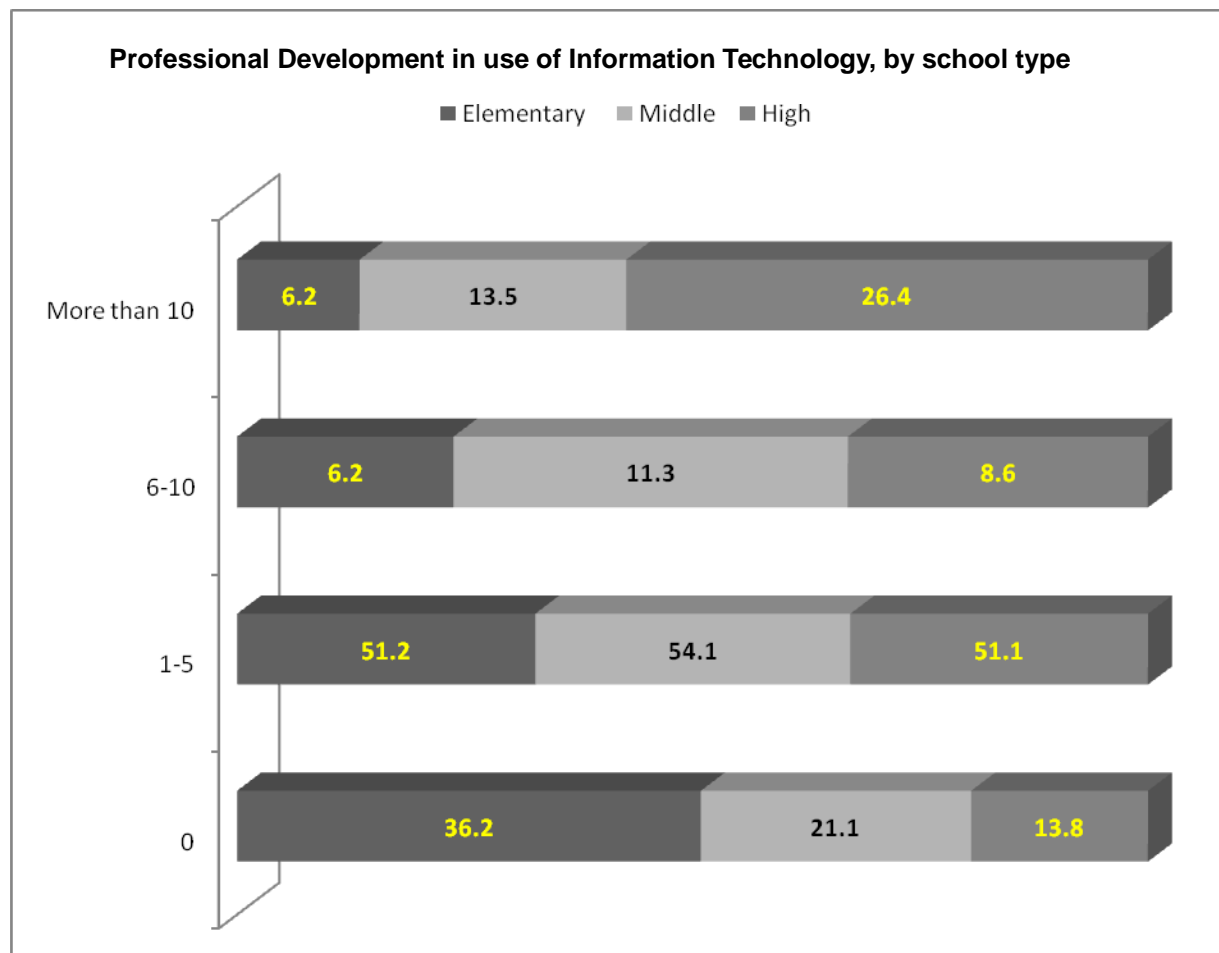
Question 55 gathered data on the number of times that participants have provided formal and/or informal professional development on the use of information technology during the current school year. The frequency distribution and percentages are shown in the table below

| Professional development in use of information technology: frequency | Frequency (%) |
|--|---------------|
| 0 | 195 (27.2) |
| 1-5 | 373 (51.9) |
| 6-10 | 59 (8.2) |
| More than 10 | 91 (12.7) |
| Total | 718 |



The tables below show the frequency of provision of professional development in information technology by school type

| Frequency of provision of professional development in information technology | Elementary | Middle | High |
|--|------------|-----------|-----------|
| 0 | 116 (36.2) | 28 (21.1) | 24 (13.8) |
| 1-5 | 164 (51.2) | 72 (54.1) | 89 (51.1) |
| 6-10 | 20 (6.2) | 15 (11.3) | 15 (8.6) |
| More than 10 | 20 (6.2) | 18 (13.5) | 46 (26.4) |
| Total | 320 | 133 | 174 |



An ANOVA was conducted to evaluate the relationship between *providing development on info tech and school type*. There was significant difference by school type. $F(2, 624) = 30.78, p < .001$.

According to the results of ANOVA, there is a relationship between school type and the number of times

school librarians provide formal/informal professional development on the use of information technology. The following tests displayed that all pairwise comparisons are significant. The results indicate that the higher the school level, the more frequently school librarians provide professional development on the use of information technology.

72.8% of participants are involved in the provision of professional development in relation to information technology in their schools. This takes place more frequently in high schools than in elementary and middle schools.

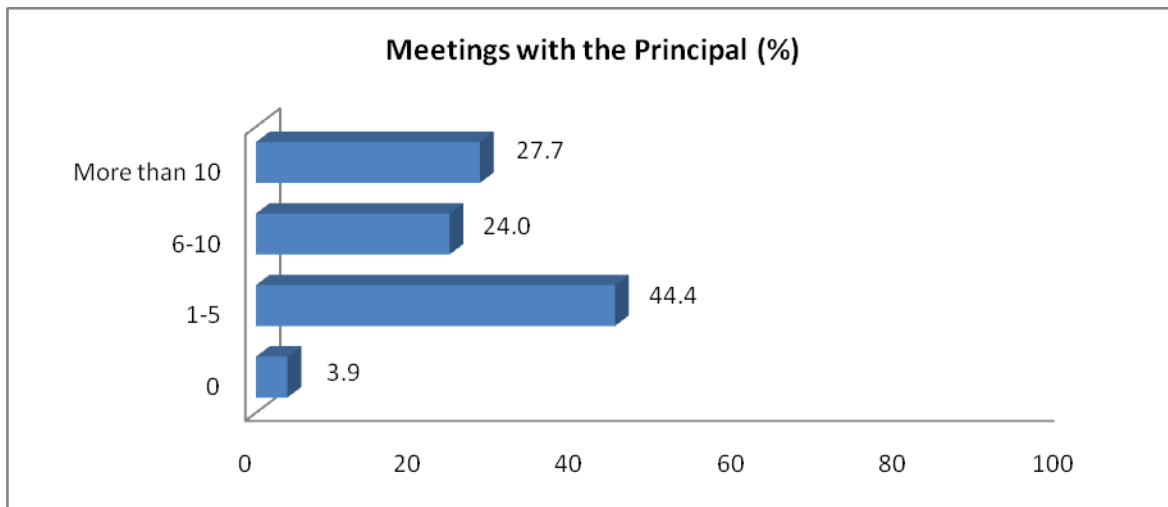
Descriptive information of number of times school librarians provide professional development on information technology by school type.

| | Number | M^a | SD | SE |
|----------------|--------|-------|-------|------|
| Elementary | 320 | 1.82 | .804 | .045 |
| Middle | 133 | 2.17 | .917 | .080 |
| High | 174 | 2.48 | 1.030 | .078 |
| Total | 627 | 2.08 | .937 | .037 |
| Model | | | | |
| Fixed Effects | | | .896 | .036 |
| Random Effects | | | | .220 |

^a The scale range is as follows: 1= 0, 2= 1 to 5 times, 3= 6 to 10 times, 4= more than 10 times

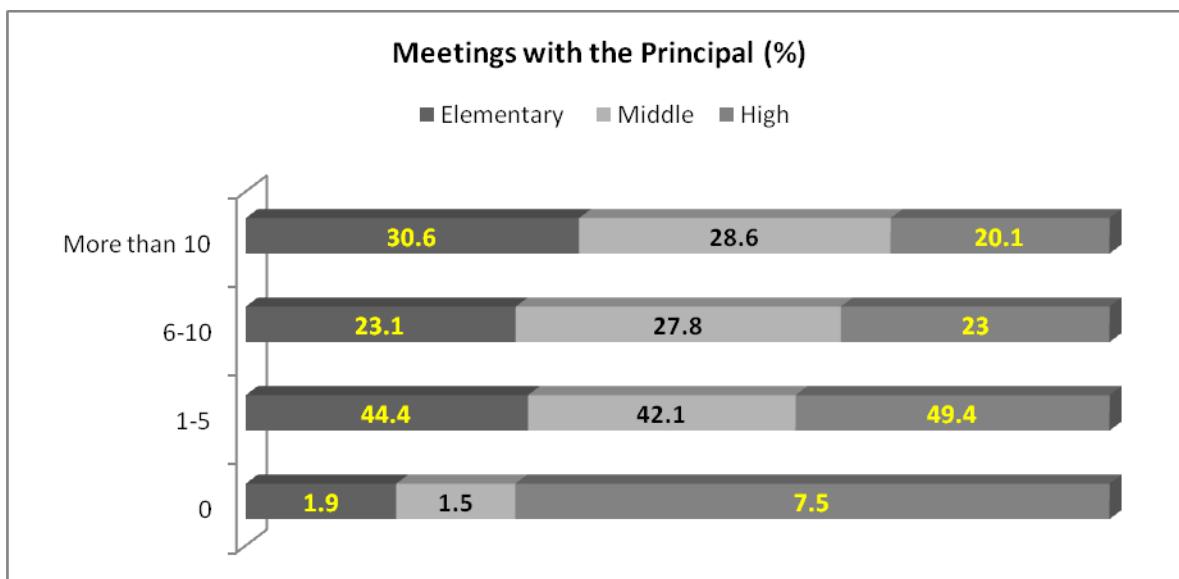
Question 56 sought to gather data on the frequency of meetings with the school principal. The frequency and percentages are shown in the table below.

| Number of meetings with school principal | Frequency (%) |
|--|---------------|
| 0 | 28 (3.9) |
| 1-5 | 319 (44.4) |
| 6-10 | 172 (24.0) |
| More than 10 | 199 (27.7) |
| Total | 718 |



The following tables show the frequency of meetings with the school principal by school type

| Number of meetings with school principal | Frequency (%) | | |
|--|---------------|-----------|-----------|
| | Elementary | Middle | High |
| 0 | 6 (1.9) | 2 (1.5) | 13 (7.5) |
| 1-5 | 142 (44.4) | 56 (42.1) | 86 (49.4) |
| 6-10 | 74 (23.1) | 37 (27.8) | 40 (23.0) |
| More than 10 | 98 (30.6) | 38 (28.6) | 35 (20.1) |
| Total | 320 | 133 | 174 |



An ANOVA was conducted to evaluate the association between the number of meetings with the principal and school type. There was significant difference by school type. $F(2, 624) = 5.84, p < .01$.

Descriptive information of number of meetings with the principal technologist by school type

| | Number | M^a | SD | SE |
|------------|----------------|-------|------|------|
| Elementary | 320 | 2.82 | .893 | .050 |
| Middle | 133 | 2.83 | .863 | .075 |
| High | 174 | 2.56 | .896 | .068 |
| Total | 627 | 2.75 | .894 | .036 |
| Model | Fixed Effects | | .887 | .035 |
| | Random Effects | | | .094 |

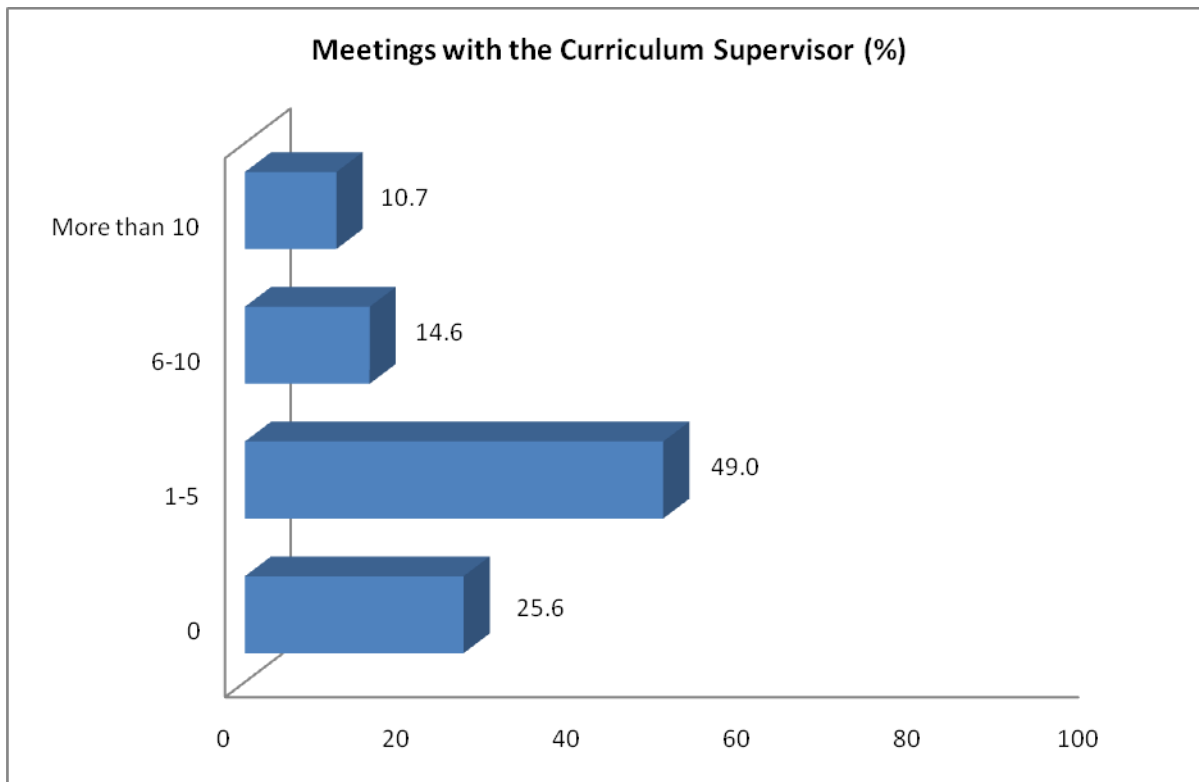
^a The scale range is as follows: 1= 0, 2= 1 to 5 times, 3= 6 to 10 times, 4= more than 10 times

According to the results of ANOVA, school type is associated with the number of meetings with the principal. The results of pairwise comparisons showed that in high schools school librarians met with their principals more frequently than in middle and/or elementary schools. There was no significant difference between middle and elementary schools.

The data show active communication with school principals. 96.1% of school librarians meet with their school principal during the school year. High school librarians meet more frequently than do librarians in middle or elementary schools. 51.7% of the school librarians meet more than five times a year.

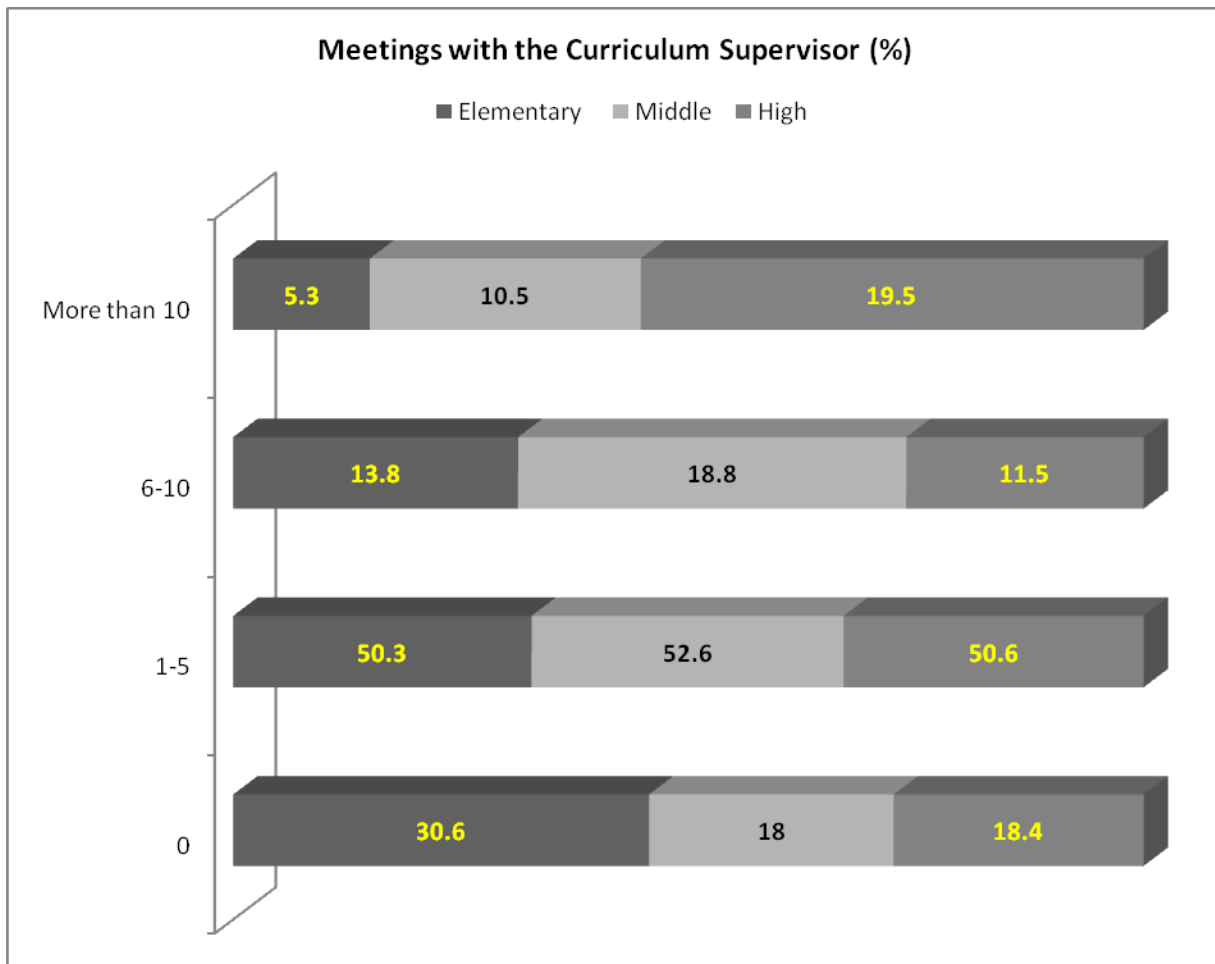
Question 57 gathered data on the number of meetings with any curriculum supervisor in the school. The frequency and percentages are shown below

| Number of meetings with any curriculum supervisor | Frequency (%) |
|---|---------------|
| 0 | 184 (25.6) |
| 1-5 | 352 (49.0) |
| 6-10 | 105 (14.6) |
| More than 10 | 77 (10.7) |
| Total | 718 |



The following tables show the number of meetings with any curriculum supervisor by school type

| Number of meetings with any curriculum supervisor | Frequency (%) | | |
|---|---------------|-----------|-----------|
| | Elementary | Middle | High |
| 0 | 98 (30.6) | 24 (18.0) | 32 (18.4) |
| 1-5 | 161 (50.3) | 70 (52.6) | 88 (50.6) |
| 6-10 | 44 (13.8) | 25 (18.8) | 20 (11.5) |
| More than 10 | 17 (5.3) | 14 (10.5) | 34 (19.5) |
| Total | 320 | 133 | 174 |



An ANOVA was conducted to evaluate the association between the number of meetings with a curriculum supervisor and school type. There was significant difference by school type. ($F(2, 624) = 12.32, p < .001$.)

Descriptive information of number of meetings with a curriculum supervisor by school type

| | Number | M^a | SD | SE |
|----------------|--------|-------|------|------|
| Elementary | 320 | 1.94 | .809 | .045 |
| Middle | 133 | 2.22 | .865 | .075 |
| High | 174 | 2.32 | .991 | .045 |
| Total | 627 | 2.10 | .890 | .036 |
| Model | | | | |
| Fixed Effects | | | .875 | .035 |
| Random Effects | | | | .135 |

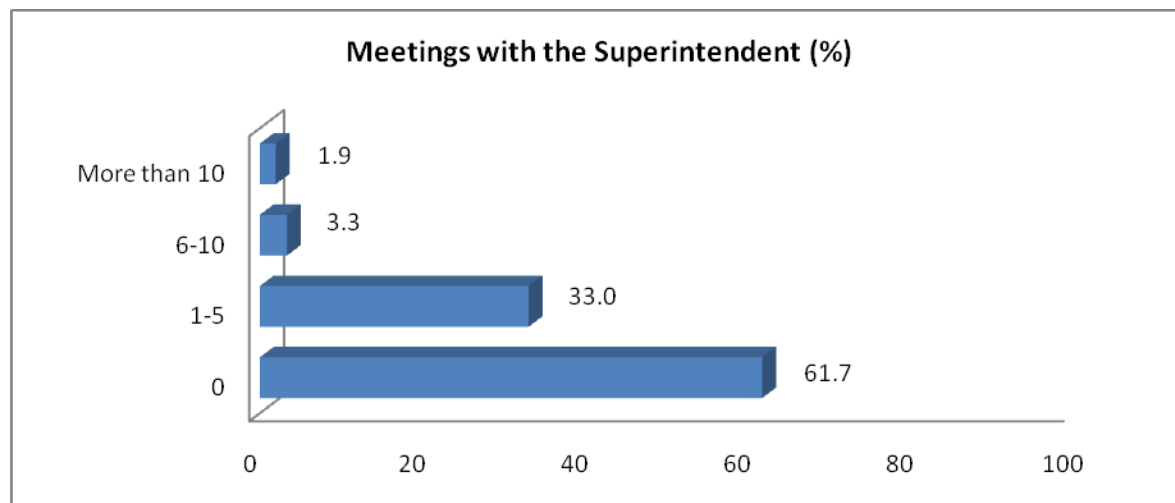
^a The scale range is as follows: 1= 0, 2= 1 to 5 times, 3= 6 to 10 times, 4= more than 10 times

According to the results of ANOVA, school type is associated with the number of meetings with a curriculum supervisor. The results of pairwise comparisons showed that, in elementary schools, school librarians met with curriculum supervisors less frequently than in middle and/or elementary schools. There was no significant difference between middle and high schools.

The data show a strong pattern of communication with curriculum supervisors. 74.4% of school librarians meet with curriculum supervisors during the school year. High school librarians meet more frequently than do librarians in middle or elementary schools. 24.3% of school librarians meet more than five times a year with curriculum supervisors.

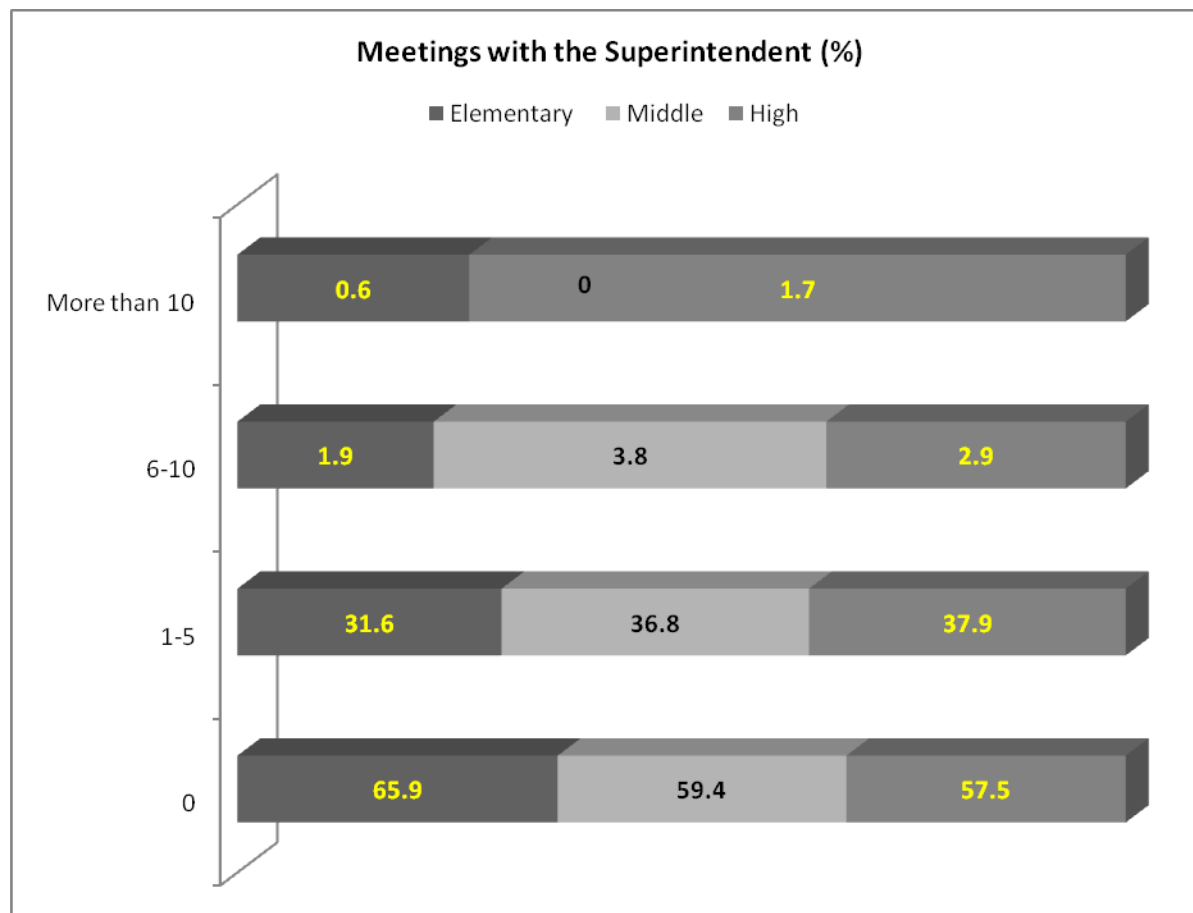
Question 58 gathered data on the number of meetings with the district superintendent. Frequency and percentages are shown in the table below

| Number of meetings with the superintendent | Frequency (%) |
|--|---------------|
| 0 | 443 (61.7) |
| 1-5 | 237 (33.0) |
| 6-10 | 24 (3.3) |
| More than 10 | 14 (1.9) |
| Total | 718 |



The table below shows the frequency of meetings with the Superintendent by school type

| Number of meetings with Superintendent | Frequency (%) | | |
|--|---------------|-----------|------------|
| | Elementary | Middle | High |
| 0 | 211 (65.9) | 79 (59.4) | 100 (57.5) |
| 1-5 | 101 (31.6) | 49 (36.8) | 66 (37.9) |
| 6-10 | 6 (1.9) | 5 (3.8) | 5 (2.9) |
| More than 10 | 2 (0.6) | 0 (0) | 3 (1.7) |
| Total | 320 | 133 | 174 |



An ANOVA was conducted to evaluate the association between the number of meetings with the superintendent and school type. There was no significant difference by school type.

Descriptive information of number of meetings with superintendent by school type.

| | Number | <i>M</i> ^a | <i>SD</i> | <i>SE</i> |
|----------------|--------|-----------------------|-----------|-----------|
| Elementary | 320 | 1.37 | .556 | .031 |
| Middle | 133 | 1.44 | .570 | .049 |
| High | 174 | 1.49 | .643 | .049 |
| Total | 627 | 1.42 | .586 | .023 |
| Model | | | | |
| Fixed Effects | | | .584 | .023 |
| Random Effects | | | | .038 |

^a The scale range is as follows: 1= 0, 2= 1 to 5 times, 3= 6 to 10 times, 4= more than 10 times

^b There was no significant difference by school type

The data show that 38.3% of school librarians meet with their superintendent during the school year. There were no significant differences in frequency according to school type.

Question 59 gathered data on frequency of participation in a number of district and school committees. The tables and graphs below summarize the frequency and percentages of participation in various school committees.

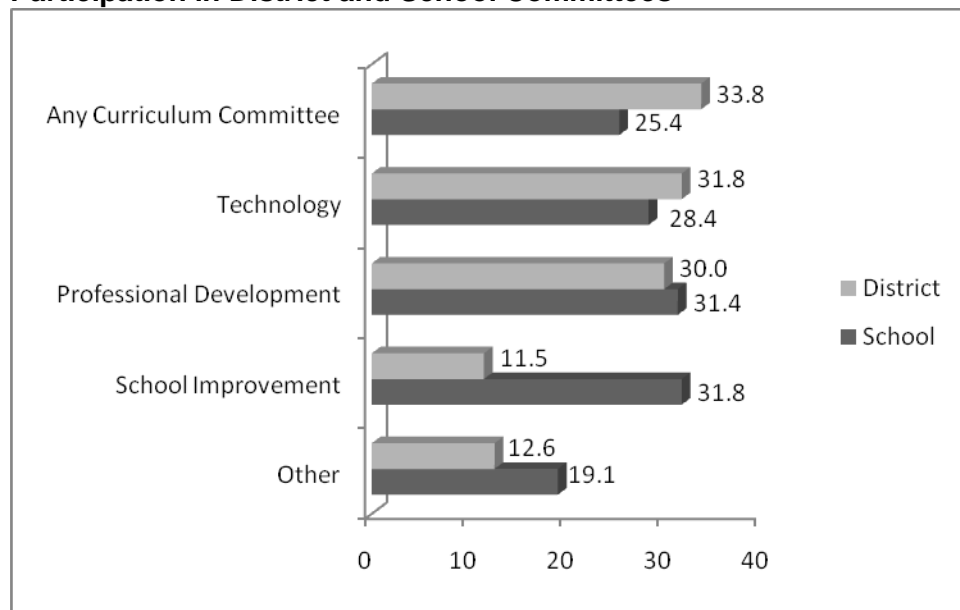
Participation in District Committees

| | Any Curriculum Committee | Technology | Professional Development | School Improvement | Other |
|-----------|-----------------------------|-------------|-----------------------------|-----------------------|-------------|
| | Number (%) | Number (%) | Number (%) | Number (%) | Number (%) |
| Yes | 258 (33.8) | 243 (31.8) | 229 (30.0) | 88 (11.5) | 96 (12.6) |
| No | 254 (33.2) | 242 (31.7) | 273 (35.7) | 249 (32.6) | 122 (16.0) |
| N/A | 32 (4.2) | 47 (6.2) | 27 (3.5) | 92 (12.0) | 56 (7.3) |
| No Answer | 220 (28.8) | 232 (30.4) | 235 (30.8) | 335 (43.8) | 490 (64.1) |
| Total | 764 (100.0) | 764 (100.0) | 764 (100.0) | 764 (100.0) | 764 (100.0) |

Participation in School Committees

| | Any Curriculum Committee | Technology | Professional Development | School Improvement | Other |
|-----------|--------------------------|-------------|--------------------------|--------------------|-------------|
| | Number (%) | Number (%) | Number (%) | Number (%) | Number (%) |
| Yes | 194 (25.4) | 217 (28.4) | 240 (31.4) | 243 (31.8) | 146 (19.1) |
| No | 216 (28.3) | 162 (21.2) | 205 (26.8) | 201 (26.3) | 93 (12.2) |
| N/A | 84 (11.0) | 116 (15.2) | 73 (9.6) | 106 (13.9) | 69 (9.0) |
| No Answer | 270 (35.3) | 269 (35.2) | 246 (32.2) | 214 (28.0) | 456 (59.7) |
| Total | 764 (100.0) | 764 (100.0) | 764 (100.0) | 764 (100.0) | 764 (100.0) |

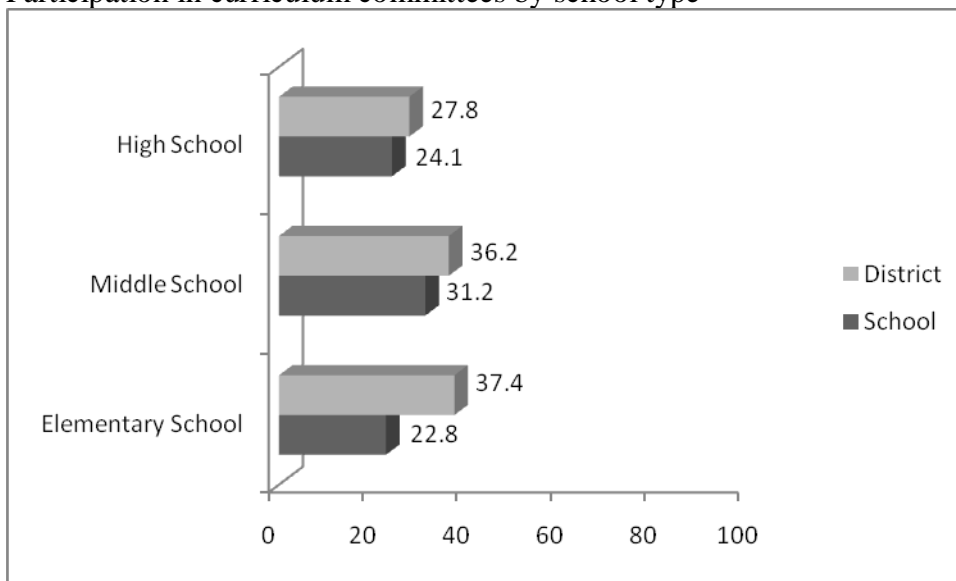
Participation in District and School Committees



Participation in curriculum committee by school type

| | | Elementary School (N=337) | Middle School (N=141) | High School (N=187) |
|----------|-----------|------------------------------|--------------------------|------------------------|
| | | Number (%) | Number (%) | Number (%) |
| District | Yes | 126 (37.4) | 51 (36.2) | 52 (27.8) |
| | No | 123 (36.5) | 48 (34.0) | 61 (32.6) |
| | N/A | 6 (1.8) | 2 (1.4) | 15 (8.0) |
| | No Answer | 82 (24.3) | 40 (28.4) | 59 (31.6) |
| School | Yes | 77 (22.8) | 44 (31.2) | 45 (24.1) |
| | No | 94 (27.9) | 37 (26.2) | 64 (34.2) |
| | N/A | 44 (13.1) | 15 (10.6) | 14 (7.5) |
| | No Answer | 122 (36.2) | 45 (31.9) | 64 (34.2) |

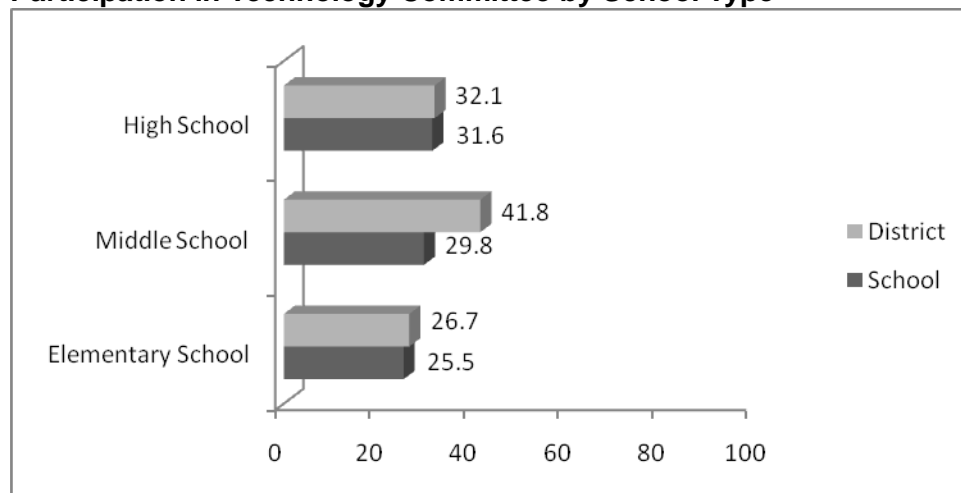
Participation in curriculum committees by school type



Participation in technology committees by school type

| | | Elementary School (N=337) | Middle School (N=141) | High School (N=187) |
|----------|-----------|------------------------------|--------------------------|------------------------|
| | | Number (%) | Number (%) | Number (%) |
| District | Yes | 90 (26.7) | 59 (41.8) | 60 (32.1) |
| | No | 132 (39.2) | 36 (25.5) | 53 (28.3) |
| | N/A | 17 (5.0) | 7 (5.0) | 14 (7.5) |
| | No Answer | 98 (29.1) | 39 (27.7) | 60 (32.1) |
| School | Yes | 86 (25.5) | 42 (29.8) | 59 (31.6) |
| | No | 77 (22.8) | 22 (15.6) | 46 (24.6) |
| | N/A | 55 (16.3) | 27 (19.1) | 23 (12.3) |
| | No Answer | 119 (35.3) | 50 (35.5) | 59 (31.6) |

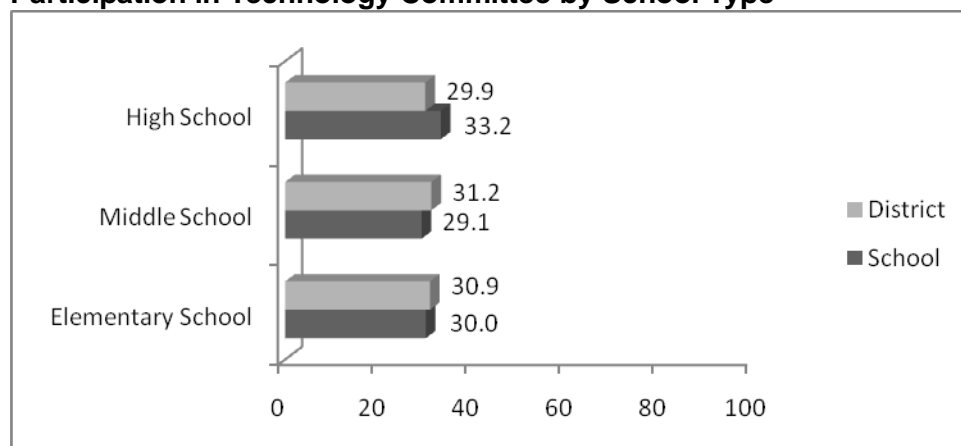
Participation in Technology Committee by School Type



Participation in the school / district professional development committees by school type.

| | | Elementary School (N=337) | Middle School (N=141) | High School (N=187) |
|----------|-----------|------------------------------|--------------------------|------------------------|
| | | Number (%) | Number (%) | Number (%) |
| District | Yes | 104 (30.9) | 44 (31.2) | 56 (29.9) |
| | No | 132 (39.2) | 54 (38.3) | 62 (33.2) |
| | N/A | 7 (2.1) | 5 (3.5) | 9 (4.8) |
| | No Answer | 94 (27.9) | 38 (27.0) | 60 (32.1) |
| School | Yes | 101 (30.0) | 41 (29.1) | 62 (33.2) |
| | No | 91 (27.0) | 36 (25.5) | 56 (29.9) |
| | N/A | 40 (11.9) | 17 (12.1) | 10 (5.3) |
| | No Answer | 105 (31.2) | 47 (33.3) | 59 (31.6) |

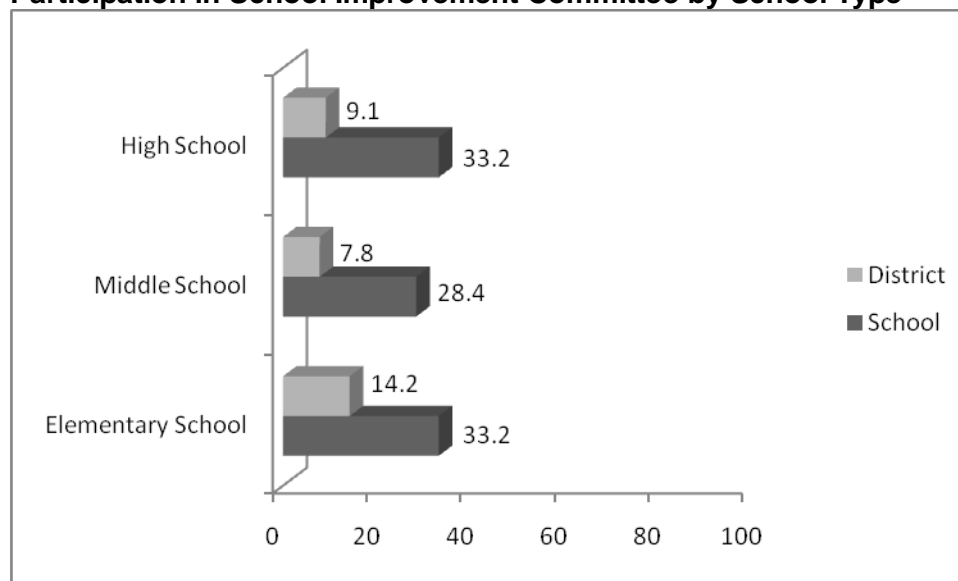
Participation in Technology Committee by School Type



Participation in school / district school improvement committees by school type.

| | | Elementary School (N=337) | Middle School (N=141) | High School (N=187) |
|----------|-----------|---------------------------------|-----------------------------|------------------------|
| | | Number (%) | Number (%) | Number (%) |
| District | Yes | 48 (14.2) | 11 (7.8) | 17 (9.1) |
| | No | 116 (34.4) | 47 (33.3) | 63 (33.7) |
| | N/A | 37 (11.0) | 20 (14.2) | 23 (12.3) |
| | No Answer | 136 (40.4) | 63 (44.7) | 84 (44.9) |
| School | Yes | 112 (33.2) | 40 (28.4) | 62 (33.2) |
| | No | 89 (26.4) | 33 (23.4) | 57 (30.5) |
| | N/A | 47 (13.9) | 27 (19.1) | 19 (10.2) |
| | No Answer | 89 (26.4) | 41 (29.1) | 49 (26.2) |

Participation in School Improvement Committee by School Type



The data show a robust contribution by a number of school librarians to various committee work in schools and districts, outside of the immediate arena of the school library, indicating an active participation in the decision making processes of the school.

Question 60 asked participants to list the activities that they have undertaken during 2008-2009 for their own professional development / education / learning

School librarians show a high level of belonging to professional associations, both within the library community as well as the educational community. Of the 765 participants, 98.9% have membership or affiliation with at least one professional association. This is predominantly, but not solely, the New Jersey Association of School Librarians. 83% of the participants have membership with more than one professional association, including regional library and school library associations, educational associations.

The following is the break down of participation in Associations, by frequency.

The most frequently listed associations are:

| Association | Number of Participants |
|--|------------------------|
| Library Associations (State / National) | |
| New Jersey Association of School Librarians (NJASL) | 558 |
| American Library Association (ALA) | 126 |
| American Association of School Librarians (AASL) | 125 |
| New Jersey Library Association (NJLA) | 61 |
| Young Adult Library Services Association (YALSA) | 32 |
| New Jersey Special Library Association (NJSLA) | 13 |
| Regional NJ Library Associations | |
| Regional county school library associations, such as Bergen/Passaic Educational media Association, Sussex County Library Media Association | 235 |
| Regional county library associations, such as Hunterdon County Library Association, Gloucester Country Library Association | 125 |
| National and State Reading Associations | |
| Various New Jersey Reading Councils | 18 |
| Keystone (Pennsylvania) Reading Association | 9 |
| Educational Associations | |
| National Education Association (NEA) and New Jersey Education Association | 143 |
| Regional educational associations, such as Burlington County Education Association, Bedminster Education Association, Morris Country Education Association | 121 |

| | |
|--|----|
| Association for Supervision and Curriculum Development) ASCD | 17 |
| International Society for Technology in Education (ISTE) | 16 |
| Association for Educational Communications and Technology (AECT) | 15 |
| New Jersey Teachers of English - Teachers of English To Speakers of Other Languages (NJTESOL) | 5 |
| National Association for Bilingual Education (NABE) | 5 |
| In addition, a plethora of individual associations were listed, for example New Jersey Business Education Association New Jersey Business teachers Association Association of Independent School Librarians Association of Catholic Librarians Association of Jewish Librarians | |

Question 61 gathered data on the scope of school librarians' involvement in professional development. School librarians in New Jersey engage in a diverse range of professional development activities. 2261 instances of professional development were documented, representing an average of 3 discrete professional development activities by each of the 756 participants who engaged in professional development (98.8% of sample). However, these results do not adequately convey the extent of participation. A substantive number of responses embedded multiple activities in a single statement: "attended several workshops and district training"; "professional development workshops, seminars and conferences"; "voluntary professional development programs at school and district"; "NJEA convention, literacy workshop and mentoring training sessions"

The following table provides an overview of the diversity of this professional development, and particularly professional development beyond the immediate school library context.

| Type of Activity | Examples |
|---|---|
| Annual state and national conferences: school library, library, education | NJASL conference NJLA conference NJEA Convention AASL, Fall Forum ALA Annual / midwinter Learning Symposium African American Authors Convention |
| Workshops / Seminars: School Library | Guided Inquiry Virtual Reference EBSCO training Follett software training Strengthening your 21 st Century School Library Program |

| | |
|--|---|
| | Archives Marketing Your Library AASL Learning Standards |
| Workshops / Seminars: Learning | Applied Learning Trends Problem based learning Differentiated Instruction Digital Learning Character Education Partnerships Identifying and Teaching Reluctant Learners Language Arts Testing Curriculum Assessment Mixing in Math Understanding at risk students Better Brains, Better Bodies State Testing Seminars Using Art to Enhance Learning Teaching the Holocaust |
| Workshops / Seminars Technology | Smartboard training Internet Safety for Educators Creating wikis and blogs Specialist certification for PowerPoint Digital camcorder training Software training Website development training Brain Pop Google Earth Social Networking training Movie Maker training E-Portfolios |
| Workshops / Seminars Reading Literacy | Best Books for Young Adults Book Expo Book Evaluation Best Young Adult Books of the Decade Follett Book Look Young Adults and literacy Developing summer Reading Boys and Books Literature Circles |
| Workshops / Seminars School General | CPR & Defibrillator Training Understanding Children from Poverty Affirmative Action training Grant Writing School-Wide safety Youth Suicide Child Abuse and Neglect Green Schools |

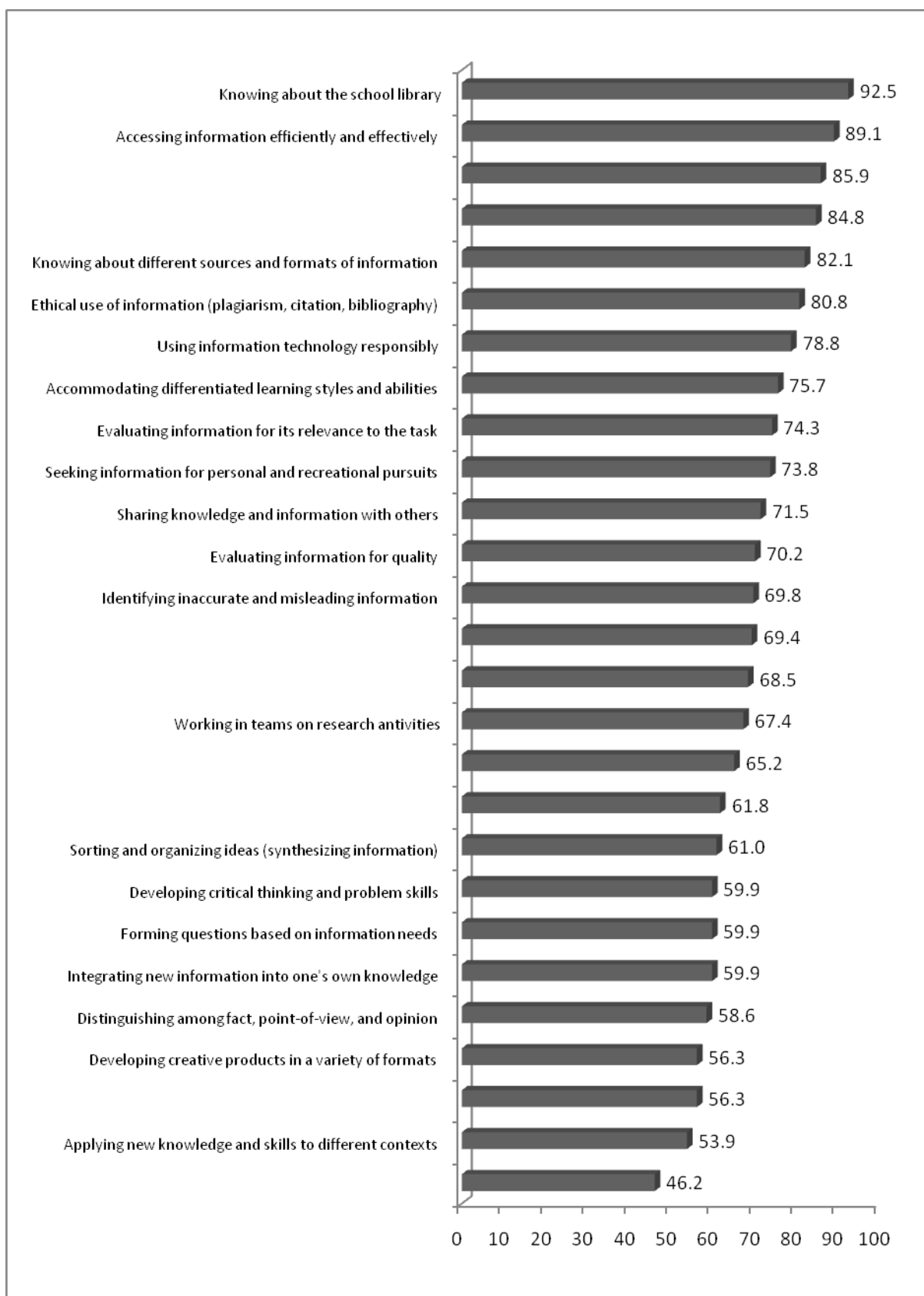
| | |
|---|--|
| | Prejudice Reduction |
| District Professional Days / District Inservice | At-Risk students Assessment Gifted and Talented Students Webquests |
| Graduate Studies | University post-masters courses University-based certification courses Supervision and Organizational Theory Principal Certification Graduate courses in doctoral degree |
| County meetings | School library programs Book evaluations Use of databases |
| Webinars and Online training | Principals' Guide to a Powerful Library Media Program Plagiarism in the Digital Age Points of View |
| Listservs / blogs | Twitter LM-Net Various edublogs Follow various library blogs |

Question 62 focuses on the information literacy instruction that school librarians have provided FOR STUDENTS. The list of capabilities / skills is based on the AASL *Information Power Information Literacy Standards* and *Standards for the 21st Century Learner*.

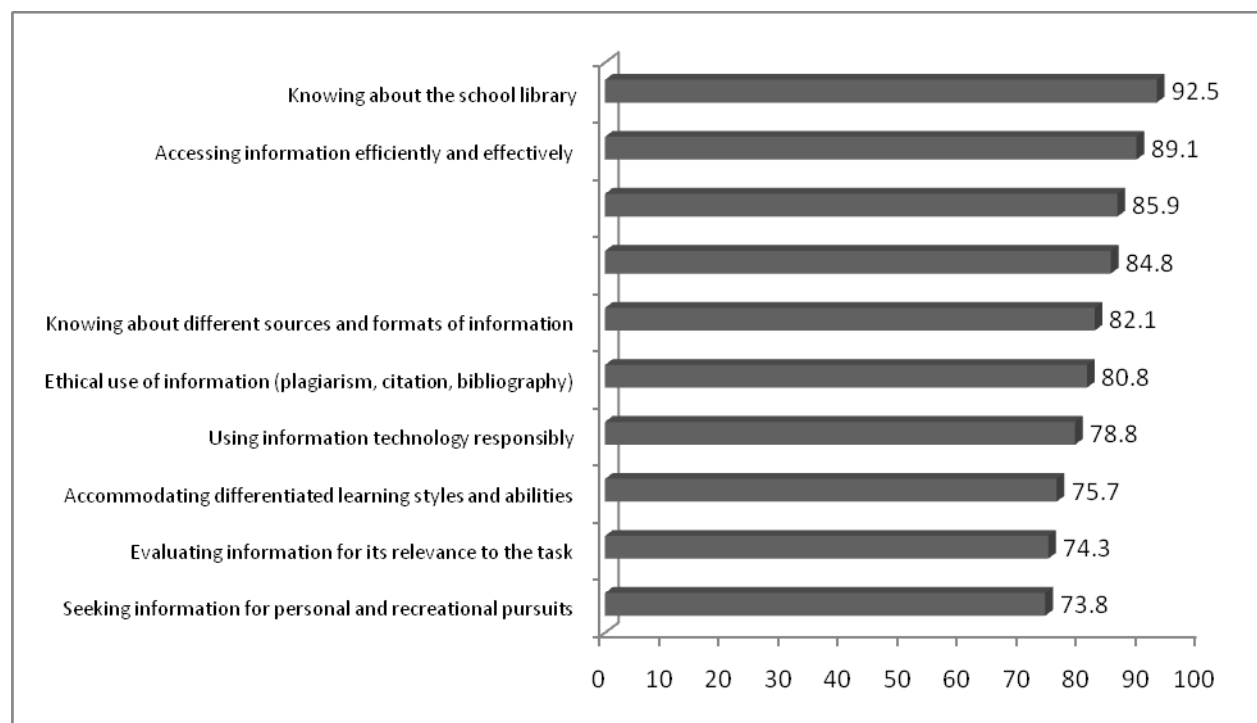
The following table shows the frequency and percentage of types of information literacy instruction for students in all school types (N=764)

| Ranking | Information Literacy for Students | Number (%) |
|---------|---|------------|
| 1 | Knowing about the school library | 707 (92.5) |
| 2 | Accessing information efficiently and effectively | 681 (89.1) |
| 3 | Knowing how to use the different sources and formats of information | 656 (85.9) |
| 4 | Strategies for finding, evaluating, and selecting appropriate sources to answer questions | 648 (84.8) |
| 5 | Knowing about different sources and formats of information | 627 (82.1) |
| 6 | Ethical use of information (plagiarism, citation, bibliography) | 617 (80.8) |
| 7 | Using information technology responsibly | 602 (78.8) |
| 8 | Accommodating differentiated learning styles and abilities | 578 (75.7) |
| 9 | Evaluating information for its relevance to the task | 568 (74.3) |
| 10 | Seeking information for personal and recreational pursuits | 564 (73.8) |
| 11 | Sharing knowledge and information with others | 546 (71.5) |
| 12 | Evaluating information for quality | 537 (70.2) |

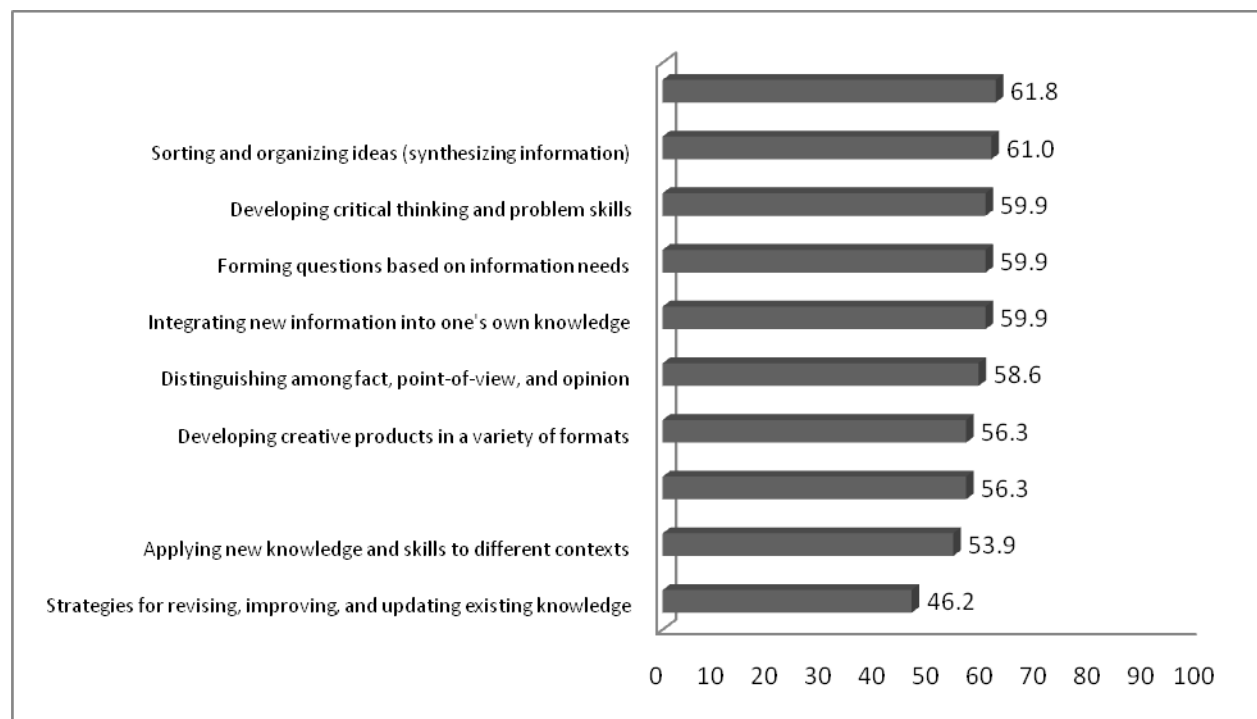
| | | |
|----|--|------------|
| 13 | Identifying inaccurate and misleading information | 533 (69.8) |
| 14 | Understanding the different strategies in doing effective research | 530 (69.4) |
| 15 | Selecting information appropriate to the problem or question at hand | 523 (68.5) |
| 16 | Working in teams on research activities | 515 (67.4) |
| 17 | Identifying main ideas in information sources (analyzing information) | 498 (65.2) |
| 18 | Producing and communicating information and ideas in appropriate formats | 472 (61.8) |
| 19 | Sorting and organizing ideas (synthesizing information) | 466 (61.0) |
| 20 | Integrating new information into one's own knowledge | 458 (59.9) |
| 20 | Forming questions based on information needs | 458 (59.9) |
| 20 | Developing critical thinking and problem skills | 458 (59.9) |
| 23 | Distinguishing among fact, point-of-view, and opinion | 448 (58.6) |
| 24 | Developing creative products in a variety of formats | 430 (56.3) |
| 24 | Deriving meaning from information presented in a variety of formats | 430 (56.3) |
| 26 | Applying new knowledge and skills to different contexts | 412 (53.9) |
| 27 | Strategies for revising, improving, and updating existing knowledge | 353 (46.2) |



Highest ranked information literacy initiatives (10) in all school types



Lowest ranked information literacy initiatives (10) in all school types



Top 10 information literacy initiatives by Type of School

Top 10 in Elementary School (n= 337)

| Ranking | Information Literacy for Students | Number (%) |
|---------|---|------------|
| 1 | Knowing about the school library | 315 (93.5) |
| 2 | Accessing information efficiently and effectively | 297 (88.1) |
| 3 | Knowing how to use the different sources and formats of information | 284 (84.3) |
| 4 | Strategies for finding, evaluating, and selecting appropriate sources to answer questions | 278 (82.5) |
| 5 | Knowing about different sources and formats of information | 263 (78.0) |
| 6 | Accommodating differentiated learning styles and abilities | 260 (77.2) |
| 7 | Seeking information for personal and recreational pursuits | 254 (75.4) |
| 8 | Sharing knowledge and information with others | 253 (75.1) |
| 9 | Using information technology responsibly | 244 (72.4) |
| 10 | Ethical use of information (plagiarism, citation, bibliography) | 242 (71.8) |

Top 10 in Middle School (n=141)

| Ranking | Information Literacy for Students | Number (%) |
|---------|---|------------|
| 1 | Knowing about the school library | 132 (93.6) |
| 2 | Accessing information efficiently and effectively | 130 (92.2) |
| 3 | Ethical use of information (plagiarism, citation, bibliography) | 128 (90.8) |
| 4 | Knowing how to use the different sources and formats of information | 127 (90.1) |
| 5 | Strategies for finding, evaluating, and selecting appropriate sources to answer questions | 126 (89.4) |
| 6 | Knowing about different sources and formats of information | 124 (87.9) |
| 7 | Using information technology responsibly | 123 (87.2) |
| 8 | Identifying inaccurate and misleading information | 116 (82.3) |
| 9 | Evaluating information for its relevance to the task | 112 (79.4) |
| 9 | Understanding the different strategies in doing effective research | 112 (79.4) |

Top 10 in High School (n=187)

| Ranking | Information Literacy for Students | Number (%) |
|---------|---|------------|
| 1 | Knowing about the school library | 172 (92.0) |
| 2 | Accessing information efficiently and effectively | 169 (90.4) |
| 3 | Ethical use of information (plagiarism, citation, bibliography) | 164 (87.7) |
| 4 | Strategies for finding, evaluating, and selecting appropriate sources to answer questions | 161 (86.1) |
| 5 | Knowing how to use the different sources and formats of information | 159 (85.0) |

| | | |
|---|--|------------|
| 5 | Knowing about different sources and formats of information | 159 (85.0) |
| 7 | Using information technology responsibly | 158 (84.5) |
| 8 | Evaluating information for quality | 150 (80.2) |
| 9 | Evaluating information for its relevance to the task | 144 (77.0) |
| 9 | Identifying inaccurate and misleading information | 144 (77.0) |
| 9 | Understanding the different strategies in doing effective research | 144 (77.0) |

All school types have the following skills in their top 10 for students' information literacy:

Knowing about the school library

Accessing information efficiently and effectively

Knowing how to use the different sources and formats of information

Strategies for finding, evaluating, and selecting appropriate sources to answer questions

Knowing about different sources and formats of information

Using information technology responsibly

Ethical use of information (plagiarism, citation, bibliography)

“Knowing about the school library” ranks #1 in all school types.

“Accessing information efficiently and effectively” ranks #2 in all school types.

Lowest ranked information literacy initiatives (10) in Elementary School (n= 337)

| Ranking | Information Literacy for Students | Number (%) |
|---------|--|------------|
| 18 | Understanding the different strategies in doing effective research | 207 (61.4) |
| 19 | Identifying inaccurate and misleading information | 205 (60.8) |
| 19 | Evaluating information for quality | 205 (60.8) |
| 21 | Deriving meaning from information presented in a variety of formats | 199 (59.1) |
| 22 | Forming questions based on information needs | 197 (58.5) |
| 23 | Producing and communicating information and ideas in appropriate formats | 196 (58.2) |
| 24 | Developing creative products in a variety of formats | 192 (57.0) |
| 25 | Applying new knowledge and skills to different contexts | 186 (55.2) |
| 25 | Distinguishing among fact, point-of-view, and opinion | 186 (55.2) |
| 27 | Strategies for revising, improving, and updating existing knowledge | 142 (42.1) |

Lowest ranked information literacy initiatives (10) in middle schools (n=141)

| Ranking | Information Literacy for Students | Number (%) |
|---------|--|------------|
| 17 | Producing and communicating information and ideas in appropriate formats | 94 (66.7) |
| 17 | Forming questions based on information needs | 94 (66.7) |
| 17 | Sorting and organizing ideas (synthesizing information) | 94 (66.7) |
| 20 | Identifying main ideas in information sources (analyzing information) | 87 (61.7) |
| 21 | Distinguishing among fact, point-of-view, and opinion | 86 (61.0) |
| 22 | Integrating new information into one's own knowledge | 82 (58.2) |
| 23 | Developing critical thinking and problem skills | 81 (57.4) |
| 24 | Deriving meaning from information presented in a variety of formats | 79 (56.0) |
| 24 | Developing creative products in a variety of formats | 79 (56.0) |
| 26 | Applying new knowledge and skills to different contexts | 76 (53.9) |
| 27 | Strategies for revising, improving, and updating existing knowledge | 64 (45.4) |

Lowest ranked information literacy initiatives (10) in High School (n=187)

| Ranking | Information Literacy for Students | Number (%) |
|---------|---|------------|
| 18 | Forming questions based on information needs | 110 (58.8) |
| 19 | Working in teams on research activities | 107 (57.2) |
| 20 | Integrating new information into one's own knowledge | 104 (55.6) |
| 21 | Identifying main ideas in information sources (analyzing information) | 102 (54.5) |
| 21 | Developing creative products in a variety of formats | 102 (54.5) |
| 23 | Sorting and organizing ideas (synthesizing information) | 100 (53.5) |
| 23 | Deriving meaning from information presented in a variety of formats | 100 (53.5) |
| 25 | Developing critical thinking and problem skills | 98 (52.4) |
| 26 | Strategies for revising, improving, and updating existing knowledge | 97 (51.9) |
| 27 | Applying new knowledge and skills to different contexts | 96 (51.3) |

All school types have the following skills in their lowest rank for students' information literacy:
Deriving meaning from information presented in a variety of formats
Forming questions based on information needs
Developing creative products in a variety of formats
Applying new knowledge and skills to different contexts
Forming strategies for revising, improving, and updating existing knowledge.

Although these skills are ranked lowest, they are dimensions of an information literacy focus on knowledge construction, and are generally considered to be in the domain of classroom teachers. Accordingly, the extent of participation in these instructional activities is encouraging to see.

An ANOVA analysis was undertaken to identify significant patterns. Data from the two-way contingency table analysis is presented here.

| | Elementary School (N=337) | Middle School (N=141) | High School (N=187) | Total | χ^2 |
|---|------------------------------|--------------------------|------------------------|----------------|--------------|
| Knowing about the school library | 315 (50.9) | 132 (21.3) | 172 (27.8) | 619 (100.0) | 1.92 |
| Accessing information efficiently and effectively | 297 (49.8) | 130 (21.8) | 169 (28.4) | 596 (100.0) | 5.91 |
| Strategies for finding, evaluating, and selecting appropriate sources to answer questions | 278 (49.2) | 126 (22.3) | 161 (28.5) | 565 (100.0) | 7.11* |
| Knowing how to use the different sources and formats of information | 284 (49.8) | 127 (22.3) | 159 (27.9) | 570 (100.0) | 4.20 |
| Evaluating information for its relevance to the task | 235 (47.9) | 112 (22.8) | 144 (29.3) | 491 (100.0) | 8.65* |
| Identifying inaccurate and misleading information | 205 (44.1) | 116 (24.9) | 144 (31.0) | 465 (100.0) | 34.40** * |
| Identifying main ideas in information sources (analyzing information) | 240 (55.9) | 87 (20.3) | 102 (23.8) | 429 (100.0) | 14.87** |
| Integrating new information into one's own knowledge | 213 (53.4) | 82 (20.6) | 104 (26.1) | 399 (100.0) | 2.65 |
| Producing and communicating information and ideas in appropriate formats | 196 (48.0) | 94 (23.0) | 118 (28.9) | 408 (100.0) | 4.14 |
| Applying new knowledge and skills to different contexts | 186 (52.0) | 76 (21.2) | 96 (26.8) | 358 (100.0) | .41 |
| Understanding the different strategies in doing effective research | 207 (44.7) | 112 (24.2) | 144 (31.1) | 463 (100.0) | 27.55** * |

| | | | | | |
|--|---------------|---------------|---------------|----------------|--------------|
| Forming questions based on information needs | 197 (49.1) | 94 (23.4) | 110 (27.4) | 401 (100.0) | 3.06 |
| Knowing about different sources and formats of information | 263 (48.2) | 124 (22.7) | 159 (29.1) | 546 (100.0) | 13.09** |
| Evaluating information for quality | 205 (44.1) | 110 (23.7) | 150 (32.3) | 465 (100.0) | 34.50** * |
| Distinguishing among fact, point-of-view, and opinion | 186 (47.6) | 86 (22.0) | 119 (30.4) | 391 (100.0) | 5.32 |
| Selecting information appropriate to the problem or question at hand | 218 (47.1) | 109 (23.5) | 136 (29.4) | 463 (100.0) | 10.96** |
| Sorting and organizing ideas (synthesizing information) | 210 (52.0) | 94 (23.3) | 100 (24.8) | 404 (100.0) | 5.78 |
| Developing critical thinking and problem skills | 219 (55.0) | 81 (20.4) | 98 (24.6) | 398 (100.0) | 7.76* |
| Seeking information for personal and recreational pursuits | 254 (51.8) | 103 (21.0) | 133 (27.1) | 490 (100.0) | .70 |
| Deriving meaning from information presented in a variety of formats | 199 (52.6) | 79 (20.9) | 100 (26.5) | 378 (100.0) | 1.16 |
| Developing creative products in a variety of formats | 192 (51.5) | 79 (21.2) | 102 (27.3) | 373 (100.0) | .10 |
| Ethical use of information (plagiarism, citation, bibliography) | 242 (45.3) | 128 (24.0) | 164 (30.7) | 534 (100.0) | 45.46** * |
| Sharing knowledge and information with others | 253 (53.4) | 98 (20.7) | 123 (25.9) | 474 (100.0) | 4.78 |
| Accommodating differentiated learning styles and abilities | 260 (52.0) | 111 (22.2) | 129 (25.8) | 500 (100.0) | 4.60 |
| Strategies for revising, improving, and updating existing knowledge | 142 (46.9) | 64 (21.1) | 97 (32.0) | 303 (100.0) | 5.85 |
| Using information technology responsibly | 244 (46.5) | 123 (23.4) | 158 (30.1) | 525 (100.0) | 25.75** * |
| Working in teams on research activities | 234 (52.6) | 104 (23.4) | 107 (24.0) | 445 (100.0) | 11.15** |

*p<.05 **p<.01 *** p<.001

Follow-up pairwise comparisons were conducted to evaluate the difference. The Holm's sequential Bonferroni method was used to control for Type I error at the .05 across all three comparisons.

Strategies for finding, evaluating, and selecting appropriate sources to answer questions

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | .27 | .60 | | NS | .03 |
| Elementary vs. high | 3.64 | .056 | | NS | .09 |
| Elementary vs. middle | 4.93 | .026 | .0167 | NS | .10 |

Evaluating information for its relevance to the task

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | .04 | .848 | | NS | .01 |
| Elementary vs. high | 5.48 | .019 | .0167 | NS | .11 |
| Elementary vs. middle | 5.40 | .020 | | NS | .11 |

Identifying inaccurate and misleading information

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | .84 | .361 | .05 | NS | .05 |
| Elementary vs. high | 19.00 | .000 | .0167 | * | .20 |
| Elementary vs. middle | 23.09 | .000 | .0167 | * | .23 |

Identifying main ideas in information sources (analyzing information)

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | 1.27 | .260 | | NS | .06 |
| Elementary vs. high | 14.20 | .000 | .0167 | * | .17 |
| Elementary vs. middle | 4.76 | .029 | .025 | NS | .10 |

Understanding the different strategies in doing effective research

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | .04 | .848 | .05 | NS | .01 |
| Elementary vs. high | 17.90 | .000 | .0167 | * | .19 |
| Elementary vs. middle | 16.14 | .000 | .0167 | * | .19 |

Knowing about different sources and formats of information

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | .14 | .712 | .05 | NS | .02 |
| Elementary vs. high | 7.65 | .006 | .025 | * | .12 |
| Elementary vs. middle | 8.04 | .005 | .0167 | * | .13 |

Evaluating information for quality

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | .98 | .323 | .05 | NS | .06 |
| Elementary vs. high | 27.33 | .000 | .0167 | * | .24 |
| Elementary vs. middle | 14.45 | .000 | .0167 | * | .18 |

Selecting information appropriate to the problem or question at hand

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | .47 | .492 | .05 | NS | .04 |
| Elementary vs. high | 5.59 | .018 | .025 | * | .11 |
| Elementary vs. middle | 8.19 | .004 | .0167 | * | .13 |

Developing critical thinking and problem skills

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | .53 | .467 | | NS | .04 |
| Elementary vs. high | 7.20 | .007 | .0167 | * | .12 |
| Elementary vs. middle | 2.69 | .101 | .025 | NS | .08 |

Ethical use of information (plagiarism, citation, bibliography)

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | .25 | .619 | .05 | NS | .03 |
| Elementary vs. high | 26.71 | .000 | .0167 | * | .23 |
| Elementary vs. middle | 24.80 | .000 | .0167 | * | .23 |

Using information technology responsibly

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | .09 | .762 | .05 | NS | .02 |
| Elementary vs. high | 15.76 | .000 | .0167 | * | .18 |
| Elementary vs. middle | 14.73 | .000 | .0167 | * | .18 |

Working in teams on research activities

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | 9.12 | .003 | .0167 | * | .17 |
| Elementary vs. high | 7.13 | .008 | .025 | * | .12 |
| Elementary vs. middle | 1.00 | .317 | .05 | NS | .05 |

| | 1-3 yrs (N=205) | 4-10 yrs (N=296) | 11-20 yrs (N=151) | More than 20 yrs (N=102) | Total (N=754) | χ^2 |
|---|--------------------|---------------------|-------------------------|--------------------------------|------------------|----------|
| Knowing about the school | 184 (26.0) | 278 (39.3) | 146 (20.7) | 99 (14.0) | 707 (100.0) | 7.69 |
| Accessing information efficiently and effectively | 172 (25.3) | 269 (39.5) | 145 (21.3) | 95 (14.0) | 681 (100.0) | 10.80* |
| Strategies for finding, evaluating, and selecting appropriate sources to answer questions | 164 (25.3) | 260 (40.1) | 136 (21.0) | 88 (13.6) | 648 (100.0) | 6.85 |
| Knowing how to use the different sources and formats of information | 167 (25.5) | 257 (39.2) | 138 (21.0) | 94 (14.3) | 656 (100.0) | 3.37 |
| Evaluating information for its relevance to the task | 139 (24.5) | 233 (41.0) | 117 (20.6) | 79 (13.9) | 568 (100.0) | 6.17 |
| Identifying inaccurate and misleading information | 140 (26.3) | 217 (40.7) | 100 (18.8) | 76 (14.3) | 533 (100.0) | 4.27 |
| Identifying main ideas in information sources (analyzing information) | 122 (24.5) | 199 (40.0) | 110 (22.1) | 67 (13.5) | 498 (100.0) | 5.04 |
| Integrating new information into one's own knowledge | 118 (25.8) | 182 (39.7) | 91 (19.9) | 67 (14.6) | 458 (100.0) | .65 |
| Producing and communicating information and ideas in appropriate formats | 118 (25.0) | 189 (40.0) | 102 (21.6) | 63 (13.3) | 472 (100.0) | 2.78 |
| Applying new knowledge and skills to different contexts | 100 (24.3) | 161 (39.1) | 87 (21.1) | 64 (15.5) | 412 (100.0) | 2.94 |
| Understanding the different strategies in doing effective research | 127 (24.0) | 214 (40.4) | 111 (20.9) | 78 (14.7) | 530 (100.0) | 5.65 |
| Forming questions based on information needs | 113 (24.7) | 181 (39.5) | 100 (21.8) | 64 (14.0) | 458 (100.0) | 2.54 |
| Knowing about different sources and formats of information | 157 (25.0) | 249 (39.7) | 133 (21.2) | 88 (14.0) | 627 (100.0) | 4.89 |
| Evaluating information for quality | 131 (24.4) | 223 (41.6) | 107 (20.0) | 75 (14.0) | 536 (100.0) | 6.46 |
| Distinguishing among fact, point-of-view, and opinion | 110 (24.6) | 172 (38.4) | 103 (23.0) | 63 (14.1) | 448 (100.0) | 5.28 |
| Selecting information appropriate to the problem or question at hand | 125 (23.9) | 212 (40.5) | 110 (21.0) | 76 (14.5) | 523 (100.0) | 5.68 |
| Sorting and organizing ideas (synthesizing information) | 123 (26.4) | 184 (39.5) | 97 (20.8) | 62 (13.3) | 466 (100.0) | .88 |
| Developing critical thinking and | 113 | 183 | 99 | 63 (13.8) | 458 | 2.51 |

| | | | | | | |
|---|---------------|---------------|---------------|-----------|----------------|-------------|
| problem skills | (24.7) | (40.0) | (21.6) | | (100.0) | |
| Seeking information for personal and recreational pursuits | 143 (25.4) | 216 (38.3) | 124 (22.0) | 81 (14.4) | 564 (100.0) | 4.37 |
| Deriving meaning from information presented in a variety of formats | 109 (25.3) | 172 (40.0) | 93 (21.6) | 56 (13.0) | 430 (100.0) | 2.34 |
| Developing creative products in a variety of formats | 109 (25.3) | 180 (41.9) | 91 (21.2) | 50 (11.6) | 430 (100.0) | 7.68 |
| Ethical use of information (plagiarism, citation, bibliography) | 152 (24.6) | 254 (41.2) | 129 (20.9) | 82 (13.3) | 617 (100.0) | 12.27* * |
| Sharing knowledge and information with others | 130 (23.8) | 222 (40.7) | 112 (20.5) | 82 (15.0) | 546 (100.0) | 7.85* |
| Accommodating differentiated learning styles and abilities | 153 (26.5) | 229 (39.6) | 115 (19.9) | 81 (14.0) | 578 (100.0) | .75 |
| Strategies for revising, improving, and updating existing knowledge | 85 (24.1) | 144 (40.8) | 76 (21.5) | 48 (13.6) | 353 (100.0) | 2.37 |
| Using information technology responsibly | 151 (25.1) | 238 (39.5) | 125 (20.8) | 88 (14.6) | 602 (100.0) | 2.90 |
| Working in teams on research activities | 135 (26.2) | 205 (39.8) | 103 (20.0) | 72 (14.0) | 515 (100.0) | .48 |

*p<.05 **p<.01 *** p<.001

This table shows that there is some significant – and appropriate – variation in the range of information literacy competencies, especially between high and middle schools, compared to elementary schools. Upper schools give more attention to critical evaluation of diverse information sources, the identification of main and supporting ideas (the hierarchical and associative structuring of information), the responsible and ethical use of information, and the development of critical thinking capacities.

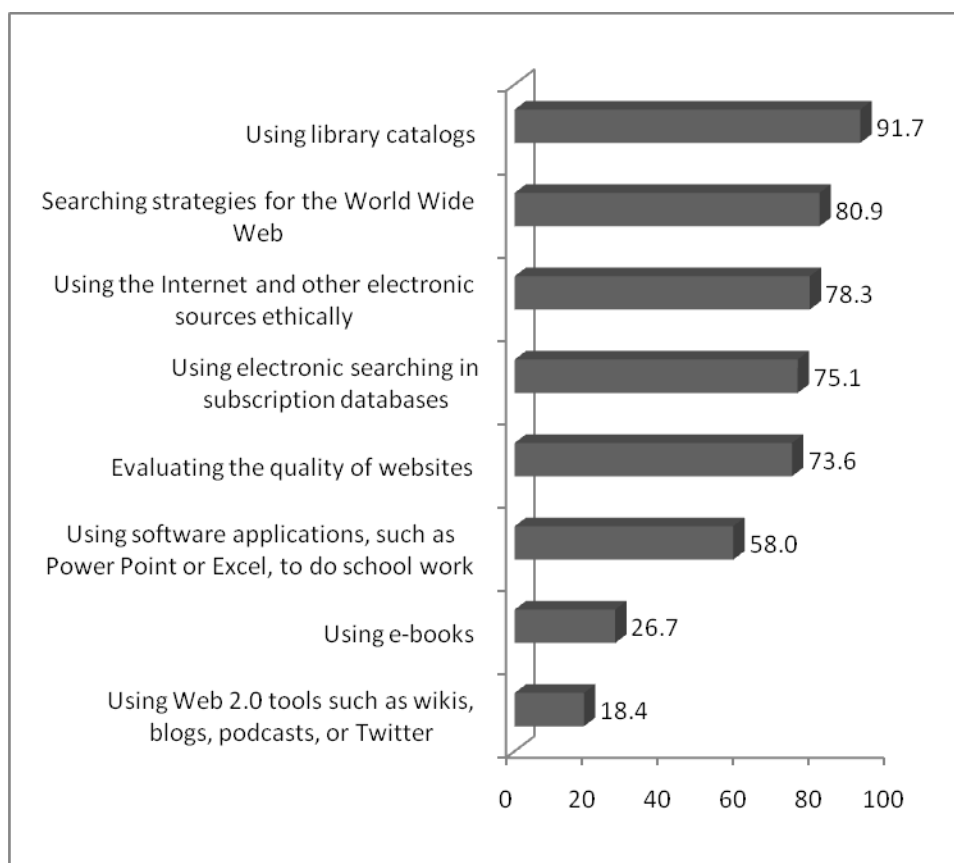
School librarians in New Jersey clearly do engage in a range of information literacy instruction initiatives. This instruction primarily centers on knowing about the school library, knowing about different sources and formats, with sound levels related to understanding the different strategies in doing effective research, learning how to use the resources, evaluating information for quality, and learning to use information ethically. It is also pleasing to see that despite issues with staffing in the elementary schools, school librarians where available are contributing substantially to this instruction.

Overall, there is an information – resource orientation, but there is also some instructional focus on knowledge-outcomes from information literacy instruction. The focus appears to be on essential skills of accessing and locating information, and evaluating its appropriateness for task and authority. There is no question that these are important competencies.

Question 63 focuses on the instruction that school librarians provide FOR STUDENTS specifically in relation to the use of information technology. The following table and graph show the frequency and percentage of types of information literacy instruction in the use of information technology for students in all school types (N=719)

Information Technology Instruction for Students (n=719)

| Ranking | Info Tech Instruction for Students | Number (%) |
|---------|--|------------|
| 1 | Using library catalogs | 659 (91.7) |
| 2 | Searching strategies for the World Wide Web | 582 (80.9) |
| 3 | Using the Internet and other electronic sources ethically | 563 (78.3) |
| 4 | Using electronic searching in subscription databases | 540 (75.1) |
| 5 | Evaluating the quality of websites | 529 (73.6) |
| 6 | Using software applications, such as Power Point or Excel, to do school work | 417 (58.0) |
| 7 | Using e-books | 192 (26.7) |
| 8 | Using Web 2.0 tools such as wikis, blogs, podcasts, or Twitter | 132 (18.4) |



Information Technology Instruction for Instruction for Students in Elementary School (n=320)

| Ranking | Info Tech Instruction | Number (%) |
|---------|--|------------|
| 1 | Using library catalogs | 288 (90.0) |
| 2 | Searching strategies for the World Wide Web | 224 (70.0) |
| 3 | Using the Internet and other electronic sources ethically | 220 (68.8) |
| 4 | Evaluating the quality of websites | 185 (57.8) |
| 5 | Using electronic searching in subscription databases | 169 (52.8) |
| 6 | Using software applications, such as Power Point or Excel, to do school work | 145 (45.3) |
| 7 | Using e-books | 32 (10.0) |
| 8 | Using Web 2.0 tools such as wikis, blogs, podcasts, or Twitter | 26 (8.1) |

Information Technology Instruction for Students in Middle School (n=134)

| Ranking | Info Tech Instruction | Number (%) |
|---------|--|------------|
| 1 | Using electronic searching in subscription databases | 126 (94.0) |
| 2 | Using library catalogs | 126 (94.0) |
| 3 | Searching strategies for the World Wide Web | 119 (88.8) |
| 4 | Using the Internet and other electronic sources ethically | 118 (88.1) |
| 5 | Evaluating the quality of websites | 115 (85.8) |
| 6 | Using software applications, such as Power Point or Excel, to do school work | 92 (68.7) |
| 7 | Using Web 2.0 tools such as wikis, blogs, podcasts, or Twitter | 41 (30.6) |
| 8 | Using e-books | 38 (28.4) |

Information Technology Instruction for Students in High School (n=174)

| Ranking | Info Tech Instruction | Number (%) |
|---------|--|------------|
| 1 | Using electronic searching in subscription databases | 170 (97.7) |
| 2 | Using library catalogs | 166 (95.4) |
| 3 | Searching strategies for the World Wide Web | 160 (92.0) |
| 4 | Evaluating the quality of websites | 158 (90.8) |
| 5 | Using the Internet and other electronic sources ethically | 154 (88.5) |
| 6 | Using software applications, such as Power Point or Excel, to do school work | 131 (75.3) |
| 7 | Using e-books | 108 (62.1) |
| 8 | Using Web 2.0 tools such as wikis, blogs, podcasts, or Twitter | 50 (28.7) |

Two-Way Contingency Table Analysis Using Crosstabs

| | Elementary School (N=320) | Middle School (N=134) | High School (N=174) | Total (N=628) | χ^2 |
|--|------------------------------|--------------------------|------------------------|------------------|---------------|
| Searching strategies for the World Wide Web | 224 (44.5) | 119 (23.7) | 160 (31.8) | 503 (100.0) | 42.18** * |
| Evaluating the quality of websites | 185 (40.4) | 115 (25.1) | 158 (34.5) | 458 (100.0) | 76.48** * |
| Using software applications, such as Power Point or Excel, to do school work | 145 (39.4) | 92 (25.0) | 131 (35.6) | 368 (100.0) | 48.85** * |
| Using electronic searching in subscription databases | 169 (36.3) | 126 (27.1) | 170 (36.6) | 465 (100.0) | 153.58* ** |
| Using library catalogs | 288 (49.7) | 126 (21.7) | 166 (28.6) | 580 (100.0) | 5.34 |
| Using e-books | 32 (18.0) | 38 (21.3) | 108 (60.7) | 178 (100.0) | 150.46* ** |
| Using the Internet and other electronic sources ethically | 220 (44.7) | 118 (24.0) | 154 (31.3) | 492 (100.0) | 35.41** * |
| Using Web 2.0 tools such as wikis, blogs, podcasts, or Twitter | 26 (22.2) | 41 (35.0) | 50 (42.7) | 117 (100.0) | 47.68** * |

*p<.05 **p<.01 *** p<.001

Follow-up pairwise comparisons were conducted to evaluate the difference. The Holm's sequential Bonferroni method was used to control for Type I error at the .05 across all three comparisons.

Searching strategies for the World Wide Web

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | .88 | .35 | .05 | NS | .05 |
| Elementary vs. high | 31.39 | .000 | .0167 | * | .25 |
| Elementary vs. middle | 18.08 | .000 | .0167 | * | .20 |

Evaluating the quality of websites

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | 1.87 | .17 | .05 | NS | .08 |
| Elementary vs. high | 57.81 | .000 | .0167 | * | .34 |
| Elementary vs. middle | 33.06 | .000 | .0167 | * | .27 |

Using software applications, such as Power Point or Excel, to do school work

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | 1.67 | .20 | .05 | NS | .07 |
| Elementary vs. high | 41.08 | .000 | .0167 | * | .29 |
| Elementary vs. middle | 20.63 | .000 | .0167 | * | .21 |

Using electronic searching in subscription databases

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | 2.73 | .10 | .05 | NS | .09 |
| Elementary vs. high | 105.48 | .000 | .0167 | * | .46 |
| Elementary vs. middle | 70.51 | .000 | .0167 | * | .39 |

Using e-books

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | 34.50 | .000 | .0167 | * | .34 |
| Elementary vs. high | 150.47 | .000 | .0167 | * | .55 |
| Elementary vs. middle | 24.41 | .000 | .0167 | * | .23 |

Using the Internet and other electronic sources ethically

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | .02 | .90 | .05 | NS | .01 |
| Elementary vs. high | 23.92 | .000 | .0167 | * | .22 |
| Elementary vs. middle | 18.51 | .000 | .0167 | * | .20 |

Using Web 2.0 tools such as wikis, blogs, podcasts, or Twitter

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | .13 | .72 | .05 | NS | .02 |
| Elementary vs. high | 36.78 | .000 | .0167 | * | .27 |
| Elementary vs. middle | 37.92 | .000 | .0167 | * | .29 |

Two-Way Contingency Table Analysis Using Crosstabs

| | 1-3 yrs (N=189) | 4-10 yrs (N=281) | 11-20 yrs (N=147) | More than 20 yrs (N=102) | Total (N=719) | χ^2 |
|--|--------------------|---------------------|-------------------------|--------------------------------|------------------|----------|
| Searching strategies for the World Wide Web | 145 (24.9) | 236 (40.5) | 120 (20.6) | 81 (13.9) | 582 (100.0) | 4.07 |
| Evaluating the quality of websites | 130 (24.6) | 216 (40.8) | 105 (19.8) | 78 (14.7) | 529 (100.0) | 4.59 |
| Using software applications, such as Power Point or Excel, to do school work | 106 (25.4) | 167 (40.0) | 93 (22.3) | 51 (12.2) | 417 (100.0) | 4.87 |
| Using electronic searching in subscription databases | 141 (26.1) | 217 (40.2) | 104 (19.3) | 78 (14.4) | 540 (100.0) | 2.29 |
| Using library catalogs | 170 (25.8) | 258 (39.2) | 138 (20.9) | 93 (14.1) | 659 (100.0) | 1.71 |
| Using e-books | 41 (21.4) | 83 (43.2) | 40 (20.8) | 28 (14.6) | 192 (100.0) | 3.63 |
| Using the Internet and other electronic sources ethically | 143 (25.4) | 223 (39.6) | 119 (21.1) | 78 (13.9) | 563 (100.0) | 1.77 |
| Using Web 2.0 tools such as wikis, blogs, podcasts, or Twitter | 39 (29.5) | 56 (42.4) | 19 (14.4) | 18 (13.6) | 132 (100.0) | 4.05 |

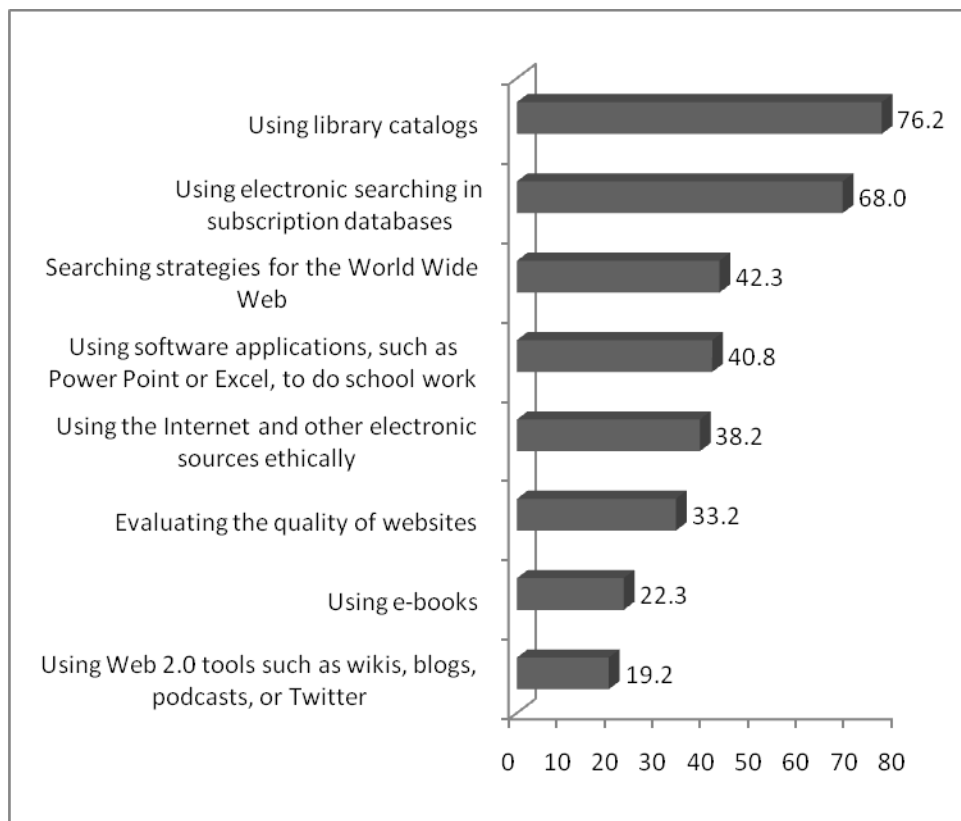
*p<.05 **p<.01 *** p<.001

School librarians in New Jersey clearly take a strong instructional role in the providing students with the intellectual and technical scaffolds to engage with information technology in efficient and productive ways. Teaching search strategies, both in relation to the internet and specialized databases, library catalogs and directories, is given the most widespread emphasis. It is particularly encouraging to see the early adoption and integration of a range of web 2.0 technologies, tools and techniques to support curriculum content standards. This is highly commendable. The contingency analysis shows that this is taking place more strongly in the high schools and middle schools, rather than in the elementary schools. Cognizant of the staffing issues raised earlier in this report, this finding presents further evidence that elementary school children may be missing significant opportunities to learn information and critical skills related to the use of information technology, not just for accessing and locating and evaluating information, but also for learning to use information technology tools and software packages to create their learning products, particularly those using web 2.0 tools. School librarians do show considerable capacity to lead this important journey in their schools.

Question 64 This question focuses on the professional development provided by school librarians FOR FACULTY specifically in relation to the use of information technology.

Information Technology Instructions for faculty

| Ranking | Info Tech Instruction for Faculty | Number (%) |
|---------|--|------------|
| 1 | Using library catalogs | 548 (76.2) |
| 2 | Using electronic searching in subscription databases | 489 (68.0) |
| 3 | Searching strategies for the World Wide Web | 304 (42.3) |
| 4 | Using software applications, such as Power Point or Excel, to do school work | 293 (40.8) |
| 5 | Using the Internet and other electronic sources ethically | 275 (38.2) |
| 6 | Evaluating the quality of websites | 239 (33.2) |
| 7 | Using e-books | 160 (22.3) |
| 8 | Using Web 2.0 tools such as wikis, blogs, podcasts, or Twitter | 138 (19.2) |



Information Technology Instruction for Faculty in Elementary School (n=320)

| Ranking | Info Tech Instruction for Faculty | Number (%) |
|---------|--|------------|
| 1 | Using library catalogs | 260 (81.2) |
| 2 | Using electronic searching in subscription databases | 157 (49.1) |
| 3 | Searching strategies for the World Wide Web | 110 (34.4) |
| 4 | Using software applications, such as Power Point or Excel, to do school work | 103 (32.2) |
| 5 | Using the Internet and other electronic sources ethically | 92 (28.8) |
| 6 | Evaluating the quality of websites | 81 (25.3) |
| 7 | Using Web 2.0 tools such as wikis, blogs, podcasts, or Twitter | 30 (9.4) |
| 8 | Using e-books | 26 (8.1) |

Information Technology Instruction for Faculty in Middle School (n=134)

| Ranking | Info Tech Instruction for Faculty | Number (%) |
|---------|--|------------|
| 1 | Using electronic searching in subscription databases | 110 (82.1) |
| 2 | Using library catalogs | 88 (65.7) |
| 3 | Using software applications, such as Power Point or Excel, to do school work | 65 (48.5) |
| 4 | Searching strategies for the World Wide Web | 55 (41.0) |
| 5 | Evaluating the quality of websites | 45 (33.6) |
| 5 | Using the Internet and other electronic sources ethically | 45 (33.6) |
| 7 | Using Web 2.0 tools such as wikis, blogs, podcasts, or Twitter | 37 (27.6) |
| 8 | Using e-books | 31 (23.1) |

Information Technology Instruction for Faculty in High School (n=174)

| Ranking | Info Tech Instruction for Faculty | Number (%) |
|---------|--|------------|
| 1 | Using electronic searching in subscription databases | 160 (92.0) |
| 2 | Using library catalogs | 133 (76.4) |
| 3 | Using the Internet and other electronic sources ethically | 103 (59.2) |
| 4 | Searching strategies for the World Wide Web | 96 (55.2) |
| 5 | Using software applications, such as Power Point or Excel, to do school work | 95 (54.6) |
| 6 | Using e-books | 90 (51.7) |
| 7 | Evaluating the quality of websites | 86 (49.4) |
| 8 | Using Web 2.0 tools such as wikis, blogs, podcasts, or Twitter | 58 (33.3) |

| | Elementary School (N=320) | Middle School (N=134) | High School (N=174) | Total (N=628) | χ^2 |
|--|------------------------------|--------------------------|------------------------|------------------|-----------|
| Searching strategies for the World Wide Web | 110 (42.1) | 55 (21.1) | 96 (36.8) | 261 (100.0) | 20.09*** |
| Evaluating the quality of websites | 81 (38.2) | 45 (21.2) | 86 (40.6) | 212 (100.0) | 29.31*** |
| Using software applications, such as Power Point or Excel, to do school work | 103 (39.2) | 65 (24.7) | 95 (36.1) | 263 (100.0) | 26.33*** |
| Using electronic searching in subscription databases | 157 (36.8) | 110 (25.8) | 160 (37.5) | 427 (100.0) | 110.84*** |
| Using library catalogs | 260 (54.1) | 88 (18.3) | 133 (27.7) | 481 (100.0) | 12.79** |
| Using e-books | 26 (17.7) | 31 (21.1) | 90 (61.2) | 147 (100.0) | 119.51*** |
| Using the Internet and other electronic sources ethically | 92 (38.3) | 45 (18.8) | 103 (42.9) | 240 (100.0) | 45.80*** |
| Using Web 2.0 tools such as wikis, blogs, podcasts, or Twitter | 30 (24.0) | 37 (29.6) | 58 (46.4) | 125 (100.0) | 46.93*** |

*p<.05 **p<.01 *** p<.001

Follow-up pairwise comparisons were conducted to evaluate the difference. The Holm's sequential Bonferroni method was used to control for Type I error at the .05 across all three comparisons.

Searching strategies for the World Wide Web

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | 6.05 | .014 | .025 | * | .14 |
| Elementary vs. high | 20.05 | .000 | .0167 | * | .20 |
| Elementary vs. middle | 1.82 | .178 | .05 | NS | .06 |

Evaluating the quality of websites

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | 7.77 | .005 | .025 | * | .16 |
| Elementary vs. high | 29.29 | .000 | .0167 | * | .24 |
| Elementary vs. middle | 3.22 | .073 | .05 | NS | .08 |

Using software applications, such as Power Point or Excel, to do school work

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | 1.13 | .289 | .05 | NS | .06 |
| Elementary vs. high | 23.57 | .000 | .0167 | * | .22 |
| Elementary vs. middle | 10.79 | .001 | .025 | * | .15 |

Using electronic searching in subscription databases

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | 6.81 | .009 | .05 | * | .15 |
| Elementary vs. high | 90.19 | .000 | .0167 | * | .43 |
| Elementary vs. middle | 42.53 | .000 | .0167 | * | .31 |

Using library catalogs

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | 4.33 | .037 | .025 | NS | .12 |
| Elementary vs. high | 1.61 | .205 | | NS | .06 |
| Elementary vs. middle | 12.81 | .000 | .0167 | * | .17 |

Using e-books

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | 25.94 | .000 | .0167 | * | .29 |
| Elementary vs. high | 119.24 | .000 | .0167 | * | .49 |
| Elementary vs. middle | 19.38 | .000 | .0167 | * | .21 |

Using the Internet and other electronic sources ethically

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | 19.90 | .000 | .0167 | * | .25 |
| Elementary vs. high | 43.73 | .000 | .0167 | * | .30 |
| Elementary vs. middle | 1.05 | .306 | .05 | NS | .05 |

Using Web 2.0 tools such as wikis, blogs, podcasts, or Twitter

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | 1.16 | .281 | .05 | NS | .06 |
| Elementary vs. high | 44.19 | .000 | .0167 | * | .30 |
| Elementary vs. middle | 24.97 | .000 | .0167 | * | .24 |

| | 1-3 yrs (N=189) | 4-10 yrs (N=281) | 11-20 yrs (N=147) | More than 20 yrs (N=102) | Total (N=719) | χ^2 |
|--|--------------------|---------------------|----------------------|--------------------------------|------------------|----------|
| Searching strategies for the World Wide Web | 69 (22.7) | 108 (35.5) | 78 (25.7) | 49 (16.1) | 304 (100.0) | 12.67** |
| Evaluating the quality of websites | 48 (20.1) | 95 (39.7) | 55 (23.0) | 41 (17.2) | 239 (100.0) | 8.66* |
| Using software applications, such as Power Point or Excel, to do school work | 72 (24.6) | 116 (39.6) | 67 (22.9) | 38 (13.0) | 293 (100.0) | 2.52 |
| Using electronic searching in subscription databases | 113 (23.1) | 199 (40.7) | 104 (21.3) | 73 (14.9) | 489 (100.0) | 7.99* |
| Using library catalogs | 126 (23.0) | 216 (39.4) | 123 (22.4) | 83 (15.1) | 548 (100.0) | 15.58** |
| Using e-books | 28 (17.5) | 65 (40.6) | 39 (24.4) | 28 (17.5) | 160 (100.0) | 9.32* |
| Using the Internet and other electronic sources ethically | 56 (20.4) | 98 (35.6) | 69 (25.1) | 52 (18.9) | 275 (100.0) | 19.00*** |
| Using Web 2.0 tools such as wikis, blogs, podcasts, or Twitter | 43 (31.2) | 63 (45.7) | 14 (10.1) | 18 (13.0) | 138 (100.0) | 12.45** |

*p<.05 **p<.01 *** p<.001

The data show that a substantial number of school librarians in New Jersey actively provide a range of information technology-related professional development activities to faculty. This is commendable, and shows a clear commitment to whole school development in term of effective use of information technology. The highest levels of involvement are in high schools, with lowest levels of participation among elementary school librarians.

School librarians bring to the school community a unique set of information technology capabilities related to accessing and using information technology, not just for finding and evaluating resources, but to create innovative representation of knowledge. The development of the “digital library” or “virtual library” in particular has created an information environment in schools that is complex and fluid, connective and interactive, and diverse and unpredictable. A substantial number of school librarians clearly understand the complex nature of this information environment and the necessary skills students and faculty need to navigate this complex, and often ambiguous information space, and use it meaningfully to learn.

Question 65 sought to gather input on specific aspects of professional development provided to school faculty in relation to information technology in addition to ideas mentioned above. 202 valid responses

were received, and 187 identified specific aspects of professional development. These provide a very strong picture of the breadth and depth of school librarians' involvement and leadership in faculty professional development. It is clear that school librarians' engaging in this professional role have wide-ranging technical capacities, and a pedagogical understanding of their integration into learning. In particular, the analysis show capacity of school librarian to focus on and demonstrate their instructional role and pedagogical knowledge through use of information technology; demonstrate the complexity of the information landscape and the importance of appropriate use of information technology; play a school leadership role in enhancing teacher effectiveness; and play a role in driving improvement in teaching learning for student achievement

Five categories of professional development were identified. These focus on professional development in relation to:

- 1. Technical mastery of information Technology hardware.**
- 2. Technical mastery of a range of information technology software.**
- 3. Technical mastery and use of library-specific software and technology tools.**
- 4. Pedagogical integration of hardware and software into classroom and library-based instruction, and providing on-going instructional support.**
- 5. Use of information technology tools to develop ethical use of information and information technology by students.**

This professional development typically takes place through formally scheduled workshops as part of the school's professional development program, as well as through informal one-on-one instruction.

Types of professional development activities are listed below.

1. Technical mastery of information Technology hardware
This category identified school librarians' role in facilitating mastery of a range of IT hardware and peripherals available in a school. An extensive range of technology hardware in the schools was identified here, including:
 - SmartBoards (The most frequently identified hardware)
 - Projection equipment
 - Scanners
 - Digital video and image cameras
2. Technical mastery of a range of information technology software.
This category focused on learning the techniques and applications of a particular software. Predominant software identified were:
 - Communication software such as email and instant messaging / chat
 - File transfers
 - File conversions
 - Electronic grade books
 - Digital streaming
 - Video and image editing software eg Photoshop
 - Web 2.0 tools: blogs, wikis, RSS

- Podcasting
 - SMARTboard software
 - Videoconferencing software
 - Document management systems eg GoogleDocs and cloud computing
3. Technical mastery and use of library-specific software and technology tools. This category of professional development focused on demonstrating use and potential of library software to enhance access to quality resources, and making decisions about resources for teaching and learning. Predominant software identified were:
- Use of collection analysis software and its data, particularly Follett's *TitleWise*;
 - Access to online subscription databases and websites: *EBSCO* databases and other online repositories, e.g., *Book Flix*, *TeacherTube* and *World Book*;
 - Access and use of the school library's online catalog;
 - *Accelerated Reader* software;
 - Access and use of ebooks and digital readers;
 - Use of online interlibrary loan;
 - Use of literature support sites, e.g., *LibraryThing*;
 - Access to copyright resources;
 - Access to external library resources, e.g., Alexandria Library; public library;
 - Use of social bookmarking tools, e.g., *Delicious*;
 - Use of RSS aggregators to subscribe to blogs and changeable web content.
4. Pedagogical integration of hardware and software into classroom and library-based instruction, and providing on-going instructional support. Particularly strong were the demonstration and integration of knowledge production / presentation software which takes students away from the standard word-processed product to more creative approaches using mix-media formats. Predominant tools were:
- *Kidspiration*
 - Web authoring and publishing tools, e.g., *Firstclass*;
 - Moviemaking / creating digital videos, e.g., *iMovie*;
 - Digital storytelling software;
 - PowerPoint;
 - Specific curriculum-based software, e.g., *PLATO*, *Study Island*, *Rosetta Stone*.
 - Helping teachers use specific software for special needs students
5. Use of information technology tools to develop ethical use of information and information technology by students. Predominant tools mentioned were:
- *IUse of Turnitin.com*;
 - Use of citation generation tools, e.g., *EasyBib*, *CitationMachine*; *NoodleTools* to deal with associated issues of plagiarism;
 - Internet safety filters.
6. Website creation and support for teachers and instruction. Predominant categories were:
- Creating a teacher webpage;
 - Creating a webpage;

- Designing a webpage for specific subjects, research units;
- Updating webpages;
- Creating class wikis;
- Setting up and using a blog for classes.

Modes of delivery:

A small number (21) of participants mentioned specific modes of delivery of this professional development. These were:

- Formally scheduled workshops as part of the school's professional development program;
- One-on-one instruction delivered informally and based on expressed need, and often when teachers and school librarians were working on a collaborative unit. School librarians saw these as opportunities to build relationships.

Issues identified in the data:

In some schools, the provision of professional development appears to be clearly demarcated. Some school librarians saw that this was not their responsibility, particularly because there were others designated others in the school for this responsibility: "This is not my role – technology coordinator is responsible for teaching new programs, using *PowerPoint*, etc. with teachers"; "no formal PD from me. We have a technology teacher in the school."; "I do not provide professional development for faculty .. ever.."; "The curriculum director provides PD"

Question 66 gathered data on the school library contribution to student learning. It sought to uncover learning outcomes enabled by the school library program and the explicit interventions of the school librarians. Underpinning this question is the concept of evidence-based practice, which revolves around the key question: What differences does our school library and its learning initiatives make to student learning? That is, what are the differences, the tangible learning benefits, defined and expressed in ways that lead a school community to say, "We need more of this!"? Evidence-based practice is about ensuring that day to day efforts put some focus on gathering meaningful and systematic evidence on how the school library and its instructional and service initiatives contribute to learning outcomes.

Do New Jersey's school libraries impact student learning?

721 participants made comments in relation to Question 66, although not all were able to identify library-related learning outcomes. These were analyzed using a qualitative approach of constant comparison to establish key concepts, categories and relationships.

Based on this input, New Jersey's school libraries appear to contribute to learning outcomes in six key ways, as shown in the analysis below.

- 1. Contribution to development of curriculum standards, including mastery of content standards and contribution to test score achievement.**
- 2. The development of resource-based competencies, centering on library operations, mastery of information skills.**
- 3. The development of research process and learning management competencies, centering on the mastery of explicit aspects of the research process, inquiry processes, strategies of independent learning, and research project management.**
- 4. The development of thinking based competencies, in particular the processes of thinking, analysis and synthesis that create knowledge and the representation of knowledge through a range of products.**
- 5. The development of affective, personal and interpersonal competencies, including the development of positive and ethical values in relation to the use of information, increased motivation, and interest for engaging with information for learning, and working effectively with others in research activities.**
- 6. Outcomes related to the development of reading, including increased interest in reading, increased participation in reading, the development of wider reading interests, and becoming more discriminating readers.**

The categories of outcomes identified in this question are organized around the following labels and definitions:

COMPETENCY: skills, abilities and habits of mind that underpin discovery, inquiry, and creativity: working with information to build deep knowledge and understanding, and to describe key learning outcomes

1. GENERAL – MASTERY OF CURRICULUM STANDARDS

These refer to general statements of outcomes as they relate to New Jersey's core content curriculum standards and test score achievement.

2. MASTERY OF RESOURCE-BASED COMPETENCIES. These refer to competencies related to seeking, accessing and evaluating resources in a variety of formats, including people and cultural artifacts as sources, and libraries. They include using technology tools to seek, access and evaluate these sources.

MASTERY OF RESEARCH PROCESSES AND LEARNING MANAGEMENT COMPETENCIES: These refer to competencies that enable students to prepare for, plan and successfully undertake a curriculum-based research unit, including research plans and frameworks

DEVELOPMENT OF THINKING-BASED COMPETENCIES AND KNOWLEDGE-BASED OUTCOMES: These are abilities and dispositions that focus on substantive engagement with data and information, the processes of higher order thinking and critical analysis that lead to the creation of representations / products that demonstrate deep knowledge and deep understanding; it also includes

outcomes related to the creation of knowledge.

DEVELOPMENT AFFECTIVE, PERSONAL AND INTERPERSONAL COMPETENCIES: These refer to competencies and dispositions related to the social and personal aspects of leaning: about self as a learner, and the social and cultural participation of inquiry

OUTCOMES RELATED TO READING TO LEARN AND READING FOR ENJOYMENT: these refer to competencies dispositions and attitudes related to the transformation, communication and dissemination of text in its multiple forms and modes and the development of meaning and understanding

These outcomes are developed in detail in the following table, and supported with illustrative examples.

| COMPETENCY: | DIMENSIONS | ARTICIPANT STATEMENTS – SELECTED EXAMPLES |
|---|--|--|
| GENERAL DEVELOPMENT OF CURRICULLUM STANDARDS | – Mastery of curriculum standards | General statements related to mastery of standards “meeting curriculum standards” “meeting standards” “We meet curriculum standards for library literacy and (reading) literacy” “We meet curriculum standards for library literacy and (reading) literacy” “Meet curriculum standards in the areas of media, technology skills, student motivation for research and planning” |
| | Test score achievement 79 direct references to contribution to school's results in relation to standardized test scores. These were simple statements of general outcome, with few details provided of the specific nature or direction of the outcome, nor how these were explicitly connected to interventions and initiatives of the school library. | General statements related to test scores “superior test scores” “improved test scores” “test score achievement” “higher test scores” “improved reading test scores” “boosting test scores” “test score improvement” “test scores in our district have improved” “Our test scores in the building are excellent” “Positive standardized test scores” “Assessment of OPAC skills indicated that 25% of 6th graders scored a C or better on a September pre-test; March pos-test resulted in 65% of 6th graders scored C or better” |
| RESOURCE-BASED COMPETENCIES | Library as place (12 references) - respect for library as learning space - understand library layout and structure | General statements related to library as place “successfully navigating the library, changing attitudes of students about library and program” “knowledge of organization of the library and retrieving books and information from a variety of sources” “Pre-k - 2nd - we work mostly on treating materials with respect - the concept of borrowing - that it means returning” |

Mastery of Information skills / information literacy development in general (121 general references)

As with other responses, these were simple statements of general outcome.

Specific information literacy capabilities, including mastery of technology competencies were identified. These included:

- selection of particular types of resources to suit research needs
- use of information retrieval systems, such as subscription databases and web-based information repositories
- use of OPACS and library catalogs
- development of search strategies to retrieve information
- evaluating information for quality, particularly websites

Statements related to information literacy

"Mastery of information literacy"
 "Master information skills"
 "improved information literacy skills"
 "They exhibit mastery in technology skills and information literacy"
 "Our students do very well at the high school with respect to information literacy according to the feedback we receive"
 "They exhibit mastery in technology skills and information literacy."
 "improving information literacy skills for students"

Statements of specific competencies

"students able to use OPAC and subscription databases to locate information to their personal needs"
 "Learning about the right 'tool' for the given quest"
 "mastery of software applications in the library"
 "Developing familiarity with a classification system"
 They are mastering the use of the on line data bases and reliable sources"
 "ability to do searches for bogus websites and evaluation of them"
 "mastery of Website evaluation strategies"
 "understanding need for website evaluation"
 "knowing how to broaden or narrow a search to find the information available out there"
 "mastery of searching the library catalog"
 "understanding of the purpose of reference materials"
 "the students know how to use the online catalog to search for materials and can then locate the materials independently"
 "students are trying new technology and databases for finding information instead of just websites"
 mastery of information, media and technology skills;
 mastery of research skills including keyword selection and search strategies"
 "selection of appropriate websites"
 "students evaluate information for validity using critical thinking skills"
 "attribution of information found"

RESEARCH PROCESSES AND LEARNING MANAGEMENT COMPETENCIES

Research processes (359 references to student mastery of research process)

Inquiry processes (98 references)

Independent learning (34 references)

Project management (12 references)

This includes task organization and

Statements related to research process and inquiry

"Mastery of integral research skills"
 "know a sequence of strategies for doing good research"
 "develop their research skills- what to use when- knowing when print reference is efficient, when databases are better and when to use the free internet"
 "able to follow a general research plan from start to finish of the research task"
 Successfully completed a research based guided-inquiry project on the presidents of the US
 "able to work through an inquiry learning process"
 "able to focus on their research tasks"
 "know the steps to doing a good research report"

management; develop and following plans, and setting up and apply structures, strategies and files to maintain and manage their overall research tasks

Statements related to independent learning

"become more independent with their library skills"
 "Many of my student outcomes relate to independence - e.g. locating, choosing and using information independently"
 "Ability to work cooperatively and independently"
 "Some students have become more independent in their use of the library"
 "successful completion of school assignments, and independent life-long learning"
 "ability to find materials independently"
 "Work independently or collaboratively with peers to conduct research or give written responses"
 "they become confident, independent users of information"

Statements related to project management

"The students appear to manage the research tasks in a timely manner"
 "Students seem to be able to plan their projects"
 "Students show ability to manage all the articles and papers that they find"
 "Some students have organized folders for their research projects"
 "4th grade students created and electronic portfolio to meet the state tech benchmark standards"
 "Students plan their research projects that are given specifically by the teacher"

THINKING-BASED COMPETENCIES KNOWLEDGE- BASED OUTCOMES

In essence: the processes of thinking, analysis and synthesis that create knowledge, and the products they represent the knowledge of students.

Intellectual engagement with information

14 references were made relating to thinking-based outcomes

Construction and presentation of knowledge

15 references were made to creating knowledge.

Statements related to the intellectual engagement with information

"Think through all the information and work out what is needed"
 "students have developed some higher order thinking skills, reading strategies, making connections to texts, world and self"
 "students show ability to master critical thinking skills applicable to each grade level"
 "meeting curriculum standards, test score achievement through critical thinking"
 "understanding cross-references in searching for data and critical analysis of information"
 "thinking, comprehension and communication skills have been developed"
 "students show intellectual curiosity"
 Students evaluate information for validity using critical thinking skills"

Statements related to demonstrating knowledge and producing representations of knowledge

"able to demonstrate and use skills to write research papers, create projects, etc"
 "Blending different types of resources for a project"
 "Demonstrate research organization, integration of new knowledge, properly crediting sources, etc"

“see increasing students' attention to detail, increasing ability to organize information and ideas”
 “increasing ability to make connections among ideas and information”
 “mastering the fusion of others' and own ideas”
 “Mastery of information for fulfilling personal needs (how-to, career, etc.)”
 “end product for learning activity- ie. power point presentation, excel spreadsheet, publisher booklet, word document, etc.”

AFFECTIVE, PERSONAL AND INTERPERSONAL COMPETENCIES

Substantive number of references were made to the development of a range of attitudes and values, including:

Display interest
 (158 references)

Increased motivation
 (78 references)

Team work and interpersonal relationships
 (12 references)
 Work effectively in teams;
 Positive relations to each other and library staff

Ethical information use behaviors (40 references)
 This shows outcomes related to students demonstrating use of accepted protocols to document ideas, with some limited reference to using technology in appropriate and safe ways

Ethical behaviors in relation to citation practices, plagiarism, and copyright were identified

Statements related to motivation and interest

“developing awareness of ethical issues in information and communication”
 “positive changes in interest and motivation, not just for using the library but school work in general”
 “They have found new interests to increase motivation in other areas”
 “motivation to read widely and seek out information”
 “students have better attitudes and increased motivation toward the library and doing research”
 “Students are more motivated to use the library because they know they are in a friendly environment where they know they will not be judged based upon their queries”
 “Students are motivated to use the computers for research and reporting alike”
 “Children are motivated in the library, and leave with the effective use of information technology. They become positive researchers”
 “My students are very motivated and enjoy coming to the media center each week”
 “motivation to use the library and its facilities; motivated to conduct research”
 “motivated and interested in unexplored areas”
 Students have come to discover that the school library is the gateway to academic achievement through their exposure to the use of information technologies in the library, such as electronic databases, AVs etc. These had gone a long way to motivate them to learning”
 “Students in some cases have achieved a calmer and more efficient attitude to their specific skills. They have found new interests to increase motivation in other areas”
 “Motivation goes up, goals are easier to reach, curricula is mastered, technology becomes more helpful, and information is gained: resulting in success at tasks and gain of knowledge”
 “The students' attitudes towards research and literacy have improved this year. What they viewed as frustrating and insurmountable is not viewed as a "do-able" project”

Statements related to social and person agency

“through the school library students respect different ideas and differences with people and themselves more”

“group research projects have taught some students how to work better together and in teams”

Statements related to ethical behavior

“they get it – plagiarism is not on”

“students show increasing use of appropriate citation processes”

The students are initiated, at the library to Turnitin so there is now much less active plagiarism”

“students show evidence of understanding ethical use of information, plagiarism issues and correct citation format”

“students appear to respect intellectual property”

READING TO LEARN AND TO ENJOY

The participants made 198 references to outcomes related to reading. Elementary and middle school librarians were mostly represented. The majority of these referred to:

increased interest in reading

increased circulation of reading materials

development of wider reading interests

becoming discriminating readers.

Statements related to reading to learn and reading for enjoyment

“changes in attitudes and interests towards books”

familiarity with award winning authors/illustrators; knowledge of various genres”

“Students are more interested in taking out books for pleasure reading”

“Our circulation has each student checking out at least one book per week”

“large increases in borrowing of fiction after our reading promotion”

“Students develop both an understanding and an appreciation for different types of fiction and non-fiction This is motivational in that it broadens attitudes and interests”

“increased motivation for informational and pleasure reading”

“Students are eager to select books for instructional and recreational needs”

“Advancing reading and comprehension levels”

‘enhancing reading enjoyment, comprehension, and fluency”

The qualitative responses of participants collectively show the contribution of school libraries to the development of the whole child. The school library is portrayed as an agency for intellectual development, and for social and the cultural growth of students as they grow up in a complex and diverse information world. According to the evidence of the school librarians represented here, the school librarian works to meet core content standards, to develop a wide range of information handling competencies, and to provide students with the intellectual and technical scaffolds they need to learn and be ethical and productive users and consumers of information.

Two important observations emerge out of this analysis. Firstly, while it is encouraging that school librarians can articulate improvements in terms of reading, information literacy, use of information technology, and improved attitudes towards the library, very few could articulate specific learning outcomes in relation to the students’ development of deep knowledge and deep understanding of content

areas. At best, outcomes were expressed as “meet curriculum standards”, referencing the examples provided in the question. While this may be an artifact of the question, school librarians appear to have difficulty articulating the outcomes of library initiatives in terms of specific curriculum standards / goals, and provide specific evidence-based claims of specific gains in knowledge and skills. It is a question of precision and specificity. Secondly, a substantial number of school librarians had difficulty focusing on student outcomes, rather, they articulated in detail what they did, identifying instructional inputs and processes, rather than clarifying outcomes from the perspective of the student. There is an assumption that through articulating what is done, i.e., the inputs, some kind of outcomes are enabled, even if they are not identified. .

Some illustrative examples of a focus on inputs are presented here:

- “I formally teach grades K-4 and have had the opportunity to collaborate on curriculum projects with the classroom teachers in those grades.”
- We have never conducted a formal assessment to determine actual learning outcomes or any deviation in test scores, but I base the library program on curriculum standards. Students will have been taught information literacy, media and technology skills and a research process and should have some master of these skills. meeting curriculum standards, these I believe are the results of my program, but I do not have the opportunity to evaluate their work, so I can only estimate from my interactions with them as they research in the Library Media Center with me.”
- ‘Work with English and other departments to meet curriculum standards.”
- “I focus on subscription databases as a source for research information.”
- “ I am on every curriculum revision and therefore promote the LMC as an integral part of the curriculum.
- “I make sure lessons cover the standards and stress the importance of what type of learner each student is and how best they can succeed mastering skills across the curriculum. Research is taught in small increments and expanded.”
- “We teach every grade level (K-8).”
- Through-out the year students are introduced to a wide variety of books, mainly fiction. As a result, every child has read several books by the end of the school year from the media center. All children utilize technology such as *Microsoft Office* programs, and most are quite proficient by the end of the year, especially in *Word* and *PowerPoint*. They also learn how to use research databases such as *Culture Grams* and *NetTrekker*, and some Web 2.0 applications. All students use the computers for research, and are taught how to cite sources.”
- “Every lesson plan that I teach coordinates with NJCCS and the 21st Century skills from ALA.”
- “I give instructions on the research process, the use of software programs and databases, and the selection of appropriate websites. I stress with the students organization skills, ethical use of resources, and the development of personal and social skills.”
- “I have been working with groups of students to identify the emotional stages they will experience while completing their research papers.”
- “Test scores have not come back yet, but many projects and research papers have been completed here in the media center.”
- “My library programming includes several activities that can be considered "high stake testing skills" and I feel I am a huge contributor to our high NJ ASK annual scores in grades 3,4,and 5.”
- “This year I have been focusing on changing attitudes about libraries and information retrieval, as well as emphasizing the critical nature of being a good consumer of information.”

- “I teach library/information literacy skills and promote the love of reading.”
- “I try to make a lot of "guides" and show students simple tricks to make research easier and more organized.”

Unstructured, information observation was identified by a small number of participants as the basis for making claims of outcomes:

- “We have never conducted a formal assessment to determine actual learning outcomes or any deviation in test scores, but I base the library program on curriculum standards. Students will have been taught information literacy, media and technology skills and a research process and should have some master of these skills, and I see the learning going on.”
- “Meeting curriculum standards, these I believe are the results of my program, but I do not have the opportunity to evaluate their work, so I can only estimate from my interactions with them as they research in the Library Media Center with me.”
- “I have seen evidence of all of the above, except for test score achievement (I don't often see teachers' grades). One teacher informed me that the assistance I provided her students in using technology (creating Power Point presentation) helped them to improve their grades”

Two participants identified some strategies for collecting evidence as a basis for making claims of outcomes.

- “I give pre- and post-tests in some of my collaborations to track learning outcomes related to standards.”
- “Look at test score data and see if the classes we have done reading strategies (with) show up in the scores.”

Five participants indicated that it was impossible to gather evidence due to a range of factors in the schools:

- “ I formally teach grades K-4 and have not had the opportunity to collaborate on projects with the classroom teachers in those grades. I see the children 40 minutes/week. This is a 100% increase over last year, when my predecessor saw grades 2-4 only 20 times per year. Under these conditions, it is not possible to identify specific learning outcomes resulting from Library instruction.”
- “I am too busy running the library without assistants and so it is not possible to determine the specific outcomes.”

In the light of these concerns, and given the current climate of learning accountability, standards-based education, and very clear calls for school librarians to articulate library outcomes in terms of student achievement and mastery of content / curriculum standards, we would strongly recommend that all school librarians undertake a professional development program on Evidence-Based Practice to develop their skills at identifying, documenting, and disseminating student learning outcomes enabled by the school library program, particularly emphasizing curriculum outcomes, rather than library-based outcomes.

Question 67 gathered data on the focus of reading and related activities that participants have undertaken during the 2008-2009 school year. These are tabulated in the table below.

Reading and Related Activities during Last School Year

| Reading and Related Activities | All School Types (n=719) | Elementary School (n=320) | Middle School (n=134) | High School (n=174) |
|--|--------------------------------|---------------------------------|--------------------------|------------------------|
| | Number (%) | Number (%) | Number (%) | Number (%) |
| Book talks to promote literature for recreational reading | 557 (77.5) | 282 (88.1) | 106 (79.1) | 97 (55.7) |
| Book talks to promote curriculum related reading | 415 (57.7) | 232 (72.5) | 75 (56.0) | 59 (33.9) |
| Use databases and/or websites to encourage reading | 544 (75.7) | 230 (71.9) | 103 (76.9) | 139 (79.9) |
| Author visit | 291 (40.5) | 177 (55.3) | 51 (38.1) | 28 (16.1) |
| Book clubs or literature discussion groups, where students share ideas and discuss their reading | 253 (35.2) | 95 (29.7) | 61 (45.5) | 64 (36.8) |
| Encouraging any voluntary reading activities, such as DEAR, inside of school | 408 (56.7) | 229 (71.6) | 80 (59.7) | 50 (28.7) |
| Encouraging any free voluntary reading outside of school | 554 (77.1) | 261 (81.6) | 100 (74.6) | 122 (70.1) |
| Literature displays | 643 (89.4) | 286 (89.4) | 126 (94.0) | 153 (87.9) |
| Creative writing activities related to literature | 293 (40.8) | 138 (57.2) | 34 (25.4) | 30 (17.2) |
| Readers' theater | 232 (32.3) | 184 (57.5) | 12 (9.0) | 3 (1.7) |
| Storytelling | 297 (41.3) | 220 (68.8) | 21 (15.7) | 10 (5.7) |
| Summer reading programs | 315 (43.8) | 159 (49.7) | 57 (42.5) | 57 (32.8) |
| Music and rhymes | 222 (30.9) | 186 (58.1) | 5 (3.7) | 3 (1.7) |
| Electronic gaming | 93 (12.9) | 49 (15.3) | 14 (10.4) | 11 (6.3) |
| Literature-related programs for students with special needs | 232 (32.3) | 121 (37.8) | 44 (32.8) | 40 (23.0) |
| Collaboration with public libraries in reading or writing programs | 309 (43.0) | 153 (47.8) | 49 (36.6) | 59 (33.9) |
| Self-help information such as brochures, web links, or book lists | 399 (55.5) | 144 (45.0) | 81 (60.4) | 122 (70.1) |
| Books or information to help students cope with challenges or sensitive topics | 391 (54.4) | 165 (51.6) | 70 (52.2) | 111 (63.8) |
| Any reading incentive program within the school | 429 (59.7) | 238 (74.4) | 83 (61.9) | 50 (28.7) |

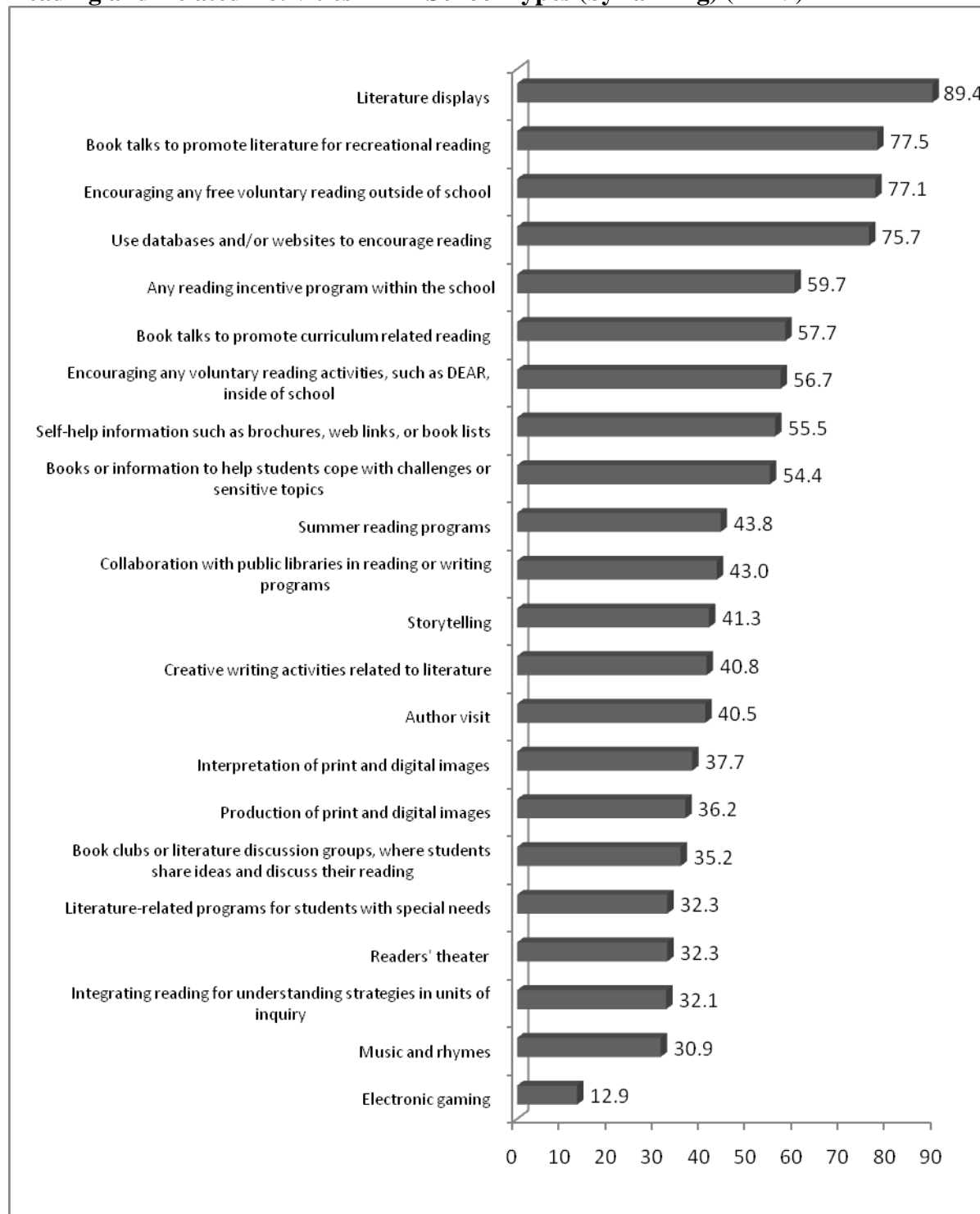
| | | | | |
|--|------------|------------|-----------|-----------|
| Integrating reading for understanding strategies in units of inquiry | 231 (32.1) | 143 (44.7) | 36 (26.9) | 23 (13.2) |
| Interpretation of print and digital images | 271 (37.7) | 145 (45.3) | 43 (32.1) | 45 (25.9) |
| Production of print and digital images | 260 (36.2) | 116 (36.2) | 46 (34.3) | 60 (34.5) |

The table below shows the extent of involvement in the different reading and related activities.

Reading and Related Activities in All School Types (by ranking) (n=719)

| Ranking | Reading and Related Activities (n=719) | Number (%) |
|---------|--|------------|
| 1 | Literature displays | 643 (89.4) |
| 2 | Book talks to promote literature for recreational reading | 557 (77.5) |
| 3 | Encouraging any free voluntary reading outside of school | 554 (77.1) |
| 4 | Use databases and/or websites to encourage reading | 544 (75.7) |
| 5 | Any reading incentive program within the school | 429 (59.7) |
| 6 | Book talks to promote curriculum related reading | 415 (57.7) |
| 7 | Encouraging any voluntary reading activities, such as DEAR, inside of school | 408 (56.7) |
| 8 | Self-help information such as brochures, web links, or book lists | 399 (55.5) |
| 9 | Books or information to help students cope with challenges or sensitive topics | 391 (54.4) |
| 10 | Summer reading programs | 315 (43.8) |
| 11 | Collaboration with public libraries in reading or writing programs | 309 (43.0) |
| 12 | Storytelling | 297 (41.3) |
| 13 | Creative writing activities related to literature | 293 (40.8) |
| 14 | Author visit | 291 (40.5) |
| 15 | Interpretation of print and digital images | 271 (37.7) |
| 16 | Production of print and digital images | 260 (36.2) |
| 17 | Book clubs or literature discussion groups, where students share ideas and discuss their reading | 253 (35.2) |
| 18 | Readers' theater | 232 (32.3) |
| 18 | Literature-related programs for students with special needs | 232 (32.3) |
| 20 | Integrating reading for understanding strategies in units of inquiry | 231 (32.1) |
| 21 | Music and rhymes | 222 (30.9) |
| 22 | Electronic gaming | 93 (12.9) |

Reading and Related Activities in All School Types (by ranking) (n=719)



Top ranked (10) reading related activities (n=719)

| Ranking | Reading and Related Activities | Number (%) |
|---------|--|------------|
| 1 | Literature displays | 643 (89.4) |
| 2 | Book talks to promote literature for recreational reading | 557 (77.5) |
| 3 | Encouraging any free voluntary reading outside of school | 554 (77.1) |
| 4 | Use databases and/or websites to encourage reading | 544 (75.7) |
| 5 | Any reading incentive program within the school | 429 (59.7) |
| 6 | Book talks to promote curriculum related reading | 415 (57.7) |
| 7 | Encouraging any voluntary reading activities, such as DEAR, inside of school | 408 (56.7) |
| 8 | Self-help information such as brochures, web links, or book lists | 399 (55.5) |
| 9 | Books or information to help students cope with challenges or sensitive topics | 391 (54.4) |
| 10 | Summer reading programs | 315 (43.8) |

Lowest ranked (10) reading and related activities (n=719)

| Ranking | Reading and Related Activities | Number (%) |
|---------|--|------------|
| 13 | Creative writing activities related to literature | 293 (40.8) |
| 14 | Author visit | 291 (40.5) |
| 15 | Interpretation of print and digital images | 271 (37.7) |
| 16 | Production of print and digital images | 260 (36.2) |
| 17 | Book clubs or literature discussion groups, where students share ideas and discuss their reading | 253 (35.2) |
| 18 | Readers' theater | 232 (32.3) |
| 18 | Literature-related programs for students with special needs | 232 (32.3) |
| 20 | Integrating reading for understanding strategies in units of inquiry | 231 (32.1) |
| 21 | Music and rhymes | 222 (30.9) |
| 22 | Electronic gaming | 93 (12.9) |

Top ranked 10 reading related activities in Elementary School (n=320)

| Ranking | Reading and Related Activities | Number (%) |
|---------|--|------------|
| 1 | Literature displays | 286 (89.4) |
| 2 | Book talks to promote literature for recreational reading | 282 (88.1) |
| 3 | Encouraging any free voluntary reading outside of school | 261 (81.6) |
| 4 | Any reading incentive program within the school | 238 (74.4) |
| 5 | Book talks to promote curriculum related reading | 232 (72.5) |
| 6 | Use databases and/or websites to encourage reading | 230 (71.9) |
| 7 | Encouraging any voluntary reading activities, such as DEAR, inside of school | 229 (71.6) |
| 8 | Storytelling | 220 (68.8) |
| 9 | Music and rhymes | 186 (58.1) |
| 10 | Readers' theater | 184 (57.5) |

Top ranked 10 reading related activities in Middle School (n=134)

| Ranking | Reading and Related Activities | Number (%) |
|---------|--|------------|
| 1 | Literature displays | 126 (94.0) |
| 2 | Book talks to promote literature for recreational reading | 106 (79.1) |
| 3 | Use databases and/or websites to encourage reading | 103 (76.9) |
| 4 | Encouraging any free voluntary reading outside of school | 100 (74.6) |
| 5 | Any reading incentive program within the school | 83 (61.9) |
| 6 | Self-help information such as brochures, web links, or book lists | 81 (60.4) |
| 7 | Encouraging any voluntary reading activities, such as DEAR, inside of school | 80 (59.7) |
| 8 | Book talks to promote curriculum related reading | 75 (56.0) |
| 9 | Books or information to help students cope with challenges or sensitive topics | 70 (52.2) |
| 10 | Book clubs or literature discussion groups, where students share ideas and discuss their reading | 61 (45.5) |

Top ranked (10) reading related activities in High School (n=174)

| Ranking | Reading and Related Activities | Number (%) |
|---------|--|------------|
| 1 | Literature displays | 153 (87.9) |
| 2 | Use databases and/or websites to encourage reading | 139 (79.9) |
| 3 | Encouraging any free voluntary reading outside of school | 122 (70.1) |
| 3 | Self-help information such as brochures, web links, or book lists | 122 (70.1) |
| 5 | Books or information to help students cope with challenges or sensitive topics | 111 (63.8) |
| 6 | Book talks to promote literature for recreational reading | 97 (55.7) |
| 7 | Book clubs or literature discussion groups, where students share ideas and discuss their reading | 64 (36.8) |
| 8 | Production of print and digital images | 60 (34.5) |
| 9 | Book talks to promote curriculum related reading | 59 (33.9) |
| 9 | Collaboration with public libraries in reading or writing programs | 59 (33.9) |

All school types have the following reading-related activities in their top 10:

Literature displays

Book talks to promote literature for recreational reading

Encouraging any free voluntary reading outside of school

Book talks to promote curriculum related reading

Use databases and/or websites to encourage reading

“Literature displays” ranks #1 in all school types.

Lowest ranked (10) reading related activities in Elementary School (n=320)

| Ranking | Reading and Related Activities | Number (%) |
|---------|--|------------|
| 13 | Books or information to help students cope with challenges or sensitive topics | 165 (51.6) |
| 14 | Summer reading programs | 159 (49.7) |
| 15 | Collaboration with public libraries in reading or writing programs | 153 (47.8) |
| 16 | Interpretation of print and digital images | 145 (45.3) |
| 17 | Self-help information such as brochures, web links, or book lists | 144 (45.0) |
| 18 | Integrating reading for understanding strategies in units of inquiry | 143 (44.7) |
| 19 | Literature-related programs for students with special needs | 121 (37.8) |
| 20 | Production of print and digital images | 116 (36.2) |
| 21 | Book clubs or literature discussion groups, where students share ideas and discuss their reading | 95 (29.7) |
| 22 | Electronic gaming | 49 (15.3) |

Lowest ranked (10) reading related activities in Middle School (n=134)

| Ranking | Reading and Related Activities | Number (%) |
|---------|--|------------|
| 13 | Collaboration with public libraries in reading or writing programs | 49 (36.6) |
| 14 | Production of print and digital images | 46 (34.3) |
| 15 | Literature-related programs for students with special needs | 44 (32.8) |
| 16 | Interpretation of print and digital images | 43 (32.1) |
| 17 | Integrating reading for understanding strategies in units of inquiry | 36 (26.9) |
| 18 | Creative writing activities related to literature | 34 (25.4) |
| 19 | Storytelling | 21 (15.7) |
| 20 | Electronic gaming | 14 (10.4) |
| 21 | Readers' theater | 12 (9.0) |
| 22 | Music and rhymes | 5 (3.7) |

Lowest ranked (10) reading related activities in High School (n=174)

| Ranking | Reading and Related Activities | Number (%) |
|---------|--|------------|
| 12 | Encouraging any voluntary reading activities, such as DEAR, inside of school | 50 (28.7) |
| 12 | Any reading incentive program within the school | 50 (28.7) |
| 14 | Interpretation of print and digital images | 45 (25.9) |
| 15 | Literature-related programs for students with special needs | 40 (23.0) |
| 16 | Creative writing activities related to literature | 30 (17.2) |
| 17 | Author visit | 28 (16.1) |
| 18 | Integrating reading for understanding strategies in units of inquiry | 23 (13.2) |
| 19 | Electronic gaming | 11 (6.3) |
| 20 | Storytelling | 10 (5.7) |
| 21 | Readers' theater | 3 (1.7) |
| 21 | Music and rhymes | 3 (1.7) |

All school types have the following reading-related activities in their lowest rank:

Electronic gaming

Integrating reading for understanding strategies in units of inquiry

Literature-related programs for students with special needs

Interpretation of print and digital images

Test of significance

| | Elementary School (N=320) | Middle School (N=134) | High School (N=174) | Total (N=628) | χ^2 |
|--|---------------------------------|-----------------------------|---------------------------|------------------|----------|
| Book talks to promote literature for recreational reading | 282 (58.1) | 106 (21.9) | 97 (20.0) | 485 (100.0) | 67.53*** |
| Book talks to promote curriculum related reading | 232 (63.4) | 75 (20.5) | 59 (16.1) | 366 (100.0) | 69.41*** |
| Use databases and/or websites to encourage reading | 230 (48.7) | 103 (21.8) | 139 (29.4) | 472 (100.0) | 4.14 |
| Author visit | 177 (69.1) | 51 (19.9) | 28 (10.9) | 256 (100.0) | 72.32*** |
| Book clubs or literature discussion groups, where students share ideas and discuss their reading | 95 (43.2) | 61 (27.7) | 64 (29.1) | 220 (100.0) | 10.73** |
| Encouraging any voluntary reading activities, such as DEAR, inside of school | 229 (63.8) | 80 (22.3) | 50 (13.9) | 359 (100.0) | 84.87*** |
| Encouraging any free voluntary reading outside of school | 261 (54.0) | 100 (20.7) | 122 (25.3) | 483 (100.0) | 8.82* |
| Literature displays | 286 (50.6) | 126 (22.3) | 153 (27.1) | 565 (100.0) | 3.37 |
| Creative writing activities related to literature | 183 (74.1) | 34 (13.8) | 30 (12.1) | 247 (100.0) | 89.28*** |

| | | | | | |
|--|------------|-----------|------------|-------------|------------|
| Readers' theater | 184 (92.5) | 12 (6.0) | 3 (1.5) | 199 (100.0) | 202.65**** |
| Storytelling | 220 (87.6) | 21 (8.4) | 10 (4.0) | 251 (100.0) | 228.38**** |
| Summer reading programs | 159 (58.2) | 57 (20.9) | 57 (20.9) | 273 (100.0) | 13.21** |
| Music and rhymes | 186 (95.9) | 5 (2.6) | 3 (1.5) | 194 (100.0) | 226.81**** |
| Electronic gaming | 49 (66.2) | 14 (18.9) | 11 (14.9) | 74 (100.0) | 9.06* |
| Literature-related programs for students with special needs | 121 (59.0) | 44 (21.5) | 40 (19.5) | 205 (100.0) | 11.27** |
| Collaboration with public libraries in reading or writing programs | 153 (58.6) | 49 (18.8) | 59 (22.6) | 261 (100.0) | 10.72** |
| Self-help information such as brochures, web links, or book lists | 144 (41.5) | 81 (23.3) | 122 (35.2) | 347 (100.0) | 30.61**** |
| Books or information to help students cope with challenges or sensitive topics | 165 (47.7) | 70 (20.2) | 111 (32.1) | 346 (100.0) | 7.38* |
| Any reading incentive program within the school | 238 (64.2) | 83 (22.4) | 50 (13.5) | 371 (100.0) | 97.69**** |
| Integrating reading for understanding strategies in units of inquiry | 143 (70.8) | 36 (17.8) | 23 (11.4) | 202 (100.0) | 53.35**** |
| Interpretation of print and digital images | 145 (62.2) | 43 (18.5) | 45 (19.3) | 233 (100.0) | 20.11**** |
| Production of print and digital images | 116 (52.3) | 46 (20.7) | 60 (27.0) | 222 (100.0) | .23 |

Follow-up pairwise comparisons were conducted to evaluate the difference. The Holm's sequential Bonferroni method was used to control for Type I error at the .05 across all three comparisons.

Book talks to promote literature for recreational reading

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | 18.38 | .000 | .0167 | * | .24 |
| Elementary vs. high | 66.16 | .000 | .0167 | * | .37 |
| Elementary vs. middle | 6.19 | .013 | .05 | * | .12 |

Book talks to promote curriculum related reading

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | 14.99 | .000 | .0167 | * | .22 |
| Elementary vs. high | 69.35 | .000 | .0167 | * | .38 |
| Elementary vs. middle | 11.79 | .001 | .05 | * | .16 |

Author visit

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | 19.16 | .000 | .0167 | * | .25 |
| Elementary vs. high | 71.42 | .000 | .0167 | * | .38 |
| Elementary vs. middle | 11.25 | .001 | .05 | * | .16 |

Book clubs or literature discussion groups, where students share ideas and discuss their reading

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | 2.40 | .121 | | NS | .09 |
| Elementary vs. high | 2.60 | .107 | .025 | NS | .07 |
| Elementary vs. middle | 10.50 | .001 | .0167 | * | .15 |

Encouraging any voluntary reading activities, such as DEAR, inside of school

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | 29.76 | .000 | .0167 | * | .31 |
| Elementary vs. high | 84.10 | .000 | .0167 | * | .41 |
| Elementary vs. middle | 6.11 | .013 | .05 | * | .12 |

Encouraging any free voluntary reading outside of school

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | .77 | .382 | | NS | .05 |
| Elementary vs. high | 8.48 | .004 | .0167 | * | .13 |
| Elementary vs. middle | 2.79 | .095 | .025 | NS | .08 |

Creative writing activities related to literature

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | 3.04 | .081 | .05 | NS | .10 |
| Elementary vs. high | 73.33 | .000 | .0167 | * | .39 |
| Elementary vs. middle | 38.31 | .000 | .0167 | * | .29 |

Readers' theater

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | 8.54 | .003 | .05 | * | .17 |
| Elementary vs. high | 149.05 | .000 | .0167 | * | .55 |
| Elementary vs. middle | 90.72 | .000 | .0167 | * | .45 |

Storytelling

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | 8.24 | .004 | .05 | * | .16 |
| Elementary vs. high | 179.81 | .000 | .0167 | * | .60 |
| Elementary vs. middle | 106.84 | .000 | .0167 | * | .49 |

Summer reading programs

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | 3.11 | .078 | .025 | NS | .10 |
| Elementary vs. high | 13.13 | .000 | .0167 | * | .16 |
| Elementary vs. middle | 1.94 | .164 | | NS | .07 |

Music and rhymes

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | 1.21 | .272 | .05 | NS | .06 |
| Elementary vs. high | 151.79 | .000 | .0167 | * | .55 |
| Elementary vs. middle | 114.66 | .000 | .0167 | * | .50 |

Electronic gaming

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | 1.73 | .189 | | NS | .08 |
| Elementary vs. high | 8.54 | .003 | .0167 | * | .13 |
| Elementary vs. middle | 1.87 | .171 | .025 | NS | .06 |

Literature-related programs for students with special needs

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | 3.70 | .054 | .025 | NS | .11 |
| Elementary vs. high | 11.27 | .001 | .0167 | * | .15 |
| Elementary vs. middle | 1.01 | .315 | | NS | .05 |

Collaboration with public libraries in reading or writing programs

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | .24 | .628 | | NS | .03 |
| Elementary vs. high | 8.90 | .003 | .0167 | * | .13 |
| Elementary vs. middle | 4.84 | .028 | .025 | NS | .10 |

Self-help information such as brochures, web links, or book lists

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | 3.15 | .076 | .05 | NS | .10 |
| Elementary vs. high | 28.61 | .000 | .0167 | * | .24 |
| Elementary vs. middle | 9.02 | .003 | .025 | * | .14 |

Books or information to help students cope with challenges or sensitive topics

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | 4.17 | .041 | .025 | NS | .12 |
| Elementary vs. high | 6.84 | .009 | .0167 | * | .12 |
| Elementary vs. middle | .02 | .895 | | NS | .01 |

Any reading incentive program within the school

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | 34.02 | .000 | .0167 | * | .33 |
| Elementary vs. high | 96.57 | .000 | .0167 | * | .44 |
| Elementary vs. middle | 7.05 | .008 | .05 | * | .13 |

Integrating reading for understanding strategies in units of inquiry

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | 9.10 | .003 | .05 | * | .17 |
| Elementary vs. high | 50.03 | .000 | .0167 | * | .32 |
| Elementary vs. middle | 12.56 | .000 | .0167 | * | .17 |

Interpretation of print and digital images

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | 1.44 | .230 | .05 | NS | .07 |
| Elementary vs. high | 18.02 | .000 | .0167 | * | .19 |
| Elementary vs. middle | 6.81 | .009 | .025 | * | .12 |

The data showed that school librarians in New Jersey provide a range of reading and related activities to students. An analysis of the data revealed that although all types of school libraries provide various reading and related activities, in general, most school librarians still stay in the old paradigm as book/information providers.

- Evidence 1: The top ten activities (i.e., literature displays, book talks, use databases and/or websites to encourage reading, etc.) among all types of school require little interaction or participation from the readers/students. Students are simply passive receivers of information/reading.
- Evidence 2: Activities that involve student participation or interactions are ranked low. For example, book clubs or literature discussion groups are ranked 17 out of 22.
- Evidence 3: Activities that require students' higher order of thinking skills (e.g., application, analysis, evaluation, and synthesis) are ranked low. For example, integrating reading for understanding strategies in units of inquiry is ranked 20 out of 22.
- Evidence 4: The integration of visual and/or audio materials in reading activities is low. The interpretation and production of print and digital images are ranked 15 and 16 out 22, respectively.
- Evidence 5: Most school librarians still use old, traditional ways to promote reading: display, book talks, reading incentive programs, book lists compiling, etc. The use of multimedia to promote reading is rare. Only a few librarians used electronic gaming to promote reading, and only less than 10 schools mentioned the use of podcast or short film clips to promote reading materials in their libraries.

It's interesting to note that electronic gaming, which is a popular youth activity, ranked very last in all three types of school libraries. It seems to indicate that school libraries do not deem electronic gaming as important or relevant to student learning. Whether it is true or not needs further investigation.

A chi-square statistics test revealed that school type was significantly related ($p < .001$) to the following reading and related activities:

First, lower levels of schools were more likely to provide the following activities, regardless of their rankings: Book talk to promote recreational reading, Book talk to promote curriculum related reading, Author visit, Encouraging free volunteer reading inside of school, Storytelling, Reading incentive program within the school, Integrating reading for understanding strategies in units of inquiry, and Readers' theater.

Book talks to promote recreational reading: Elementary schools were about 1.1 times (88.1/79.1) and 1.6 times (88.1/55.7) more likely to have book talks to promote literature for recreational reading than

middle schools and high schools, respectively. Middle schools were about 1.4 times (79.1/55.7) more likely to have book talks to promote literature for recreational reading than high schools. In other words, lower levels of schools were more likely to have book talks to promote literature for recreational reading.

Book talks to promote curriculum related reading: Elementary schools were about 1.3 times (72.5/56.0) and 2.1 times (72.5/33.9) more likely to have book talks to promote curriculum related reading than middle schools and high schools, respectively. Middle schools were about 1.7 times (56.0/33.9) more likely to have book talks to promote curriculum related reading than high schools. Lower levels of schools were more likely to have book talks to promote curriculum related reading.

Author visits: Elementary schools were about 1.5 times (55.3/38.1) and 3.4 times (55.3/16.1) more likely to have author visits than middle schools and high schools, respectively. Middle schools were about 2.4 times (38.1/16.1) more likely to have book talks to promote curriculum related reading than high schools. Lower levels of schools were more likely to have author visits.

Encouraging free volunteer reading inside of school: Elementary schools were about 1.2 times (71.6/59.7) and 2.5 times (71.6/28.7) more likely to encourage free volunteer reading inside of school than middle schools and high schools, respectively. Middle schools were about 2.1 times (59.7/28.7) more likely to encourage free volunteer reading inside of school than high schools. Lower levels of schools were more likely to encourage free volunteer reading inside of school.

Creative writing activities related to literature: Elementary schools were about 2.3 times (57.2/25.4) and 3.3 times (57.2/17.2) more likely to provide creative writing activities related to literature than middle schools and high schools, respectively. Middle schools were about 1.5 times (25.4/17.2) more likely to provide creative writing activities related to literature than high schools. Lower levels of schools were more likely to provide creative writing activities related to literature.

Storytelling: Elementary schools were about 4.4 times (68.8/15.7) and 12 times (68.8/5.7) more likely to provide storytelling than middle schools and high schools, respectively. Middle schools were about 2.8 times (15.7/5.7) more likely to provide storytelling than high schools. Lower levels of schools were more likely to provide storytelling activities.

Reading incentive program within the school: Elementary schools were about 1.2 times (74.4/61.9) and 2.6 times (74.4/28.7) more likely to provide reading incentive programs than middle schools and high schools, respectively. Middle schools were about 2.2 times (61.9/28.7) more likely to provide reading incentive programs than high schools. Lower levels of schools were more likely to provide reading incentive programs.

Integrating reading for understanding strategies in units of inquiry: Elementary schools were about 1.7 times (44.7/26.9) and 3.4 times (44.7/13.2) more likely to integrate reading for understanding strategies in units of inquiry than middle schools and high schools, respectively. Middle schools were about 2 times (26.9/13.2) more likely to integrate reading for understanding strategies in units of inquiry than high schools. Lower levels of schools were more likely to integrate reading for understanding strategies in units of inquiry.

Readers' theater: Elementary schools were about 82 times (57.5/0.7) and 34 times (57.5/1.7) more likely to provide readers' theater activities than middle schools and high schools, respectively. High schools were about 2.4 times (1.7/0.7) more likely to provide readers' theater activities than Middle schools. Middle schools were less likely to provide readers' theater activities than elementary schools and high schools, respectively.

Second, compared with middle and high schools, elementary schools were more likely to provide the following activities, regardless of their rankings: *Creative writing activities related to literature, Music and rhymes, and Interpretation of print and digital images.*

Music and rhymes: Elementary schools were about 16 times (58.1/3.7) and 34 times (58.1/1.7) more likely to provide music and rhymes activities than middle schools and high schools, respectively. Elementary schools were more likely to provide music and rhymes activities.

Interpretation of print and digital images: Elementary schools were about 1.4 times (45.3/32.1) and 1.7 times (45.3/25.9) more likely to teach students to interpret of print and digital images than middle schools and high schools, respectively. Elementary schools were more likely to teach students to interpret of print and digital images.

Third, compared with middle and high schools, elementary schools were less likely to provide the following activity:

Self-help information: 45% of elementary schools, 60.4% of middle schools and 70.1% of high schools provided self-help information such as brochures, web links, or book lists. Elementary schools were significantly less likely to provide self-help information than middle schools and high schools, and there were no significant differences between middle and high schools.

Finally, a chi-square statistics test revealed that school type was not significantly related to the following activities regardless of their rankings:

- Databases and/or websites to encourage reading;
- Literature display;
- Production of print and digital images.

That is, school type did not make these activities more or less probable.

Other reading-related activities reported by the participating librarians:

Some librarians also mentioned the following additional activities they provided: Reading race, books give-away, reading buddies, compile booklist/bibliography, podcast/book trailer (mini commercials), student creating promotional materials for library, family reading program, book swap, what the teachers are reading, readers' advisory, Paws to Literacy (read to pet), etc.

We also observed some trends among the three types of schools.

Elementary schools

- **Reading and related activities in elementary schools focus largely on literacy skills development and interest-building—to encourage children to read better and read more and to become steady readers. Most of the top ranked activities such as literature displays and book talks do not guarantee student interaction though.**
- **Reading activities that require higher level of interaction rank low in elementary school libraries. Some examples include: book clubs or literature discussion groups (#21 out of 22), production of print and digital images (#20 out of 22), integrating reading for understanding strategies in units of inquiry (#18 out of 22), and interpretation of print and digital images (#16 out of 22).**
- **It seems to be age-appropriate that storytelling, music and rhymes, and readers' theater, activities that help young children develop a wide array of reading readiness skills, are common activities for elementary school librarians in terms of reading promotion.**
- **Elementary schools were significantly less likely to provide self-help information to students. It seems to indicate that age is a factor influencing the need of self-help information. This, however, contradict with research. Research has shown that age 6 and under, and adolescence are two peaks of growth spurs, which create the most challenges to children. Why elementary schools are less likely to provide self-help information to students needs further investigation.**
- **On average, elementary school librarians provided more reading programs (average=12 per school) in the year of 2008-2009, compared with 10 in per middle school, and 8 in per high school. However, most of the reading activities elementary school librarians provide are less involved with the higher order of thinking skills that are necessary for knowledge construction.**

Middle and high schools

- **Reading and related activities in middle school libraries have much in common with those in elementary schools, except that more student interaction is required. For example, nearly half of the middle school librarians provide or are involved with book discussion groups (#10 in the rank). Coping materials, including self-help information and books that help students cope with certain issues, seem to gain importance at this stage, ranking #6 and #9 respectively. These materials teach students not only how to think but also how to act upon important issues.**
- **A few reading and related activities in high school libraries show a slightly higher level of demand for student interaction. Book discussion groups ranks #7, and production of print and digital images, which appear in low ranks among elementary and middle schools, ranks #8.**
- **The ranks of coping materials in high school libraries are even higher: #4 for self-help information, and #5 for books to help students cope. It seems to indicate that high school students encounter more challenges in their lives, and that they are more independent and capable of dealing with challenges through their thinking skills.**
- **Although the encouragement of free voluntary reading *outside* of school is consistently high among all types of school, the encouragement of free voluntary reading *inside* of school declines in middle and particularly high schools. The findings convey a perception that high school libraries are not about reading for enjoyment and pleasure, and that pleasure reading eventually should end up in places outside of school libraries.**

These findings, including perspectives provided in Question 68, pose some issues. First, librarians seem still stay in the old paradigm as book/information providers. The reading activities that are most typically undertaken are primarily passive activities. Book display, book promotions, promotion of reading programs may, but do not necessarily engage students. Those reading initiatives that foster active engagement, discussion, creative output, such discussion groups, integrating reading for understanding strategies in units of inquiry, and creative writing activities, have much lower rates of library media specialist involvement. School libraries, in the end, are still perceived as warehouses of information, instead of knowledge construction center.

An extended and relevant issue is the lack of use of multimedia in reading and related activities. The low use of online, visual, and audio media to create and interpret information is of concern. Reading and information literacies are no longer text- or print-based only. Information can be created and distributed via various media. Students in current society need to be able to master the use of different media to integrate information and construct knowledge. School libraries must truly transform into media centers.

Finally, findings show that some reading / writing initiatives are more pervasive in the elementary school, and these mostly decline in frequency through middle school and high school. It is of some concern that this involvement in reading and literature initiatives declines through schooling. There may

be a number of possible reasons for this, such as the focus on informational resources to meet curriculum demands, and the perceived notion that such activities are for younger children. However, the reduction of certain activities conveys a perception that high school libraries are not about reading for enjoyment and pleasure, and this is a serious issue, especially in fostering an ongoing love of reading for pleasure after schooling. This is a disconnect that requires some attention.

This report consequently puts out the following challenge. It is for all school librarians in New Jersey to plan major reading / writing initiatives that engage students actively in thinking, discussing, sharing ideas, reflecting and participating through the use of multiple media, rather than activities where students primarily remain as the passive recipients. It is important for school librarians to focus on different way of engaging students in reading that are more active and integrated throughout school curricula. Developing reading comprehension requires deep, sustained reading over a period of time.

Question 69 asked participants to identify their three key priorities for change.

711 responded to this question, and a rich and diverse set of change priorities were identified. The majority of these (85%) were very concrete expressions of particular needs in a particular school, while others reflected a wider vision for the important role of school libraries in the learning fabric of schools. Emerging out of all these expressions of priority was a powerful sense that school librarians want, more than any thing else, to be able to perform their roles that they have been educated to do by virtue of their professional graduate education and the specifications of their role as articulated in professional documentation, and to have this educational responsibility honored and enabled in each school. Overall, seven key priorities for change were identified, and these reflect a central commitment to providing the best and most responsive learning environments in their information-rich schools. These are inter-related rather than discreet categories which work together. The seven priorities also a reflect a strong willingness to be active participants in a cycle of ongoing, continuous improvement both of the learning-centered role of the school library, and in doing so, building the school as a leader in educational outcomes.

Seven key priorities for change are:

- 1. Adopting flexible scheduling for school libraries across the grades.**
- 2. Developing richer and comprehensive understanding of the role of the school library , the work of the school librarian, and the contribution of the school library to learning outcomes for teachers, administrators and community members.**
- 3. Building a sustainable culture of curriculum-centered collaboration in the school focusing on integrating information, technical and critical literacies into curriculum.**
- 4. Providing adequate support staff to enable the professional role of the school librarian to be undertaken, particularly for instructional collaborations.**
- 5. Continuing to provide state-of-the-art information technology for access to information, as well as access to technology tools, to support the production and presentation of knowledge.**
- 6. Providing adequate budgets and participation in budget decisions.**
- 7. Enhancing and upgrading library facilities and space.**

Each of these priorities is described below.

1. Flexible scheduling.

Flexible Scheduling was identified as the most frequently reported key priority for change (32 % of priorities identified). Flexible scheduling has long been identified as a key dimension of quality library programs. It relates to how the school library and the professional work of the school librarian are made available to the school.

Participants were deeply concerned that the fixed-schedule approach was seen primarily as a school mechanism to provide teacher release and teacher preparation time, and in doing so, lock out access to the school's information resources at critical points of need, as well as learning opportunities at point of need determined by curriculum content and classroom activities. As such, it was often perceived by the school librarians as a convenient rather than considered approach to meeting school demands. As a result, it was seen to reduce opportunities for scheduling rich classroom collaborations, and to under-utilize the professional role of the school librarian by minimizing interactions of the teaching faculty with the school librarians in the provision of resource and information literacy expertise: "To have more time to schedule classes for extra library time. I teach 28 classes a week on a regular basis since Library class is a teacher's prep, and (I) do not have many "free" periods to schedule additional class time. I usually bring classes in for extra time during some of my planning periods."

The use of the library as a school mechanism for teacher release and teacher preparation was seen also as part of a broader misunderstanding of the role of the school librarian, and the role of the library as an active learning center. This is addressed in Priority 2.

Participants in the study saw the primary value of flexible scheduling in terms of providing a time-space framework for the school librarian to collaborate with members of the school community, as illustrated by these comments:

"Free up time in a teacher's schedule to allow for collaboration. It would be wonderful if various departments could have common prep/free time to meet and plan projects during the school day" in order to meet learning needs of students at point of need as determined by curriculum standards, and strengthening the opportunities of the school library and the work of the school librarian to be integrated into the learning goals of the school."

"Increase planning opportunities with departments and grade levels.....would result in higher quality assignments, would bring assignments more in line with the resources offered in the media center". In addition, school librarians valued the flexible opportunities enabled through flexible scheduling to directly link information literacy instruction to specific curriculum standards."

"More cohesive and effective meetings within departments because too many kids are falling through the cracks on necessary skills depending upon which string of teachers they have from 9 to 12,." and to develop these in partnership with classroom teachers, rather than in isolation, as was seen to happen in assigned teaching in fixed scheduled environments.

Participants also indicated that a flexible schedule approach would help them engage more effectively with classroom teachers, and to participate more actively in grade and team meetings to identify

resource and instructional needs. The most frequent responses embodies these ideas:

“Time to meet with teachers.

“More time for planning and assessing learning.”

“More opportunities to communicate, collaborate, and integrate with school administration and staff on a consistent and meaningful level.”

“A schedule that allowed me to attend grade level meetings on a regular basis.”

“Attending team/grade level meetings at least once a week. Again this will allow me time to plan with the teachers.”

“Scheduling of the media center time for teachers to bring their classes into the library and for the teachers to help the media specialists work with their students in selecting materials - books for book reports, country reports, etc., in order to provide optimal differentiation of instruction and chance of success for all students. It would also free teachers to make more active use of the school library at point of need – that learning moment when access to resources and instruction in their use is critical to their progress.”

“To have more open time blocks in the room usage schedule for classes that need to work on extended assignments at time of need.”

2. Understanding of the Role of the Library.

The second highest priority (32 % of priorities identified) centered on school community understanding of the professional role of the school librarian and enabling it to be enacted in the school. Participants expressed a sustained desire that the central role of the library in contributing to student learning outcomes be clearly understood and enacted, and that this would be demonstrated both in the way that library use was structured and facilitated through flexible scheduling, and enabling the school librarian to fulfill professional expectations of the role that they are educated to provide. Participants at times expressed concerns that their voices were not heard in terms of explicating their professional roles. “It is difficult to make school leaders understand the full extent of our role.” School librarians expressed the concern that their school leaders convey a disregard for the standards articulated through professional associations which articulate their role in a school. Participants saw that explicit valuing needs to be in accord with training and expertise to move beyond downgrading the role as “baby sitting” or prep place: “just a prep for teachers.”

In voicing this as a priority, school librarians at times conveyed a sense that they were “chopped off at the knees” because they are not able to enact a professional role because of school administrators’ misconceptions of their role. For example, they talked about the use of school librarians for teacher-release, which constrains the collaborative team approach to developing information literacy competencies. This was a strongly stated professional role. School librarians felt they were working “for” teachers, rather than “with” teachers. The persistent cry was,

“...understand the complexity of the role we are required to do.”

“Get administrators to really understand what we do so that they would see the instructional value of our programs, and not just a place to find a book, or schedule an event (closing us down) -- some get it, but some really don't.”

As one participant so aptly responded, “Be acknowledged by administration, school board, some staff, some parents, and some students as having the professional knowledge and instructional ability that has increased test scores consistently since 2000.” Another comment asked for, “...more awareness by administration of the amount of work required in the SLMS job.”

There was a clear expression of need for the school to engage in whole school discussion, thinking and action surrounding the role and specific expectations of the school librarian. There was an expressed need for a conversation that clarified the professional capabilities of school librarians so that they would not be disregarded, misunderstood or misused but rather that they would be seen as an integral dimension of quality learning and teaching in the school. This was particularly expressed in relation to information literacy development.

“Have the entire school population understand what "information literacy" is and how it has an impact on everything that is being taught.”

“Closing achievement gaps especially in relation to reading and literacy.”

“Understand what we do to improve reading and literacy” and the effective integration of information technology in learning .

School librarians are eager for a shared understanding of professional policy documentation that articulates the work they do, and the dimensions of the school library that are viewed as essential standards. These include policy statements in *Empowering Student Learning*, *Information Power*, and *Standards for the 21st Century Learner*, as well as the dimensions of information literacy spelled out in the curriculum framework of the Partnership for 21st century Skills.. School librarians simply want to do their job and they see a range of barriers, starting with the extent to which the professional dimensions are understood. This comment captures the frustration:

“Time to be a school library media specialist--I am the Teacher's prep, and I teach 33 classes a week in Library, Multi-Media(I've become the quasi-computer teacher), Remedial Math classes, and last year I taught Family Life classes for 35 classes. I have no time to collaborate with my colleagues on projects and it is very difficult to get time to plan my classes, and have access to the Library for students and teachers. I would love to be more active within my county professional organization, but so many meetings are scheduled after school, I can't attend.”.

Participants saw that the inappropriate use of the library made in some schools for non-library related functions, which at times prevented access to resources and services, and minimized opportunities for instructional opportunities to develop information literacy competencies. This was expressed in terms of decisions made in relation to the school library, such as not fostering the instructional role, and seeing the library as ancillary to the learning agenda of a school, and which overall conveyed a sense that the learning function of the school library was neither understood or valued.

“The MC is for the students not for PTA meetings, IEP meetings-it should not be considered a place to

plop people.”

“I wish that the library wouldn't be used for Christmas and Mother's day bazaars and school pictures and any other activity deemed important..(it is) automatically shut down and used to test a handful of kids during testing.”

“Discontinue the use of the media center that results in the re-location of my classes, i.e. voting, meetings, parental groups...not have the library used for administrative meetings and other activities that have no benefit to students.”

It is such a shame that school librarians seem to have to give priority to a struggle for meaningful use of the school library facility, particularly in light of the goals that are the essence of their professional responsibilities.

Against this backdrop, it is noteworthy that school librarians see responsibility on their part to develop more effective communication strategies. They acknowledge that they had to make a concerted effort to communicate effectively with the school executive, and have a supportive principal and staff who understand the responsibilities, and expectations, and who enable the enactment of the role to flourish. A number of participants suggested that there was need for a negotiated whole school policy that ensures that the school library is used effectively and appropriately, and that this reflects the particular needs of that school. This is built on a shared understanding of the professional capacity of the school librarian, including ongoing professional growth of the school librarian informed by established professional standards and shared expectations for meaningful use of the library to support students' development of deep knowledge and understanding. Principal support and leadership is critical here to provide leadership that is based on clear understanding of the school library arena.

Policy dimensions which were mentioned by participants include the following:

“Appropriate levels of staffing.”

“Student access to the professionally qualified school librarian.”

“Flexible scheduling of the school library for class uses.”

“School library's open hours, including after school.. use of the school library for non-library curriculum activities.”

“Instructional collaboration of classroom teachers and school librarians.”

”Reading enrichment / literature promotion activities provided through the school library.

“Teaching of information literacy competencies.”

”Assigning school librarians to key building committees that impact student achievement.”

”Library budget.”

“Library collection development.”

“Provision of information technology.”

“Integration of information technology with classroom and/or library learning.”

“Advocacy support,” e.g., at school board meetings.

“Moral support.”

“Professional evaluation of school librarians.”

“Additional funding beyond allocated budget.”

“Appropriate professional qualifications of library staff.”

In our view, a whole school policy provides the framework for a cycle of continuous improvement and the realization of strategic intentions, as well as continuing the collaborative culture of the school and instructional partnerships. This will work to bring quality student learning and information access and provision in accordance with guidelines and standards set by the professional school library community.

3. Building a sustainable culture of curriculum-centered collaboration in the school focusing on integrating information, technical and critical literacies into curriculum

It was particularly pleasing to see the participants’ commitment to building a culture of instructional collaborations, and saw the challenges of negotiating system boundaries, as identified above, to achieve this. Building collaborations, particularly instructional collaborations was identified as a key priority for change. It emerged out a pervasive belief embedded in the statements that instructional collaborations and partnerships to meet NJ core content standards are the core work of the school librarian: instructional design, integrating information and information technologies into the curriculum, active engagement in the teaching and learning process that enables students to learn meaningfully and deeply through information, and charting learning outcomes which demonstrate the relationship between the provision of school library services and student achievement, as one participant expressed: “organize more faculty interaction and utilization of library for better student learning”.

A key priority central to the collaborative instructional partnerships was built around collaborative learning interventions that focus on engaging students in the process of authentic research, and the development of a committed school wide approach to fostering inquiry, information and critical thinking through the school library. Such approaches include: integration of Web 2.0; systematic approach to the research process; and developing students as effective researchers, able to engage deeply and critically with information to build deep knowledge of their curriculum topics and meet curriculum standards. School librarians saw the challenge of making this a whole school approach:

“Teachers more aware of importance of scaffolding (or teaching) research and information skills throughout year...” in order to establish “...more consistency of expectations for students across all teachers ... so school becomes less of a game of "what we can get away with.." and more about what is

the right way to do things.”

Dimensions of realizing this challenge include the need to “develop a school wide model for research and note taking,” and “...a sequential program of research in all disciplines” where students engage in “research that uses higher order skills.” School librarians want, to “standardize research requirements by grade level including note taking and bibliographic citation,” ultimately leading to teacher empowerment where “classroom teachers assign a greater number of authentic research assignments” and make “greater use of online databases and more responsible use of Internet websites and develop complex information technology skills.

“I would love to have the ability to teach a semester class on information literacy where students could use blogs and wikis as interactive tools”, but in ways that engage students in learning deeply, rather than superficially.

“My students do too many projects involving *PowerPoint*, *MovieMaker*, wikis, blogs, etc. that allow students to get away with very shallow research. They don't learn the content, research process or critical thinking. The project often becomes a lesson in tech0logy - flashy and technical.”

Another participant expressed her goal to “decrease the number of required projects that are done "for show" in the monthly themes...teach about evaluating resources and about plagiarism to all three grade levels...”.

School librarians clearly saw the significant role that collaborative, participatory digital environments play in developing students as capable information seekers and users in a networked digital environment, and the importance of integrating this into their instructional work in the school library. “My top priority would be that teachers have more time for learning and developing new tech0logy and teaching skills which can be incorporated into the curriculum. Also that teachers have time to work with the media specialist on a cooperative level so students are better equipped to complete their assignments and that the media center becomes an integral part of the school community. This would help students become better learners in interpreting, manipulating and organizing information in their lives.”

4. Library Personnel

In order for effective change to happen, particularly the integrated instructional role, school librarians saw that a priority has to center on the provision of adequate support staff to enable the professional work of the school librarian to be accomplished, and to have this provided in a sustained way. This is a complex issue in times of budget cuts, and calls for clear positioning of the school library as an instructional center, one where the primary work is clearly that of collaborative teams working together to integrate inquiry-based learning in to the curriculum. “Provide clerical help to handle circulation type chores so that most of my time can be spend on education rather than operations”; “library clerk -It would mean that I could spend more time on teaching”; “To have a part-time paid aide to help with clerical duties. Our current system depends on volunteers. Family priorities often take them away from this task”. A key constraint that school librarians saw in engaging actively in all of these challenges was constrained by the limited amount of time and administrative support provided, especially but not solely in the elementary school: “Increased staffing to allow time for collaboration with classroom teachers. full-time librarian” At the same time, this was also seen to be part of a school wide-acknowledgement

of the library as an instructional space, and the work of the school librarian very strongly associated with instructional teams. This priority was seen to also be affirmation of the role of the school librarian, rather than the current situation where, "I feel like I'm becoming more of a clerk."

5. Information Technology upgrade

School librarians want their school libraries to be exemplary in providing state-of-the-art information technology to enable students not only to efficiently and equitably access quality information and to learn the essential evaluative skills, but to also use this information technology to develop their competencies at analysis and synthesis of information: "Top tier technology throughout the school"; "More computers available to both students and faculty -- The push is on to use more technology, but it is not available"; "Enough laptops and time to allow the SLMS to instruct children on a regular basis"; "I only have 14 computers and that is not enough for a class because the average class is over 24"; "Technology to move students into information literacy, research, database usage and overall need to infuse today's real world into learning";

The process of cascading older, superseded technologies to the library was a key concern. School librarians wanted to have working technology: Upgraded technology that works:" and to be able to use it effectively in the instructional process "Upgrade in the technology available in the school library. The library presently has the oldest computers in the school, but the librarian has had the most recent technology related training of any member of the staff"; "I have only 4 patron computers, and they are 1997 eMacs"; "Need higher level technology to keep older students involved";.

This demonstrates a lack of vision within a school in terms of the role of information technology in the information-to-knowledge cycle, and how students engage with it to build deep knowledge and understanding, in concert with the increasing demands of students for digital production to support their demonstration of learning outcomes. Participants were concerned about response time, and the need for technology support in a more timely manner: "More technology support. We sometimes have to wait days, weeks, or months to get equipment fixed. We also could use more technology equipment"

Participants saw potential with the integration of web 2.0 technologies into their instruction: "updating media center technology especially in the area of Web 2.0 resources increase number of computers and/or let students bring their own laptops into our wireless environment; "More openness to use Web 2.0 tools and OSS technologies - Our tech department's first reaction to any request is "0" or it will affect "BANDWIDTH."

6. Budget

School librarians have seen literacy, reading and resource expenditures cut, and recognize the travesty of this situation, yet cognizant of the whole funding crisis in the state. While there is the goal of having adequate funding, which pervaded a majority of the responses, the most critical need that emerged from this input is simply wanting to be engaged in budget decisions, given the opportunity to express library needs, rather than simply being told.

7. Facilities enhancement and upgrades of library space

School librarians clearly want vibrant, inviting and aesthetically appealing facilities, and facilities that enable the performance of a professional role – efficiency and adequacy of service and instructional opportunities. A number of individual suggestions were made:

"New furniture to replace the existing old, broken, soiled stuff now in place."

“A larger library facility. We have flexible scheduling but there are many times each week when two, three or more classes want to use the library but there isn't enough room.”

“Book Theft Detection System to prevent loss of materials.”

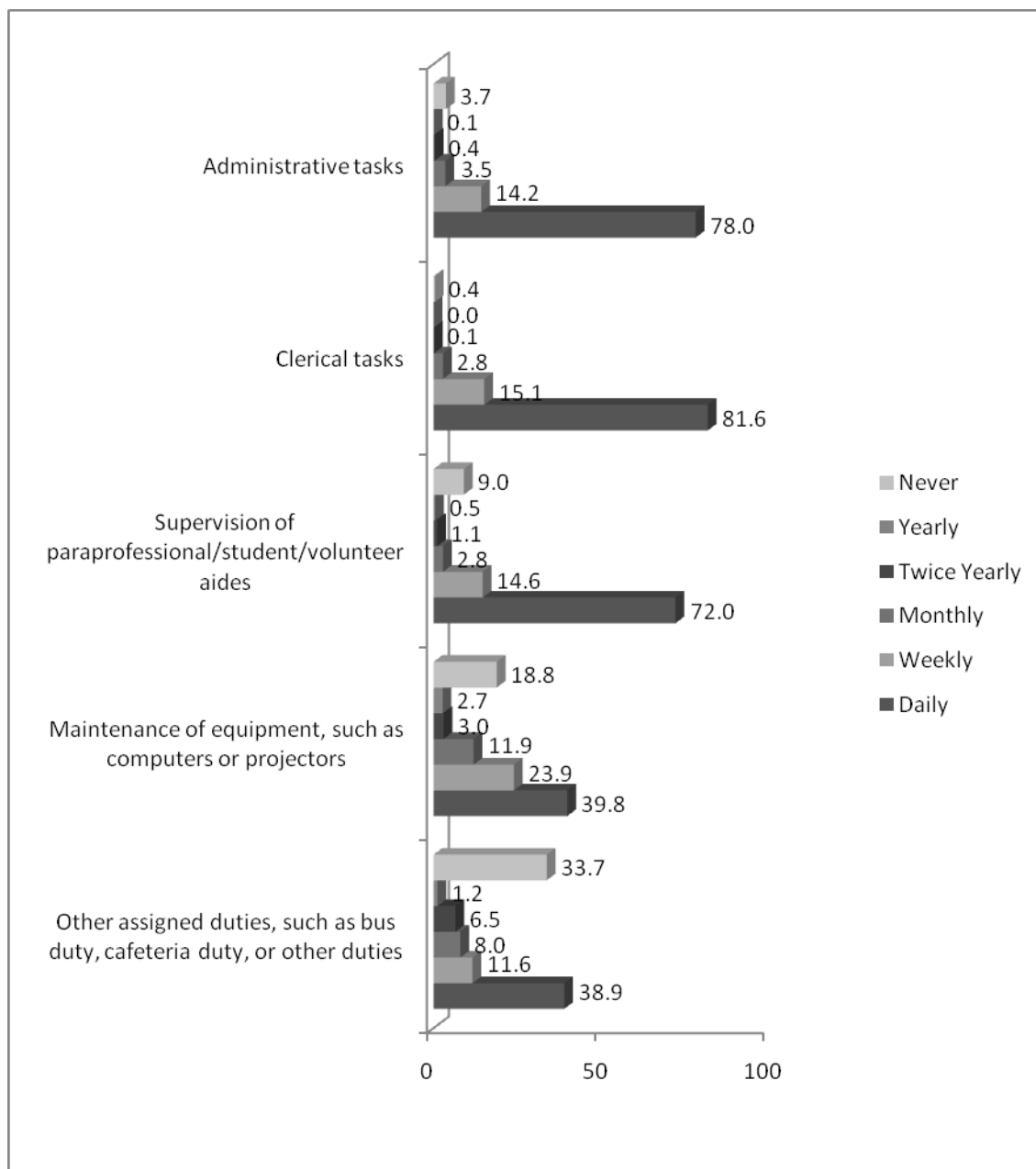
“Create a curriculum that reflects technology and libraries today rather than the slap-dash, outdated mess we now have.”

PART 5 ADMINISTRATION OF THE SCHOOL LIBRARY

Part 5 of the survey sought to gather data on dimensions of the administrative and managerial responsibilities of school librarians in New Jersey. Often these are behind-the-scenes responsibilities, sometimes not understood as professional responsibilities, and central to the role and efficient functioning of school libraries.

Question 70 sought to provide an overview of the nature and extent of school librarians' engagement in a range of library administration and management activities. This is shown in the following table:

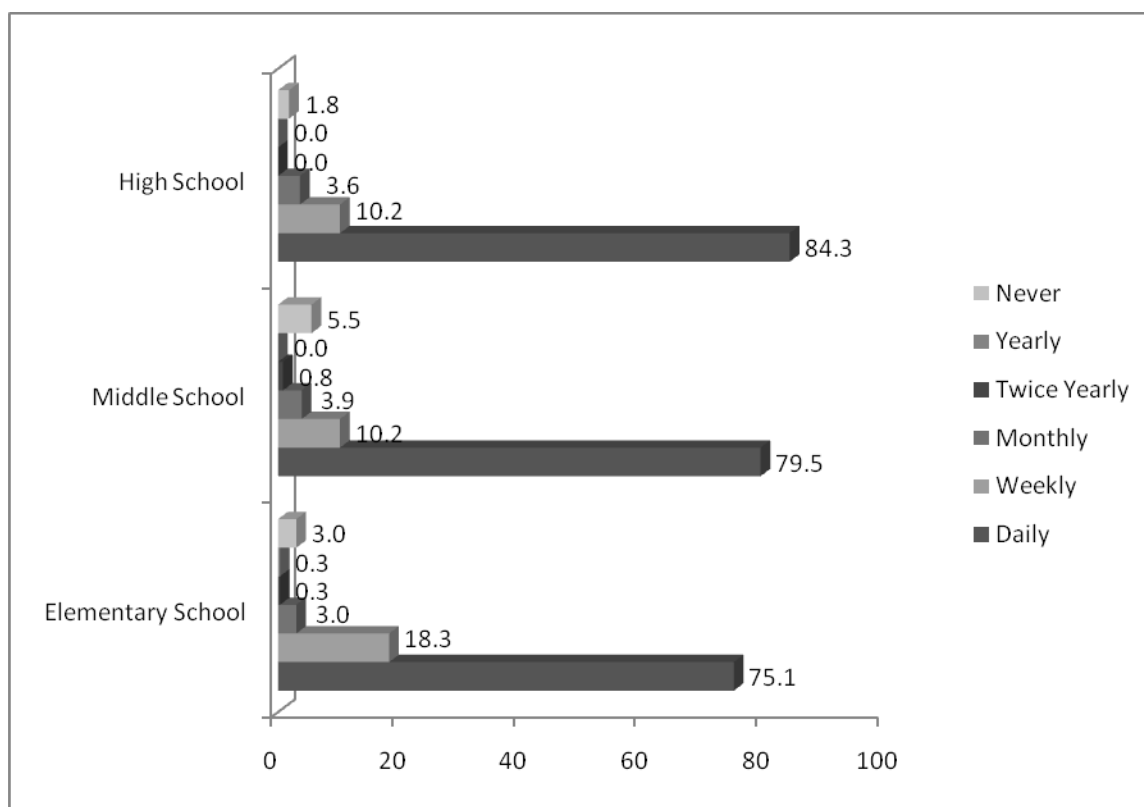
| | Daily | Weekly | Monthly | Twice Yearly | Yearly | Never | Total |
|---|------------|------------|-----------|-----------------|----------|------------|-------------|
| Administrative tasks | 532 (78.0) | 97 (14.2) | 24 (3.5) | 3 (0.4) | 1 (0.1) | 25 (3.7) | 682 (100.0) |
| Clerical tasks | 562 (81.6) | 104 (15.1) | 19 (2.8) | 1 (0.1) | 0 (0.0) | 3 (0.4) | 689 (100.0) |
| Supervision of paraprofessional/stu dent/volunteer aides | 439 (72.0) | 89 (14.6) | 17 (2.8) | 7 (1.1) | 3 (0.5) | 55 (9.0) | 610 (100.0) |
| Maintenance of equipment, such as computers or projectors | 265 (39.8) | 159 (23.9) | 79 (11.9) | 20 (3.0) | 18 (2.7) | 125 (18.8) | 666 (100.0) |
| Other assigned duties, such as bus duty, cafeteria duty, or other duties | 252 (38.9) | 75 (11.6) | 52 (8.0) | 42 (6.5) | 8 (1.2) | 218 (33.7) | 647 (100.0) |



Patterns for each activity by school type

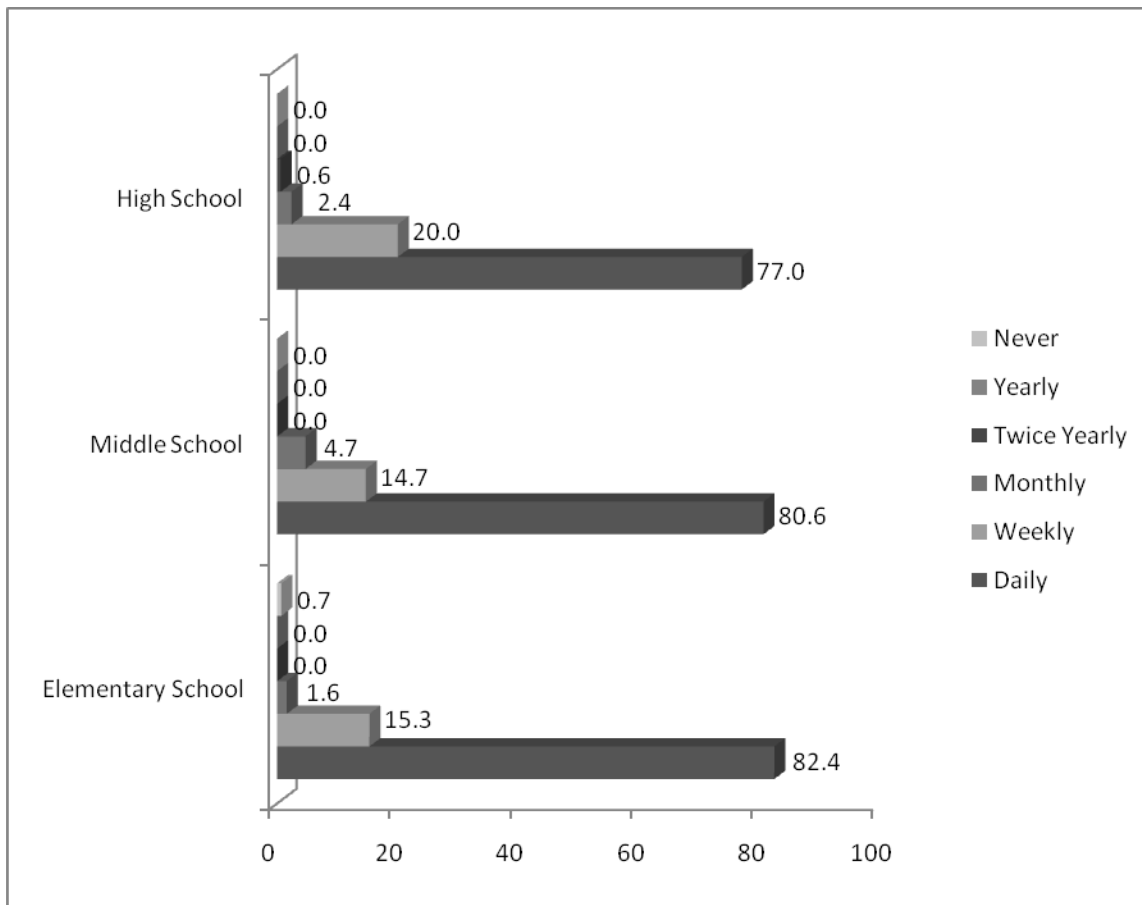
1) Administrative tasks

| | Daily | Weekly | Monthly | Twice Yearly | Yearly | Never | Total |
|-------------------|------------|-----------|---------|--------------|---------|---------|-------------|
| Elementary School | 226 (75.1) | 55 (18.3) | 9 (3.0) | 1 (0.3) | 1 (0.3) | 9 (3.0) | 301 (100.0) |
| Middle School | 101 (79.5) | 13 (10.2) | 5 (3.9) | 1 (0.8) | 0 (0.0) | 7 (5.5) | 127 (100.0) |
| High School | 140 (84.3) | 17 (10.2) | 6 (3.6) | 0 (0.0) | 0 (0.0) | 3 (1.8) | 166 (100.0) |
| Total | 467 | 85 | 20 | 2 | 1 | 19 | 594 |



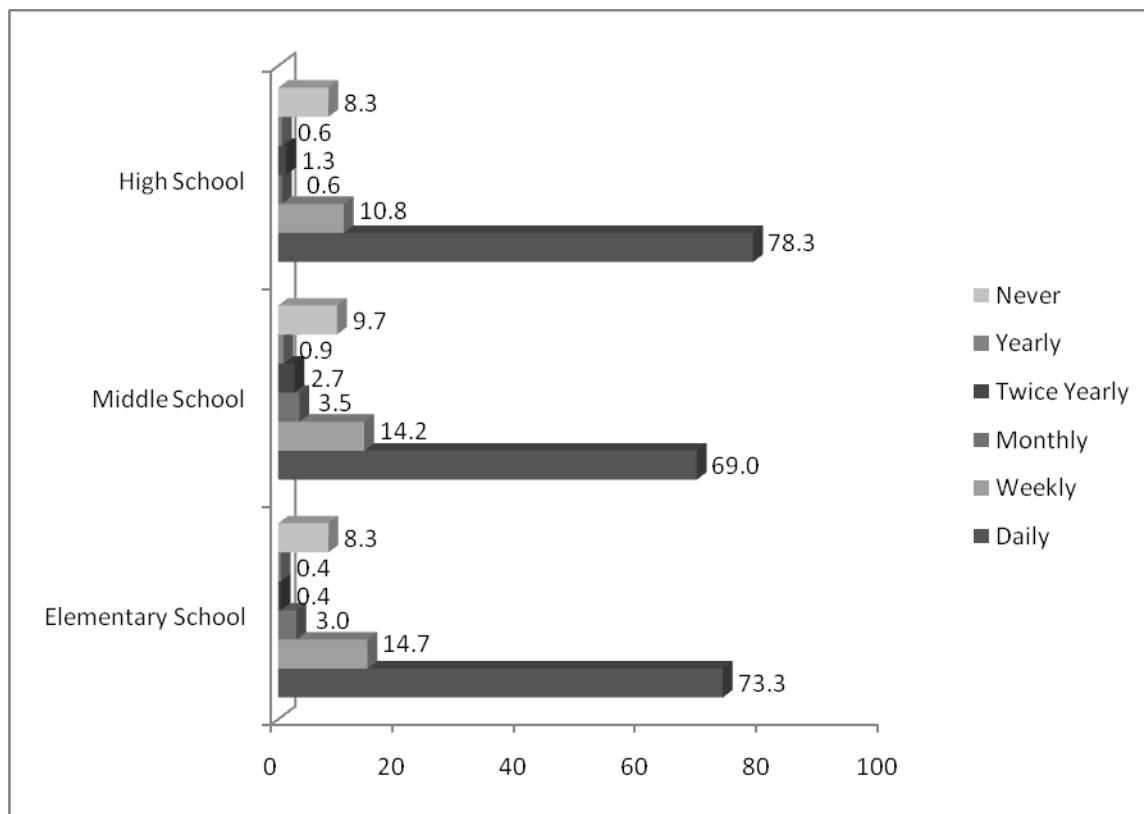
2) Clerical tasks

| | Daily | Weekly | Monthly | Twice Yearly | Yearly | Never | Total |
|-------------------|------------|-----------|---------|--------------|---------|---------|-------------|
| Elementary School | 253 (82.4) | 47 (15.3) | 5 (1.6) | 0 (0.0) | 0 (0.0) | 2 (0.7) | 307 (100.0) |
| Middle School | 104 (80.6) | 19 (14.7) | 6 (4.7) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 129 (100.0) |
| High School | 127 (77.0) | 33 (20.0) | 4 (2.4) | 1 (0.6) | 0 (0.0) | 0 (0.0) | 165 (100.0) |
| Total | 484 | 99 | 15 | 1 | 2 | 2 | 601 |



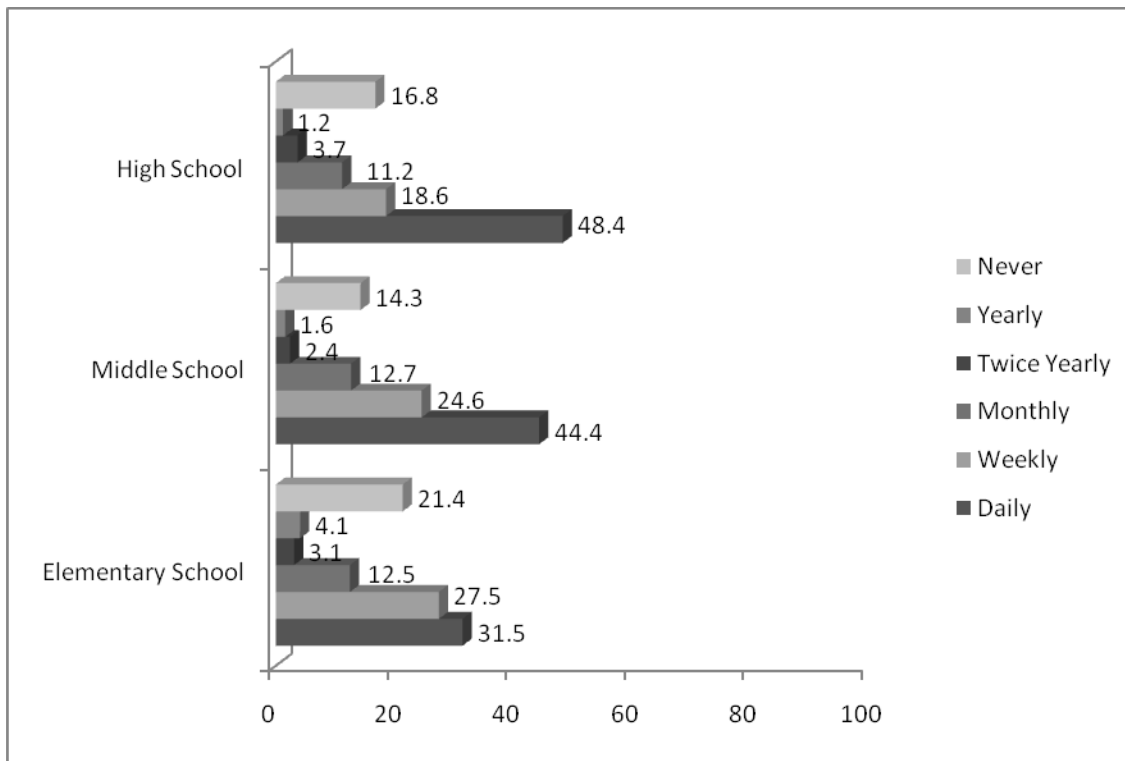
3) Supervision of paraprofessional/student/volunteer aides

| | Daily | Weekly | Monthly | Twice Yearly | Yearly | Never | Total |
|-------------------|------------|-----------|---------|--------------|---------|----------|-------------|
| Elementary School | 195 (73.3) | 39 (14.7) | 8 (3.0) | 1 (0.4) | 1 (0.4) | 22 (8.3) | 266 (100.0) |
| Middle School | 78 (69.0) | 16 (14.2) | 4 (3.5) | 3 (2.7) | 1 (0.9) | 11 (9.7) | 113 (100.0) |
| High School | 123 (78.3) | 17 (10.8) | 1 (0.6) | 2 (1.3) | 1 (0.6) | 13 (8.3) | 157 (100.0) |
| Total | 396 | 72 | 13 | 6 | 3 | 46 | 536 |



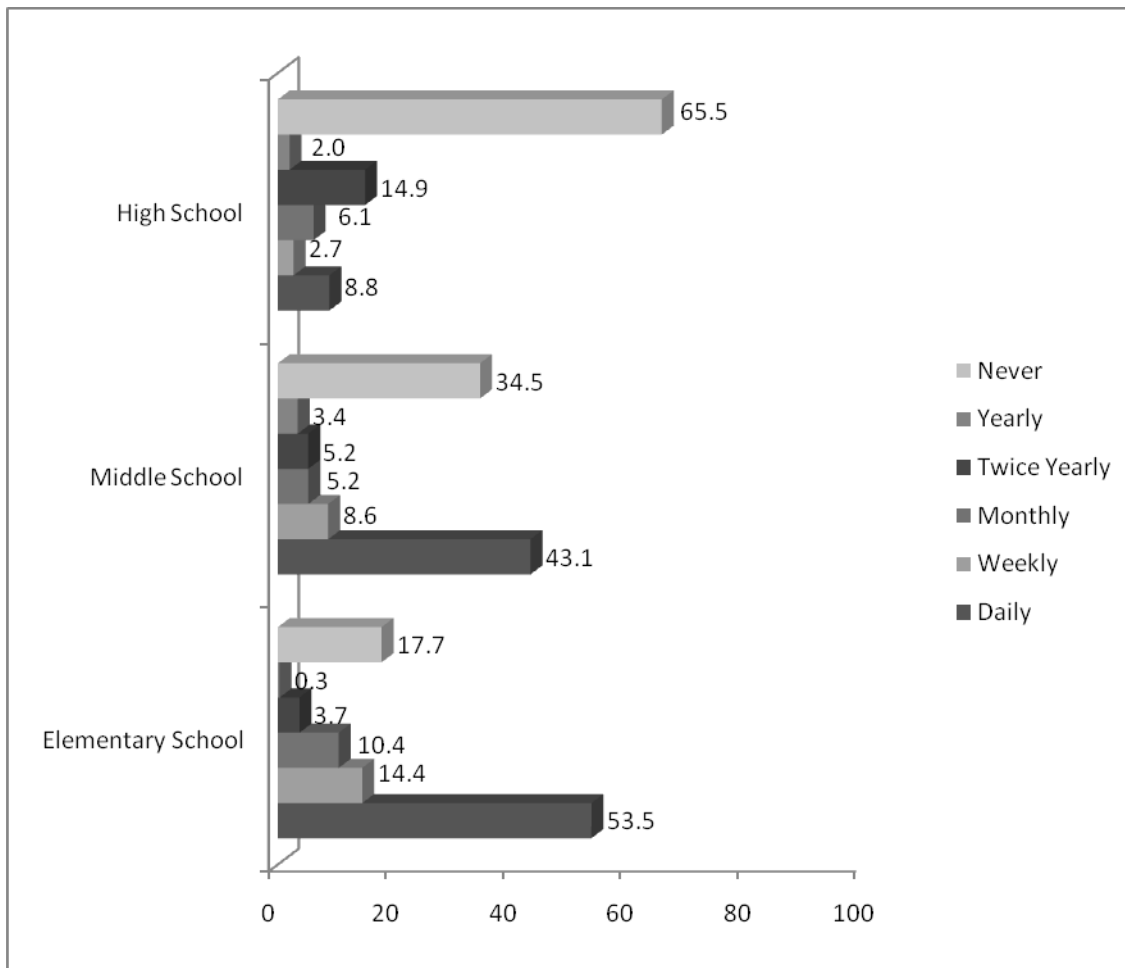
4) Maintenance of equipment, such as computers or projectors

| | Daily | Weekly | Monthly | Twice Yearly | Yearly | Never | Total |
|-------------------|-----------|-----------|-----------|--------------|----------|-----------|-------------|
| Elementary School | 93 (31.5) | 81 (27.5) | 37 (12.5) | 9 (3.1) | 12 (4.1) | 63 (21.4) | 295 (100.0) |
| Middle School | 56 (44.4) | 31 (24.6) | 16 (12.7) | 3 (2.4) | 2 (1.6) | 18 (14.3) | 126 (100.0) |
| High School | 78 (48.4) | 30 (18.6) | 18 (11.2) | 6 (3.7) | 2 (1.2) | 27 (16.8) | 161 (100.0) |
| Total | 227 | 142 | 71 | 18 | 16 | 108 | 582 |



5) Other assigned duties, such as bus duty, cafeteria duty, or other duties

| | Daily | Weekly | Monthly | Twice Yearly | Yearly | Never | Total |
|-------------------|------------|-----------|-----------|-----------------|---------|-----------|-------------|
| Elementary School | 160 (53.5) | 43 (14.4) | 31 (10.4) | 11 (3.7) | 1 (0.3) | 53 (17.7) | 299 (100.0) |
| Middle School | 50 (43.1) | 10 (8.6) | 6 (5.2) | 6 (5.2) | 4 (3.4) | 40 (34.5) | 116 (100.0) |
| High School | 13 (8.8) | 4 (2.7) | 9 (6.1) | 22 (14.9) | 3 (2.0) | 97 (65.5) | 148 (100.0) |
| Total | 223 | 57 | 46 | 39 | 8 | 190 | 563 |



Significant differences by school type

| | | Elementary School (N=301) | Middle School (N=127) | High School (N=166) | Total (N=594) | χ^2 |
|--|--------------|---------------------------------|--------------------------|------------------------|------------------|-----------|
| Administrative tasks | Daily | 226 (48.4) | 101 (21.6) | 140 (30.0) | 467 (100.0) | 13.63 |
| | Weekly | 55 (64.7) | 13 (15.3) | 17 (20.0) | 85 (100.0) | |
| | Monthly | 9 (45.0) | 5 (25.0) | 6 (30.0) | 20 (100.0) | |
| | Twice Yearly | 1 (50.0) | 1 (50.0) | 0 (0.0) | 2 (100.0) | |
| | Yearly | 1 (100.0) | 0 (0.0) | 0 (0.0) | 1 (100.0) | |
| | Never | 9 (47.4) | 7 (36.8) | 3 (15.8) | 19 (100.0) | |
| Clerical tasks | Daily | 253 (52.3) | 104 (21.5) | 127 (26.2) | 484 (100.0) | 10.02 |
| | Weekly | 47 (47.5) | 19 (19.2) | 33 (33.3) | 99 (100.0) | |
| | Monthly | 5 (33.3) | 6 (40.0) | 4 (26.7) | 15 (100.0) | |
| | Twice Yearly | 0 (0.0) | 0 (0.0) | 1 (100.0) | 1 (100.0) | |
| | Yearly | 2 (100.0) | 0 (0.0) | 0 (0.0) | 2 (100.0) | |
| | Never | 2 (100.0) | 0 (0.0) | 0 (0.0) | 2 (100.0) | |
| Supervision of paraprofession al/student/volu nteer aides | Daily | 195 (49.2) | 78 (19.7) | 123 (31.1) | 396 (100.0) | 9.29 |
| | Weekly | 39 (54.2) | 16 (22.2) | 17 (23.6) | 72 (100.0) | |
| | Monthly | 8 (61.5) | 4 (30.8) | 1 (7.7) | 13 (100.0) | |
| | Twice Yearly | 1 (16.7) | 3 (50.0) | 2 (33.3) | 6 (100.0) | |
| | Yearly | 1 (33.3) | 1 (33.3) | 1 (33.3) | 3 (100.0) | |
| | Never | 22 (47.8) | 11 (23.9) | 13 (28.3) | 46 (100.0) | |
| Maintenance of equipment, such as computers or projectors | Daily | 93 (41.0) | 56 (24.7) | 78 (34.4) | 227 (100.0) | 19.38* |
| | Weekly | 81 (57.0) | 31 (21.8) | 30 (21.1) | 142 (100.0) | |
| | Monthly | 37 (52.1) | 16 (22.5) | 18 (15.4) | 71 (100.0) | |
| | Twice Yearly | 9 (50.0) | 3 (16.7) | 6 (33.3) | 18 (100.0) | |
| | Yearly | 12 (75.0) | 2 (12.5) | 2 (12.5) | 16 (100.0) | |
| | Never | 63 (58.3) | 18 (16.7) | 27 (25.0) | 108 (100.0) | |
| Other assigned duties, such as bus duty, cafeteria duty, or other duties | Daily | 160 (71.7) | 50 (22.4) | 13 (5.8) | 223 (100.0) | 159.79*** |
| | Weekly | 43 (75.4) | 10 (17.5) | 4 (7.0) | 57 (100.0) | |
| | Monthly | 31 (67.4) | 6 (13.0) | 9 (19.6) | 46 (100.0) | |
| | Twice Yearly | 11 (28.2) | 6 (15.4) | 22 (56.4) | 39 (100.0) | |
| | Yearly | 1 (12.5) | 4 (50.0) | 3 (37.5) | 8 (100.0) | |
| | Never | 53 (27.9) | 40 (21.1) | 97 (51.1) | 190 (100.0) | |

*p<.05 **p<.01 *** p<.001

Follow-up pairwise comparisons were conducted to evaluate the difference. The Holm's sequential Bonferroni method was used to control for Type I error at the .05 across all three comparisons.

Maintenance of equipment, such as computers or projectors

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | 2.31 | .804 | | NS | .09 |
| Elementary vs. high | 15.41 | .009 | .0167 | * | .18 |
| Elementary vs. middle | 8.50 | .131 | .025 | NS | .14 |

Other assigned duties, such as bus duty, cafeteria duty, or other duties

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | 54.83 | .000 | .0167 | * | .46 |
| Elementary vs. high | 153.44 | .000 | .0167 | * | .59 |
| Elementary vs. middle | 24.14 | .000 | .0167 | * | .24 |

The data in this part of the survey provides evidence of the diverse and complex, interrelated responsibilities of managing a school library and working to make it an integral part of the learning agenda of schools. Often these are behind-the-scenes responsibilities, sometimes not understood as professional responsibilities, and central to the role and efficient functioning of school libraries.

91 percent of school librarians are engaged in administrative tasks related to acquisition and circulation of resources at least on a daily or weekly basis, with 78% of them involved in this on a daily basis. It is a time-consuming task, one of critical importance to maintaining the highest quality collection targeted to curriculum needs, reading abilities, and learning styles. When this is broken down by school type, 75.1% of elementary school librarians engage in this task on a daily or weekly basis; 79.5% for middle school librarians, and 84.3 percent of high school librarians.

A similar pattern emerges with clerical tasks. When this is broken down by school type, 82.4% of elementary school librarians engage in this task on a daily or weekly basis; 80.6% for middle school librarians, and 77% of high school librarians.

School librarians in New Jersey clearly undertake supervision responsibilities of paraprofessional and voluntary staff, when they are available or assigned. These are also part of daily routines. When this is broken down by school type, 73.3% of elementary school librarians engage in this task on a daily or weekly basis; 69.0% for middle school librarians, and 78.3% of high school librarians.

To a lesser extent, school librarians in New Jersey also undertake responsibilities in relation to the everyday maintenance and management of equipment, such as computers, projectors and recorders. These are also part of daily routines. When this is broken down by school type, 31.5% of elementary school librarians engage in this task on a daily or weekly basis; 44.4% for middle school librarians, and 48.4% of high school librarians.

Overall, there is little variation in the range of broad responsibilities undertaken across school types (elementary, middle and high), apart from some maintenance of equipment, which appears to have a stronger presence in high schools, and the performance of assigned duties such as bus, cafeteria and the like. These seem to be more assigned to elementary school librarians, who are already shared between schools and which has an impact on the potential full provision of library services.

In addition to the above findings, it is clear that school librarians give considerable service to their schools in a multitude of ways. Question 71 sought further input into the range of activities and initiatives that school librarians undertake in addition to tasks and responsibilities directly assigned in job descriptions. 387 participants responded to this question, providing an extensive list of job functions. It is clear that school librarians make a contribution to the work of schools beyond their immediate library responsibilities and that the specialized training that school librarians have is utilized in non-library capacities throughout the schools.

Five key areas of contribution were identified. These are

- 1. Information service roles, including school publishing and school-wide media responsibilities, publicity, school website and community information links.**
- 2. School wide reading and literacy initiatives involving clubs, reading challenges and competitions, reading incentive schemes and specialized reading celebrations.**
- 3. General school services utilizing the expertise of school librarians, such as school committees and grant writing.**
- 4. Student leadership, including participation in and coordination / leadership of school events targeted to developing student responsibility, leadership and civic participation.**
- 5. A range of extracurricular activities focusing on student responsibility and civic participation.**

These are elaborated below.

1. Information service roles.

By virtue of the skills that school librarians have as information managers, particularly recent graduates who bring a raft of information technology design capabilities, the contributions include:

- Publishing: Coordinator / producer of annual school magazine / yearbook; editor and producer of school newsletters and newspapers, sometimes on monthly basis; proofreader of school documents. (Total responses = 14);
- Media responsibilities: This includes responsibilities for video conferencing; producing video and slide segments for public school events; managing sound and lighting facilities for public events; sound system management; school photographer and creation of ID photographs for use by school community. (Total responses = 11);
- Publicity. Responsible for public relations; newspaper stories; school-wide bulletin boards (both print and digital); display cases; coordinating publicity committee. (Total responses = 11)'
- Website. Webmaster for school websites (in addition to library websites) including web design, content creation and management, and website updates; coordinator / member of website development committees both at school and district level; site coordination / membership of committees developing virtual schools / distance education initiatives and introducing digital learning management systems. (Total responses = 21);
- Community information links; Serving as members of public library trustees and library committee members; school liaison with public libraries; supervising students enrolled in MLIS programs and school library certification programs; members of professional committees. (Total responses = 9).

2. School-wide reading and literacy initiatives. This category highlighted the leadership and supporting role played by many school librarians in school-wide reading and literacy initiatives. These centered on the coordination and leadership of reading events and reading programs. The most frequently mentioned were:

- Annual books fairs (Total responses = 20);
- Running school book clubs, literature circles, e.g., Graphic Novel Society; Manga / Animee Club (Total responses = 12);
- Competitive book events / reading contests, e.g., Battle of the Books; Read Across America; Caldecott Challenge; Reading Olympics; Celebrity Read; (Total responses = 29);
- Managing reading incentive schemes and school-wide reading programs, e.g., Sustained silent reading (Total response = 5);
- Developing, managing and documenting Summer Reading programs (Total responses =4);
- Specialized literacy events / celebrations: Family Literacy Night; Annual spelling bee; Dr Seuss Celebration; Movie Club. (Total responses =5).

3. General school service. This category includes a range of capabilities and skills school librarians make available to the whole school. These include:

- Grant writing, for both library and initiatives where school is seeking external funding. (Total responses = 8);
- Test administration, oversee test preparation, and proctoring of state tests (Total responses = 16);
- Leadership and membership of specialist school committees (not mentioned in earlier questions), e.g., Volunteer Committee; Grievance Committee; Middle States Accreditation Committee; Emergency Management Team; Affirmative Action Committee; School Safety

Committee; Crisis Team; Building Scheduling Committee; Strategic Planning Committee; Character Education Committee; Green Taskforce (Total responses = 27);

- District committees: Union representative; District Teacher Representative; District Research Committee; Cyberbullying Committee Total responses = 7.

4. Student Leadership: This category includes participation in and coordination / leadership of school events targeted to developing student responsibility, leadership and civic participation Total responses = 11.

- Student leadership council; student governance; student parliament;
- Peer tutoring and mentoring programs;
- National Honors society.

5. Extracurricular: This category refers to leading events and groups that contribute to social and cultural engagement of students, as well as the development of personal agency and interests. A diverse range of clubs were mentioned and roles as coordinator, activity advisor, leader were identified:

- Clubs, such as Finance Club, Bird-watching Club; K-Kids Club; Crochet Club; Future Teachers Club; Animal Shelter Club; Breast Cancer Support Club) Total responses = 11);
- Festival of Arts; Multi-cultural Festival; Big Brother Big Sister Program; Hispanic Heritage Festival; Black History Month; Women's History Month Total Responses = 12).

Amidst these responses, there were some assigned responsibilities that participants saw as inappropriate. Total responses = 18):

- Substitute for absentee teachers, teachers involved in meetings, supervision of activities of absent teachers which results in closing the school library);
- Misuse of flexible schedule, e.g., taking the school librarian away from library activities and collaborative meetings with teachers to "cover" for absent teachers;
- Study hall supervision, which results in closing the school library.

ANALYSIS OF THE COLLECTIONS IN NEW JERSEY SCHOOL LIBRARIES

Questions 72 to 86 asked participants to provide data on their resource collections, including books, non-print materials, equipment, technology and interlibrary loan. The analysis of New Jersey school library book collections is structured in two ways:

- 1) Analysis of survey questions.
- 2) Analysis of *TitleWise*, a database created by Follett Library Resources that contains descriptive statistics of book collections in participating school libraries.

School librarians who are not users of the Follett Library Resource's *TitleWise* database responded to additional survey questions about their book collections. School librarians who are users of the database could choose to answer the survey questions or grant CISSL access to their *TitleWise* accounts. The table below summarizes the results of this self-selection process that results in a sub-set of 298 school libraries from the original sample of 765 . A survey question established that 474 school librarians are *TitleWise* users. Of these respondents 71 percent, or 335 respondents granted CISSL permission to access and use their

TitleWise accounts for analysis. Of those records, 298, or 89 percent, were complete and usable. The total percentage of *TitleWise* accounts that supplied data for analysis of school library collections was 39 percent of the total number of survey respondents. The 430 respondents who did not have accounts, or preferred not to grant access proceeded to answer questions survey questions and these responses are analyzed below. . The results of the analysis of the aggregated library book collection created from *TitleWise* accounts of school libraries who did grant access follows the analysis of survey questions about book collections.

Self-Selection of Sample for *TitleWise* Analysis from Survey Respondents

N= 765

| <i>TitleWise</i> Users | Permission Granted | Usable Records | Percentage of Usable Records from original sample |
|------------------------|--------------------|----------------|---|
| 474 (62%) | 335 (71%) | 298 (89%) | 39% |

Survey Responses from School Libraries that do not have TitleWise Accounts or did not grant permission for CISSL to analyze their accounts. The data in this section derives from a maximum of 61 percent of the original sample of 765 survey respondents (i.e., those who did not have TitleWise accounts, or did not give permission to CISSL to access these accounts for analysis.) Participants reported data on their school library collections for the 2008-09 school year. The following procedures were followed to prepare data from the survey questions regarding school library collections after the data were transferred to a database.

- Blank responses were deleted from the database of responses;
- Totals were computed from responses given when a total was not given;
- Decimal formats were converted to percentages;
- Text responses were converted to numerical values or deleted when both were given.

The table below reports the total number of library materials in school library collections in 2008-09, the number of those materials that were books, the number of new library materials purchased in 2008-09, and the number of the newly purchased materials that were books. Since the number of responses (n) to each question in this part of the survey varies, the number of responses to each question are noted in column 2 of the table. .

Total Number of Materials and Books in the Collection and Added Books and Materials in 2008-2009

| Question | No. responses | Mean | Standard Deviation | Median | Mode | Range of responses |
|--|----------------|-----------|--------------------|--------|--------|--------------------|
| Total number of materials in collections | 397 (51.9%) | 13, 846.9 | 9491.5 | 12,532 | 15,000 | 115,000-300 |
| Total number of books in collections | 398 (52%) | 13,028.3 | 10,323.8 | 11,000 | 14,000 | 115,000-150 |

| | | | | | | |
|---|----------------|-------|-------|-----|-----|----------|
| Total number of new materials added to collections | 398 (52%) | 580.1 | 712.7 | 415 | 500 | 8,000-12 |
| Total number of new books added to collections | 400 (52.3%) | 532.7 | 704.2 | 370 | 500 | 8,000-0 |

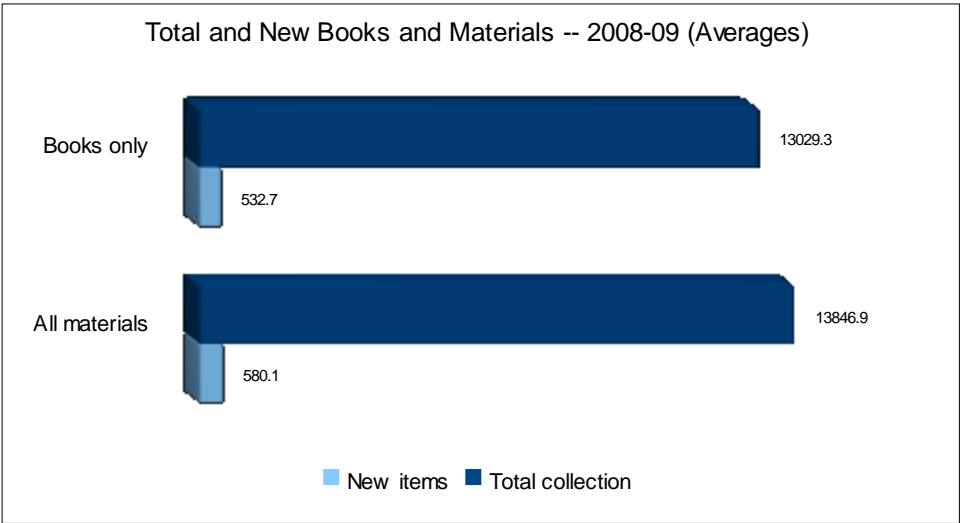
The mean in the above chart is the average number of materials. The median value is the value at midpoint, with an equal number of responses lower and higher than the median. The most common value given by respondents is the mode.

The mean, or average number of school library materials reported by survey respondents who do not have *TitleWise* accounts is 13,846.9. The average number of books in the collections is 13, 028.3. The average number of new materials added to the collections in 2008-09 is 580.1. The average number of new books added is 532.7.

While the mode, or most frequent response given for total and added numbers of books/materials in the collections do not vary that much from the mean, the range of responses indicate large differences among school library collections. The lowest number of materials in a school library is 300; the highest number is 115,000. The lowest number of books in a school library collection is 150; the largest is 115,000. The lowest number of new materials added is 12; the largest is 8,000. The lowest number of new books added is zero; the largest is 8,000. This wide variation indicates substantial inequities in the size of school library collections and in the size of their acquisitions, or new materials purchased. This also indicates inequities in the funding school library budgets. The high values of the standard deviations, or differences among the averages supports these conclusions.

The figure below illustrates the proportion of new books and materials to the existing collections calculated from the means, or averages reported.

Average Numbers of Library Materials and New Materials Added



The table below shows the sizes of magazine and newspaper subscriptions reported in school library collections.

Magazine and Newspaper Subscriptions in the Collections

| | Magazine Subscriptions | Newspaper Subscriptions |
|--|------------------------|-------------------------|
| Mean | 28 | 2.1 |
| Median | 20 | 1 |
| Mode | 0 | 0 |
| Minimum Value | 0 | 0 |
| Maximum Value | 301 | 250 |
| Number of Respondents (% of total respondents) | 460(60.1) | 465(60.8) |

The mode value, or value most frequently reported for the number of magazine and newspaper subscriptions in school libraries is zero, indicating that there are more school libraries that do not take subscriptions for periodicals in print format than libraries that do subscribe. Inequity is also indicated in the range of minimum and maximum number of periodical subscriptions reported, with a range of zero to 301 for magazines, and a range of zero to 250 for newspapers.

The table below reports the availability of electronic databases in school libraries.

Database Availability in the Collections

| | Total Available Databases | Purchased Databases |
|---|----------------------------------|----------------------------|
| Mean | 6.9 | 4.1 |
| Median | 3 | 1 |
| Mode | 1 | 0 |
| Minimum Value | 0 | 0 |
| Maximum Value | 82 | 72 |
| Number of Respondents (% of total respondents) | 456(59.6) | 454(59.3) |

The mode reported for database availability in collections is one; the modal response for purchased databases is zero. This indicates that there are more school libraries with access to one or no databases than school libraries that have database access. There was a wide range of the number of databases available through purchase or from another source, indicating substantial inequities among school library access to electronic databases.

The table below provides information about non-print materials in school library collections.

Non-Print Materials in the Collections

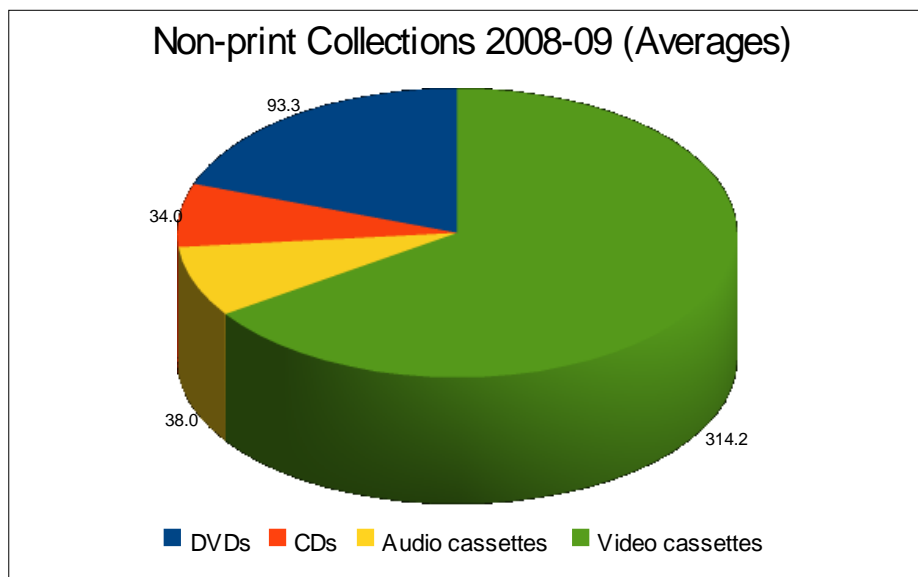
| | DVDs | CDs | Audio cassettes | Video cassettes |
|----------------------|-------------|------------|----------------------------|----------------------------|
| Mean | 93.3 | 34 | 38 | 314.2 |
| Median | 25 | 5 | 12 | 200 |
| Mode | 0 | 0 | 0 | 0 |
| Minimum Value | 0 | 0 | 0 | 0 |
| Maximum Value | 7000 | 5500 | 1000 | 6000 |

| | | | | |
|--|-----------|-----------|-----------|-----------|
| Number of Respondents (% of total respondents) | 435(56.9) | 431(56.3) | 427(55.8) | 431(56.3) |
|--|-----------|-----------|-----------|-----------|

The means, or averages of DVDs and videocassettes are, respectively, three and ten times greater than the numbers of CDs and audiocassettes in reporting school libraries. The mode for each of these four types of non-print materials is zero, indicating that more school libraries have none of these kinds of non-print materials than those who do. The ranges of minimum and maximum values also indicate the inequities among reporting school libraries. The average reported number of audio cassettes is higher than the number of CDs, but maximum values reported indicate that audio cassettes collections scattered across school libraries do not contain more than 1,000, while the largest CD collection reported is 5,500. This probably indicates the declining frequency of audiocassettes in the collections as a whole.

The graph below charts the average numbers of DVDs, CDs, audiocassettes, and videocassettes in the non-print collections of school libraries.

Average Numbers of Non-print Items in the Collections



Analysis of Book Collections in Titlewise Accounts. This section of the report describes a sample library collection of books extracted from a database called *TitleWise Collection Analysis*. *TitleWise* is an open source collection analysis tool created by Follett Library Resources in 2003. With permission from 39 percent of the total survey respondents, the analysis creates a snapshot of the status of school libraries in New Jersey. All school librarians with automated library management systems can access *TitleWise* from the Follett website where they upload MARC records from their electronic library catalogs. The program

generates reports that help identify strengths and weaknesses of school library and district collections by providing descriptive data about size and currency.

The intent of the collection analysis using *TitleWise* is not to analyze and evaluate individual school library collections, but to aggregate the 298 usable *TitleWise* accounts for the purpose of analysis. The reports generated from these individual accounts were compiled in Excel spreadsheets and the data were “cleaned” to eliminate duplicate records or records with no or little data. Each school in the sample was designated by school type (i.e., elementary, elementary middle, middle, middle high, and high school libraries) and by socioeconomic categories adapted from the District Factor Groups (DFG) created by the State of New Jersey Department of Education. The database was sorted by school type and DFG for analysis. When the school type or DFG were not available the schools were deleted from the sample. The analysis is limited to *TitleWise* accounts that contain richly detailed data about school library collections.

OVERVIEW OF LIBRARY BOOK COLLECTIONS

An overview of the collections in the sample was calculated by counting the total number of books in the aggregated collection, with a breakdown of non-fiction and fiction books. The table below summarizes the basic features of the sample collection.

Overview of the Collections of New Jersey School Libraries

n = 298

| | |
|--|-----------------|
| Total number of books in the aggregate | 3,918,667 |
| Non-fiction | 2,420,983 (62%) |
| Fiction | 1,497,684 (38%) |
| Total enrollment of sample schools | 248,947 |
| Number of books per student | 15.7 |
| Average non-fiction copyright date | 1989 |
| Average fiction copyright date | 1989 |
| Average copyright date | 1989 |

TitleWise Analysis; n=298 school libraries

An overview of the collections shows the total number of books in New Jersey school libraries is 3,018,667. Of these, 2,420,983 (62%) are non-fiction; 1,497,684 (38%) are fiction. The average number of books per student is 15.7. The average non-fiction, fiction, and overall copyright date is 1989.

The next table summarizes the non-fiction collections by Dewey categories.

Summary of Non-fiction Collections

n=298

| | Dewey Category | No. of Items | percentage of Collection | Average Age |
|-------------------|---------------------------------|--------------|--------------------------|-------------|
| 000 | Generalities | 32,355 | .8% | 1993 |
| 100 | Philosophy Psychology | 32,592 | .8% | 1991 |
| 200 | Religion | 31,213 | .8% | 1986 |
| 300 | Social Sciences | 332,754 | 8.5% | 1989 |
| 400 | Language | 24,599 | .6% | 1986 |
| 500 | Natural Sciences Mathematics | 323,975 | 8.5% | 1989 |
| 600 | Technology | 210,386 | 5.4% | 1991 |
| 700 | The Arts | 230,606 | 5.9% | 1988 |
| 800 | Literature Rhetoric | 197,131 | 5.0% | 1984 |
| 900 | Geography History | 446,359 | 11.4% | 1987 |
| | Reference | 251,859 | 6.4% | 1990 |
| | Biography | 258,775 | 6.6% | 1988 |
| | Professional (Education) | 48,379 | 1.2% | 1994 |
| Non-Fiction Total | | 2,420,983 | 62% | 1989 |

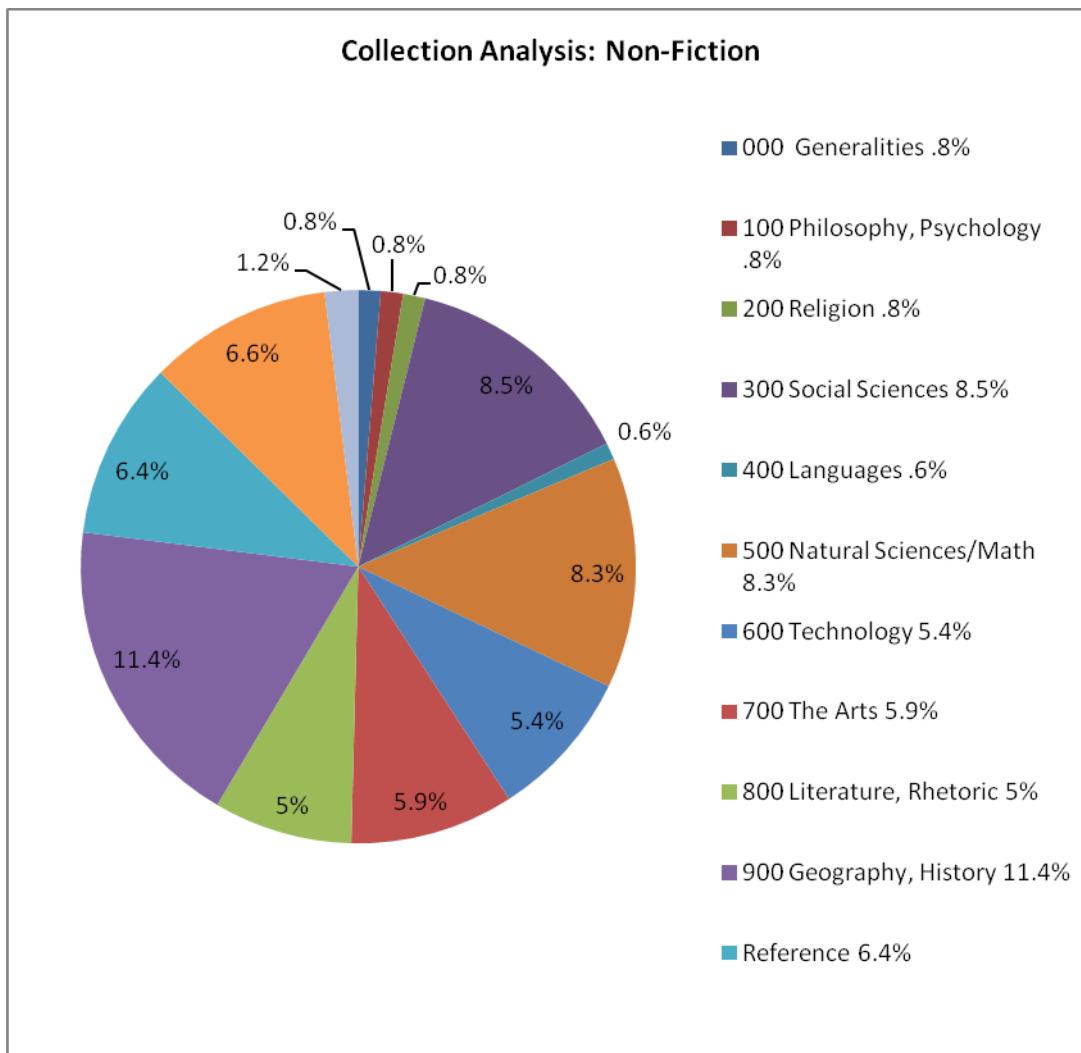
TitleWise Analysis; n=298 school libraries

The largest number of non-fiction books are Geography/History (11.4%), followed by Social Sciences (8.5%) and Natural Sciences/Mathematics (8.5%). 6.4% of non-fiction is Reference; 6.6% is Biography. The categories with the fewest books are Generalities (.8%) and Philosophy/Psychology (.8%).

The figure below presents the non-fiction collections by percentage of books in each category.

Analysis of Non-fiction

n=298



The table below summarizes the fiction collections.

Summary of Fiction Collections

n=298

| | No. of Items | percentage of Collection | Average Age |
|----------------------|------------------|--------------------------|---------------|
| General Fiction | 798,425 | 20% | 1991 |
| Story Collection | 30,767 | .8% | 1985 |
| Paperback | 109,873 | 2.8% | 1992 |
| Easy | 437,568 | 11.2% | 1985 |
| Custom Categories | 121,051 | 3.1% | 1993 |
| Total Fiction | 1,497,684 | 38% | 1989.2 |

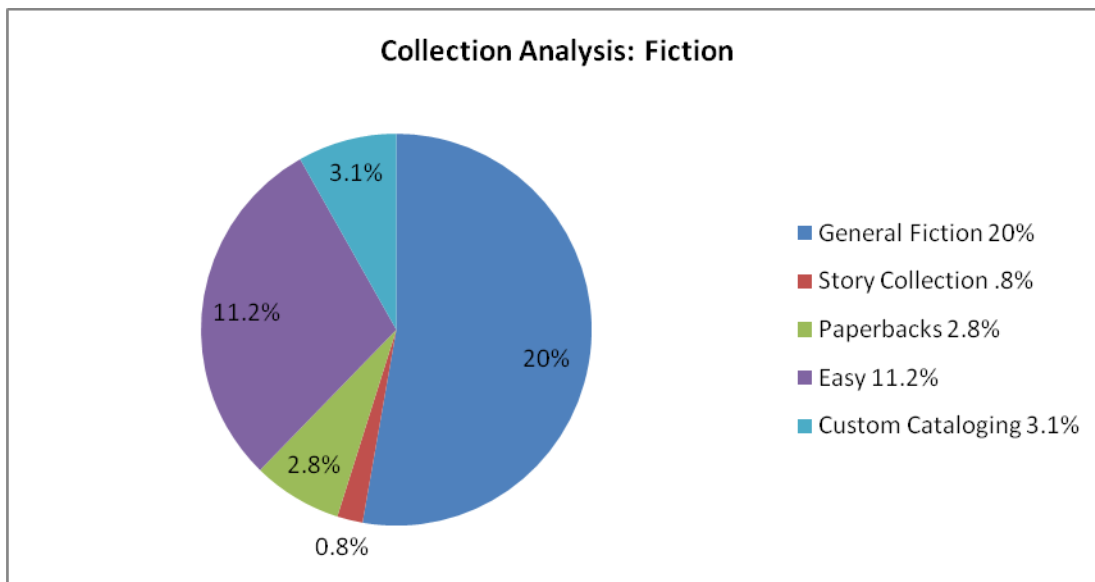
TitleWise Analysis; n=298 school libraries

General Fiction comprises 20% of the collections; Easy Books is 11.2%. The categories with the fewest books are Paperbacks (2.8%) and Story Collections (.8%).

The next figure compares the percentages of types of fiction books.

Analysis of Fiction

n=298



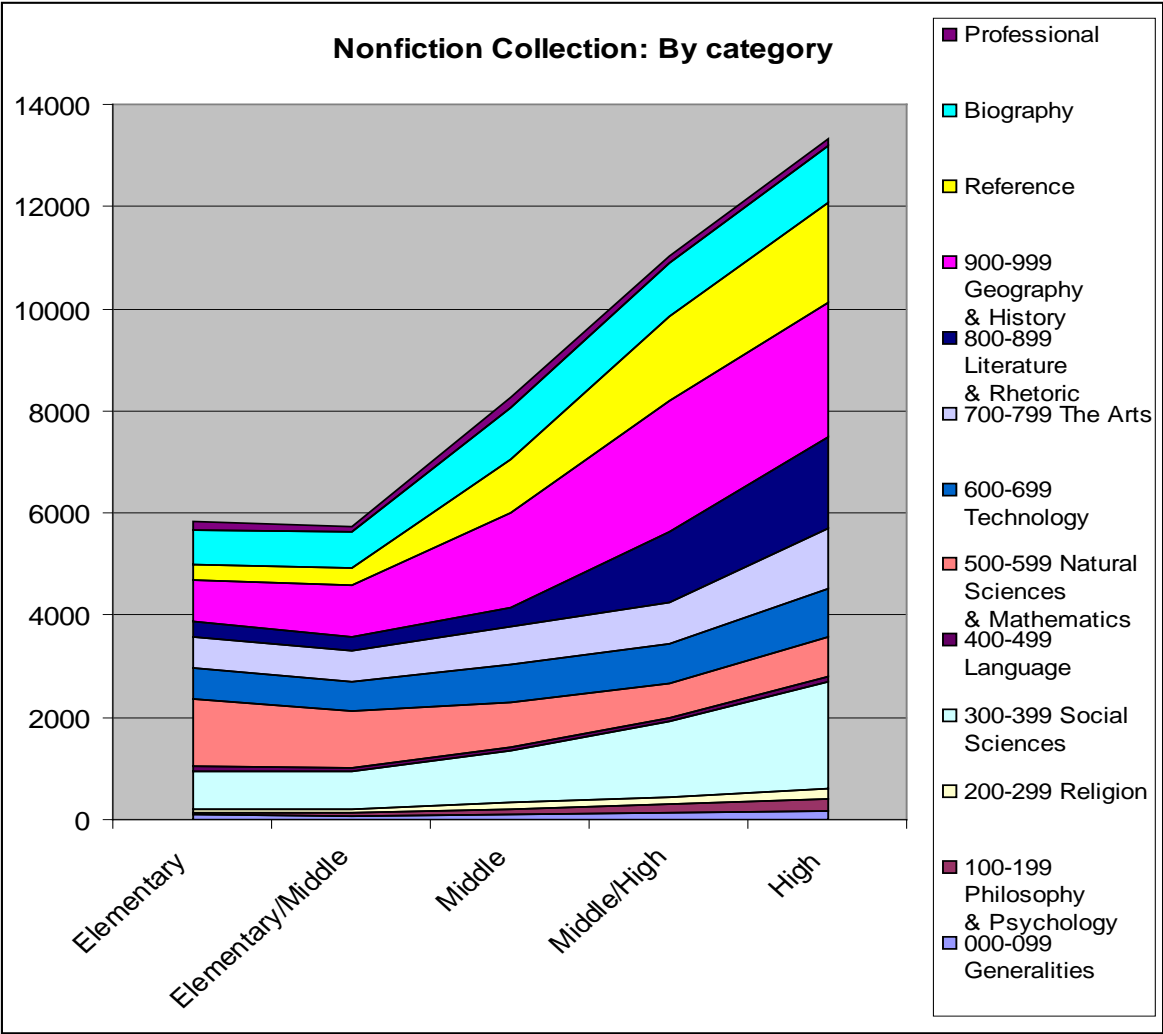
Note: “Custom cataloging” refers to a miscellaneous pool of material types specific to an individual collection, e.g. Graphic Novels. These categories are idiosyncratic but often overlap.

ANALYSIS OF THE SIZE OF THE COLLECTIONS BY SCHOOL TYPE

The size of fiction and non-fiction collections is reported in the sample collection in three ways: 1) the actual number of fiction and non-fiction books in the 298 school libraries; 2) the average number of fiction and non-fiction books calculated from the sum of all books in the 298 school libraries; 3) the percentage of books in the sample collection that are fiction or non-fiction.

The figure below shows the actual numbers of non-fiction and fiction books across school types, which are designated by the grade levels served.

Non-fiction by Dewey Category and School Type
n=298

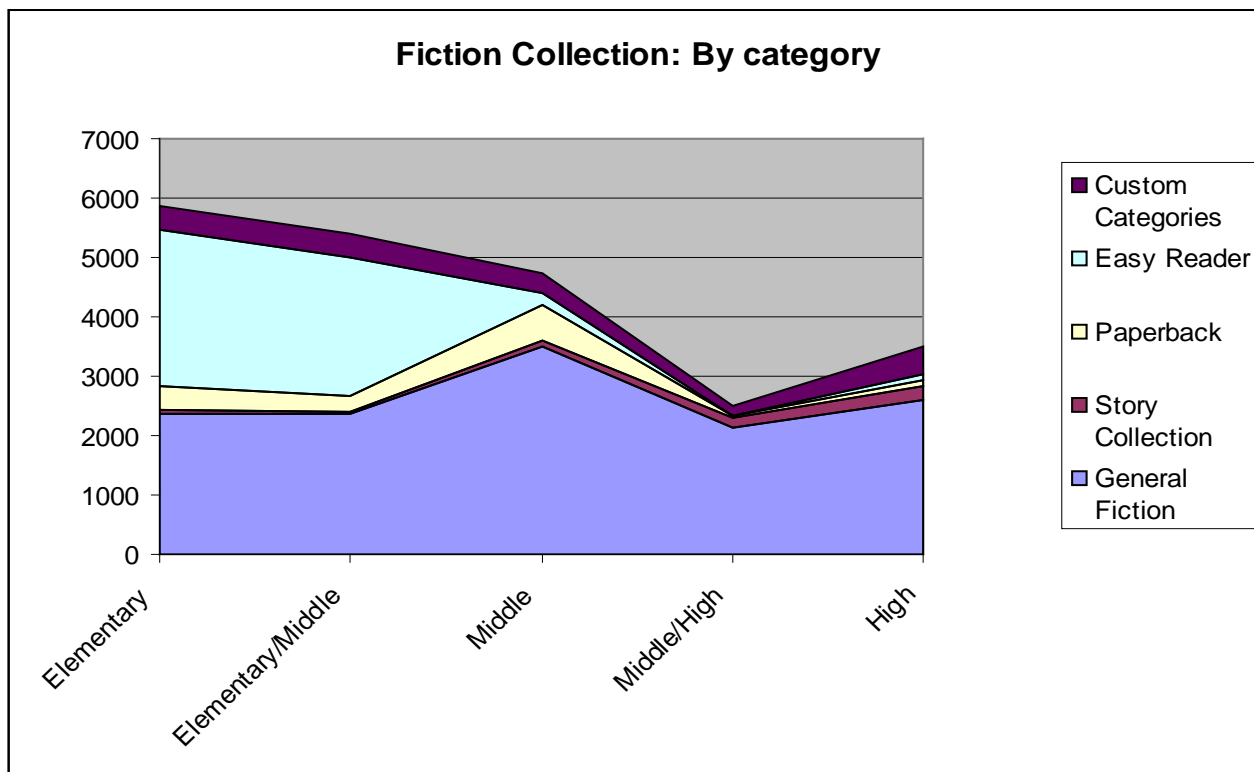


TitleWise analysis, n=298
An analysis of non-fiction by school type indicates a trend toward more non-fiction than fiction books for every level of schooling from elementary through high school. This phenomenon is labeled the “fiction-non-fiction gap.”

The figure below presents the average number of fiction books in the same collections.

Fiction by Genre and School Type

n=298

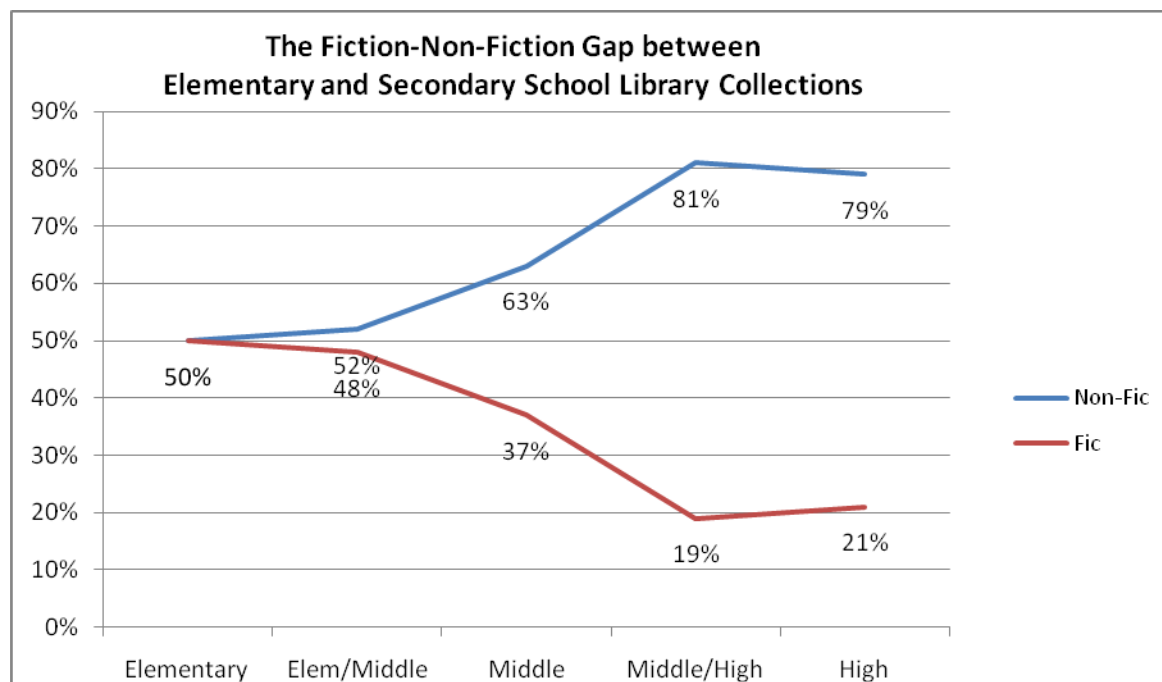


TitleWise analysis, n=298

The trend in the size of fiction collections indicates a slight decrease in elementary and elementary/middle school libraries. The fiction-non-fiction gap originates with a sharp drop of almost 50% in the number of fiction books in middle and middle high school libraries. This trend corresponds with a national decline in the amount of sustained reading among middle school students and a decline in their reading scores. High School libraries indicate a slight increase in the number of fiction titles, but the size of these fiction collections are about half of elementary school collections. This trend raises the question of accessibility of fiction reading materials for older students many of whom become disengaged from reading in the secondary years of schooling.

The graph below compares the average number of fiction and non-fiction by school type to illustrate the severity of the fiction-non-fiction gap.

Comparison of Average Number of Fiction and Non-fiction by School Type n=298



An in-depth examination of how non-fiction is distributed across the Dewey Decimal categories by school type, shown in the table below, helps to determine where the largest discrepancies between fiction and non-fiction occur.

Comparison of Non-fiction in Elementary and Secondary Libraries

| Dewey Categories | Elementary | Elementary Middle | Middle | Middle High | High |
|------------------|--------------|-------------------|-------------|-------------|--------------|
| 001 | .74% | .74% | .85% | .02% | .95% |
| 100 | .48 | .57 | .75 | 1.23 | 1.43 |
| 200 | .50 | .63 | .88 | 1.01 | 1.15 |
| 300 | 6.40 | 6.52 | 7.81 | 10.90 | 12.30 |
| 400 | .69 | .61 | .60 | .53 | .59 |
| 500 | 11.36 | 9.91 | 6.84 | 5.45 | 4.61 |
| 600 | 5.00 | 4.96 | 5.52 | 5.89 | 5.47 |
| 700 | 5.25 | 5.18 | 5.58 | 6.59 | 6.60 |
| 800 | 2.56 | 2.40 | 3.01 | 10.68 | 9.83 |
| 900 | 6.97 | 9.06 | 13.75 | 19.28 | 15.17 |
| Reference | 2.39 | 2.81 | 7.83 | 11.38 | 11.81 |
| Biography | 5.90 | 6.45 | 7.82 | 7.84 | 6.78 |
| Professional | 1.18 | .93 | 1.48 | .92 | .83 |

TitleWise analysis, n=298

The categories that exhibit the most difference when elementary and high school collections are compared are Social Sciences (300s), Literature/Rhetoric (800s), Geography/History (900s), and Reference. It is interesting to note that Science and Mathematics (500s) books decline by more than 50%, from 11.36% of elementary collections to 4.61 of high school collections.

A refinement of this analysis is found in the table below when elementary and high school collections are compared.

The Dewey Categories that Indicate the Difference between Elementary and High School Non-fiction Collections

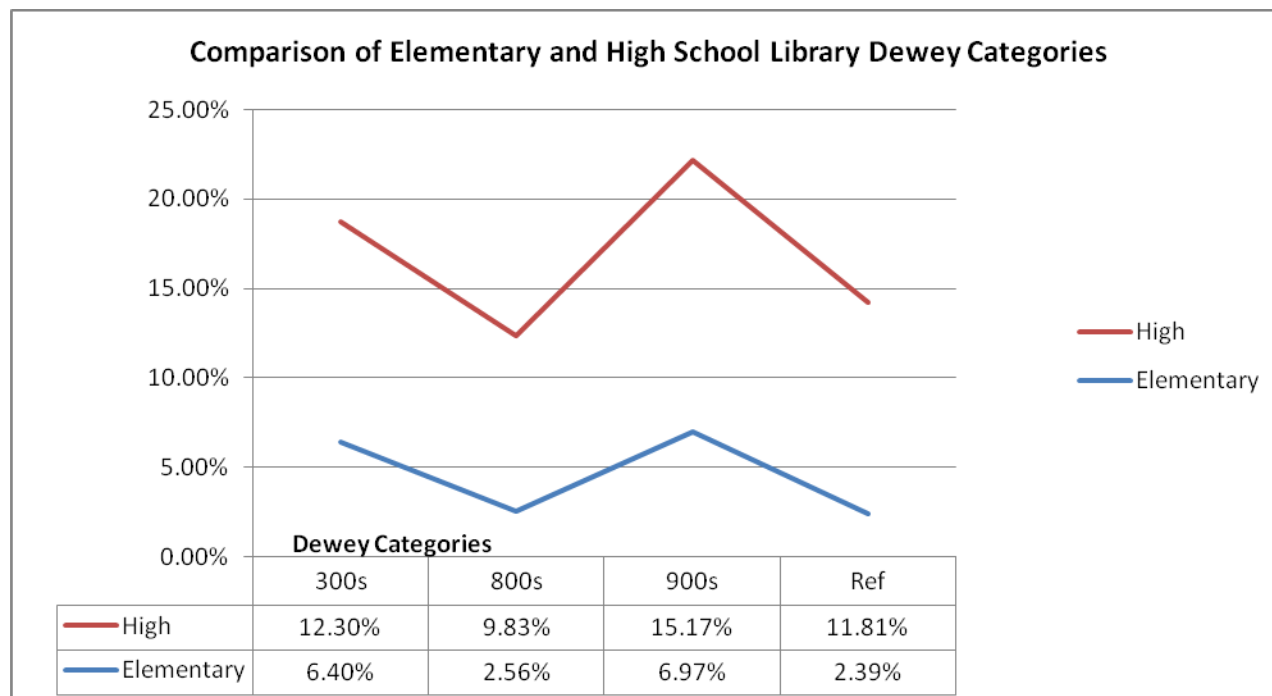
n-298

| Dewey Categories | Percentage of Elementary NF Collections | Percentage of High School NF Collections | Difference in Size of NF collections |
|---------------------------|---|--|--------------------------------------|
| 300s Social Sciences | 6.4percentage | 12.3percentage | 5.9percentage |
| 800s Literature, Rhetoric | 2.56percentage | 9.83percentage | 7.27percentage |
| 900s Geography, History | 6.97percentage | 15.17percentage | 8.2percentage |
| Reference | 2.39percentage | 11.81percentage | 9.42percentage |

TitleWise analysis, n=298

Four Dewey categories present a difference of more than five percent between the sizes of elementary and high school non-fiction collections: Social Sciences, Literature/Rhetoric, Geography/History, and Reference. These four categories have a common denominator: they contain the subject matter content of the school libraries' most frequent users. Teachers in secondary schools can exercise choice to use school library resources because typically these schools operate on flexible, rather than fixed scheduling. English/Language Arts and Social Studies classes are the most frequent users of school library print collections. The increase in non-fiction purchasing for secondary collections reflects differences in elementary and secondary curriculum, and points to a focus on reading and literacy development in lower grades.

Another way to look at the non-fiction-fiction gap is shown in the figure below. The graph below compares the holdings of elementary and high school libraries for the four Dewey categories that present a difference of more than five percent when elementary and high school collections are compared.



TitleWise analysis, n=298

A comparison of the percentages of the four Dewey categories that present the largest difference between elementary and high school library collections shows the relational similarities between elementary and high school libraries.

- **Social Sciences: Elementary (6.4%); High School (12.3%)**
- **Literature/Rhetoric: Elementary (2.5%); High School (9.8%)**
- **Geography/History: Elementary (6.9%); High School (15.1%)**
- **Reference: Elementary (2.3%); High School (11.81%)**

Although there is more than a five percent difference between each of the categories when elementary and high schools are compared, both school types have the about the same proportionate number of books in these Dewey categories books relative to the sizes of the collections.

A measure of how New Jersey school libraries compare with what is considered to be a well-balanced school library collection is the Balanced Dewey Comparison. The table below applies Wilson and Follett ideal percentages for a core school library collection of non-fiction books. The Follett adaptation of the Wilson ideal percentages is based on the company's experience with school library collections. The measure of balance is calculated by the difference between the Wilson or Follett measure and the actual percentages of

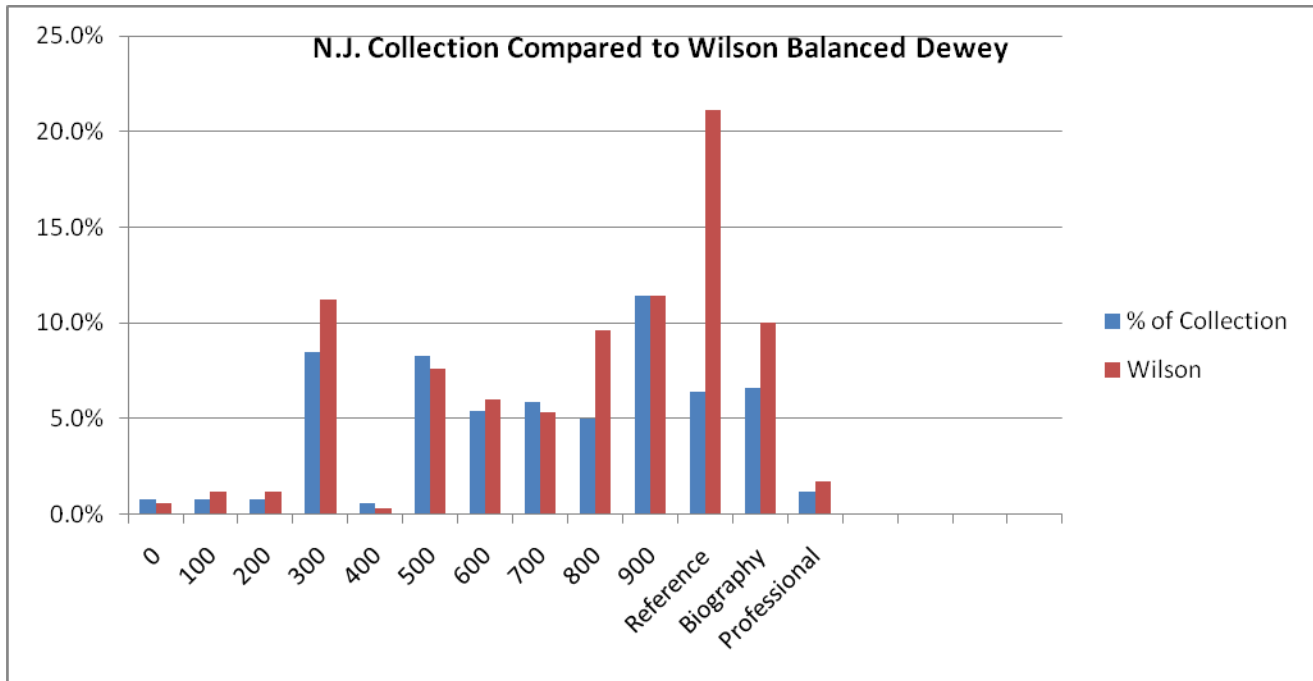
books within a Dewey or genre category.

Comparison of the Aggregated Collection with Wilson and Follett Balanced Dewey percentages
n=298

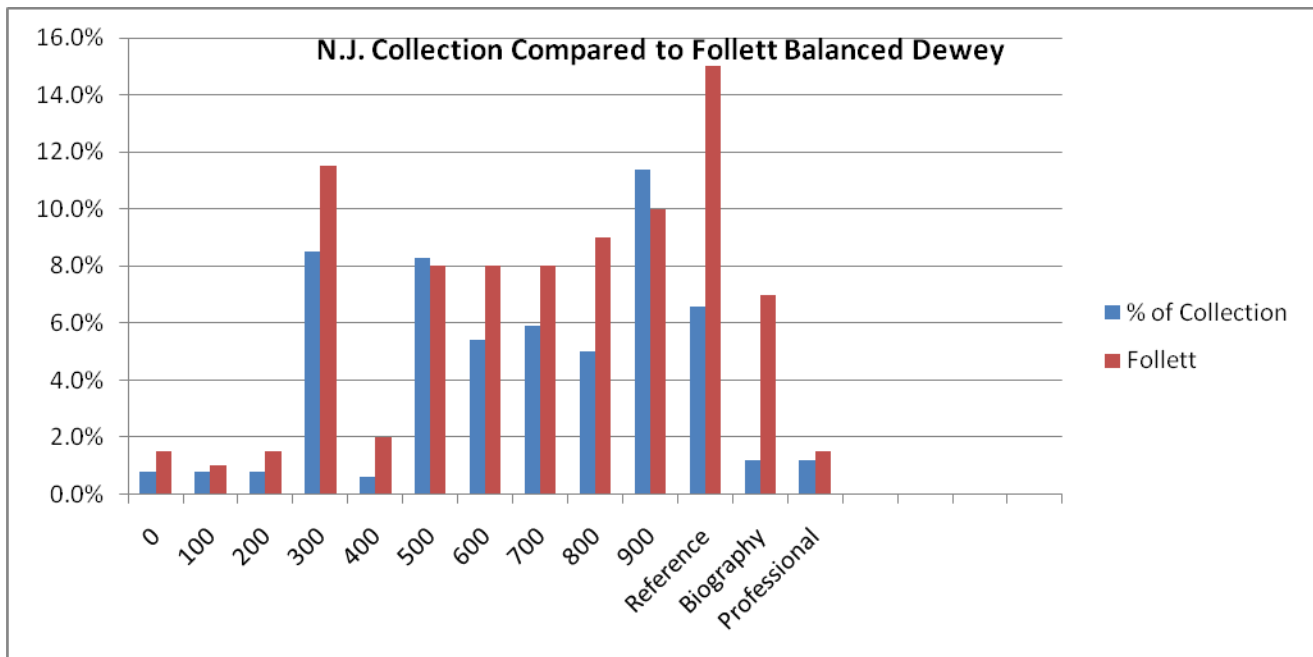
| Non-Fiction | Dewey Categories | Average Age | No. of Items | Percentage of Collections | Wilson Balanced Dewey/ | Follett Balanced Dewey/ | Collections compared with Wilson and Follett |
|--------------------|------------------------------|--------------------|---------------------|----------------------------------|-------------------------------|--------------------------------|---|
| 000 | Generalities | 1993 | 32,355 | .8% | 0.60% | 1.5% | +0.2% -0.7% |
| 100 | Philosophy Psychology | 1991 | 32,592 | .8% | 1.2% | 1% | -0.4% -0.2% |
| 200 | Religion | 1986 | 31,213 | .8% | 1.2% | 1.5% | -0.4% -0.7% |
| 300 | Social Sciences | 1989 | 332,754 | 8.5% | 11.2% | 11.5% | -2.7% -3% |
| 400 | Language | 1986 | 24,599 | .6% | 0.3% | 2% | +0.3% -1.4% |
| 500 | Sciences Mathematics | 1989 | 323,975 | 8.3% | 7.6% | 8% | +0.7% +3% |
| 600 | Technology | 1991 | 210,386 | 5.4% | 6% | 8% | -6% -2.6% |
| 700 | The Arts | 1998 | 230,606 | 5.9% | 5.3% | 8% | +0.6% -2.1% |
| 800 | Literature Rhetoric | 1984 | 197,131 | 5.% | 9.6% | 9% | -4.6% -4% |
| 900 | Geography History | 1987 | 446,359 | 11.4 % | 11.4% | 10% | 0% +1.4% |
| Ref | Reference | 1990 | 251,859 | 6.4% | 21.1% | 15% | -14.7% -8.6% |
| Biog | Biography | 1988 | 258,775 | 6.6% | 10% | 7% | -3.4% -0.4% |
| Prof | Professional | 1994 | 48,379 | 1.2% | 1.7% | 1.5% | -5% -0.3% |

The two graphs below illustrate the New Jersey school library collections by Dewey category compared with recommended Wilson and Follett percentages.

New Jersey Collection Compared to Wilson Balanced Dewey



New Jersey Collection Compared to Follett Balanced Dewey



TitleWise analysis, n-298

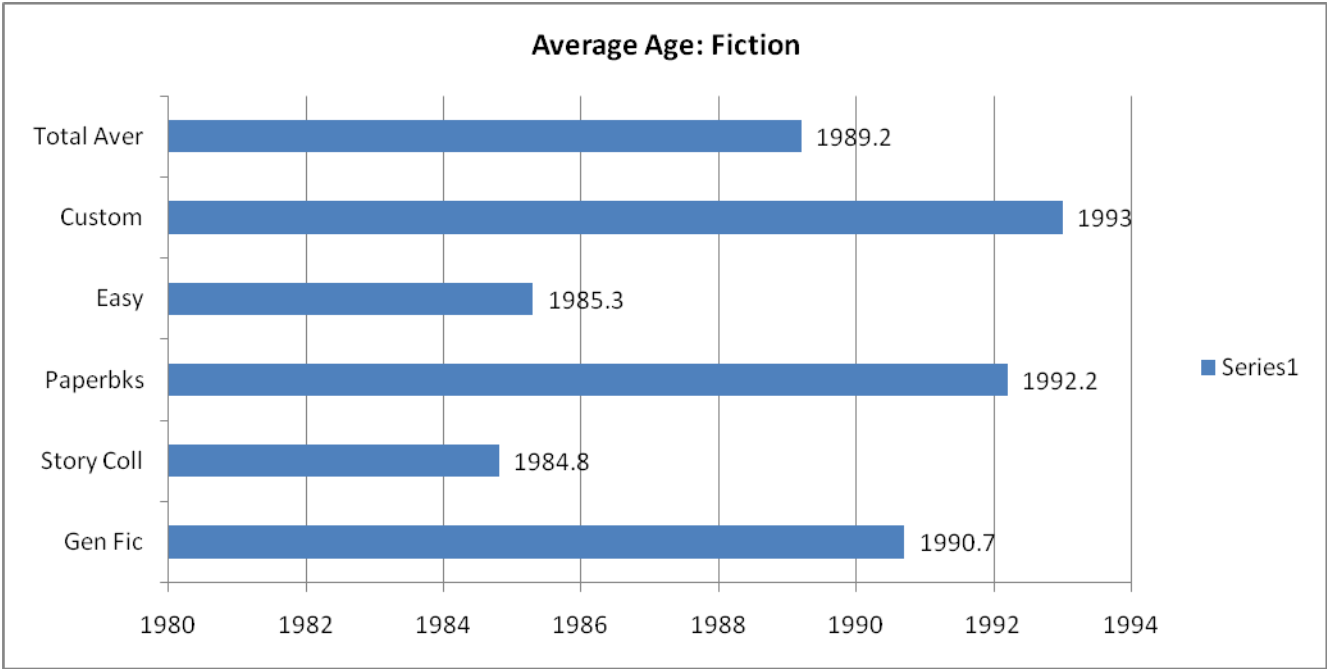
A Balanced Dewey Comparison that compares the percentages of non-fiction books in each Dewey category with the recommended percentages from H.W. Wilson Company and with Follett Library Resources shows that there are plus or minus differences of 4.6% or less in almost every category. The exception is Reference, which is 14.7% below the Wilson recommendation and 8.6% below the Follett recommendation.

ANALYSIS OF THE CURRENCY OF FICTION AND NON-FICTION IN THE SAMPLE COLLECTION

The currency of New Jersey school library collections is calculated in three ways. 1) Copyright dates; 2) Age sensitivity; 3) and the rate at which books are added to the collection. The average copyright date of all books in the sample from 298 school libraries is 1989. The average book in New Jersey school libraries has a copyright date that is 21 years old.

The figure below summarizes the average copyright dates of fiction genres.

Average Age of Fiction Copyright Dates
n=298



TitleWise analysis, n-298

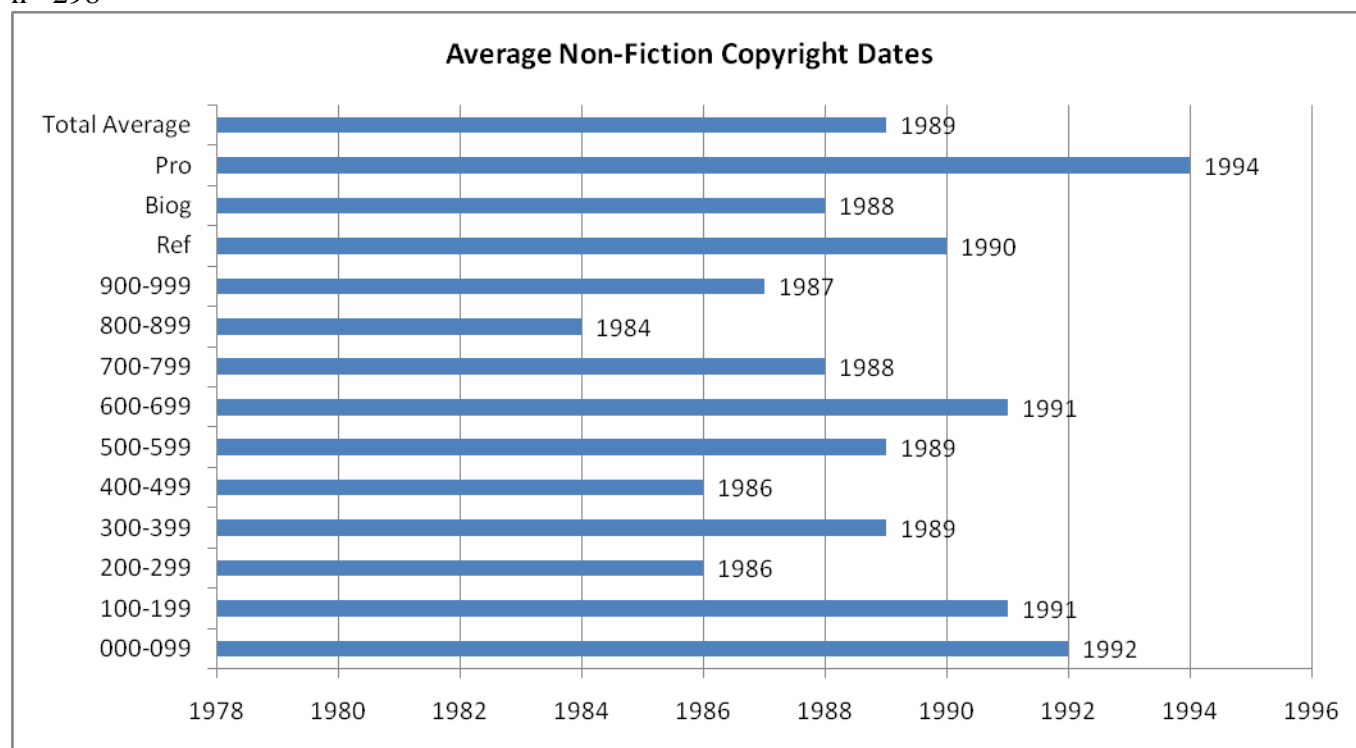
An analysis of the currency of fiction books shows an average copyright date of 1989. Books that are custom catalogued, i.e., assigned a material type other than the types specified in the TitleWise database, have the most recent average copyright date of 1993, followed by Paperbacks (1992). Story Collections and Easy Books have the oldest average copyright date of fiction types: 1985. Reluctant and struggling readers are most affected by this trend since they tend to choose short books and books that are written on low reading levels.

General fiction, which is comprised of novels, has an average copyright date that is 20 years old (1990.7). This indicates that the fiction collections are dominated by classics (i.e., classic adult novels, classic children's books, and classic Young Adult novels.) This statistic strongly indicates that new titles (e.g., Caldecott, Newbery, and other award winning titles) and high interest books, e.g., best-sellers, books that have entered other media such as film, and new books that appeal to specific sub-groups or cultures, such as urban fiction and manga, are not accessible in school libraries to a large number of young readers. Old, worn, outdated, and irrelevant literature will not motivate youth to read in the sustained and meaningful way that develops reading comprehension.

The figure below displays the average dates for 13 non-fiction categories, including Dewey categories, and reference, biography, and professional books.

Average Non-Fiction Copyright Dates

n= 298

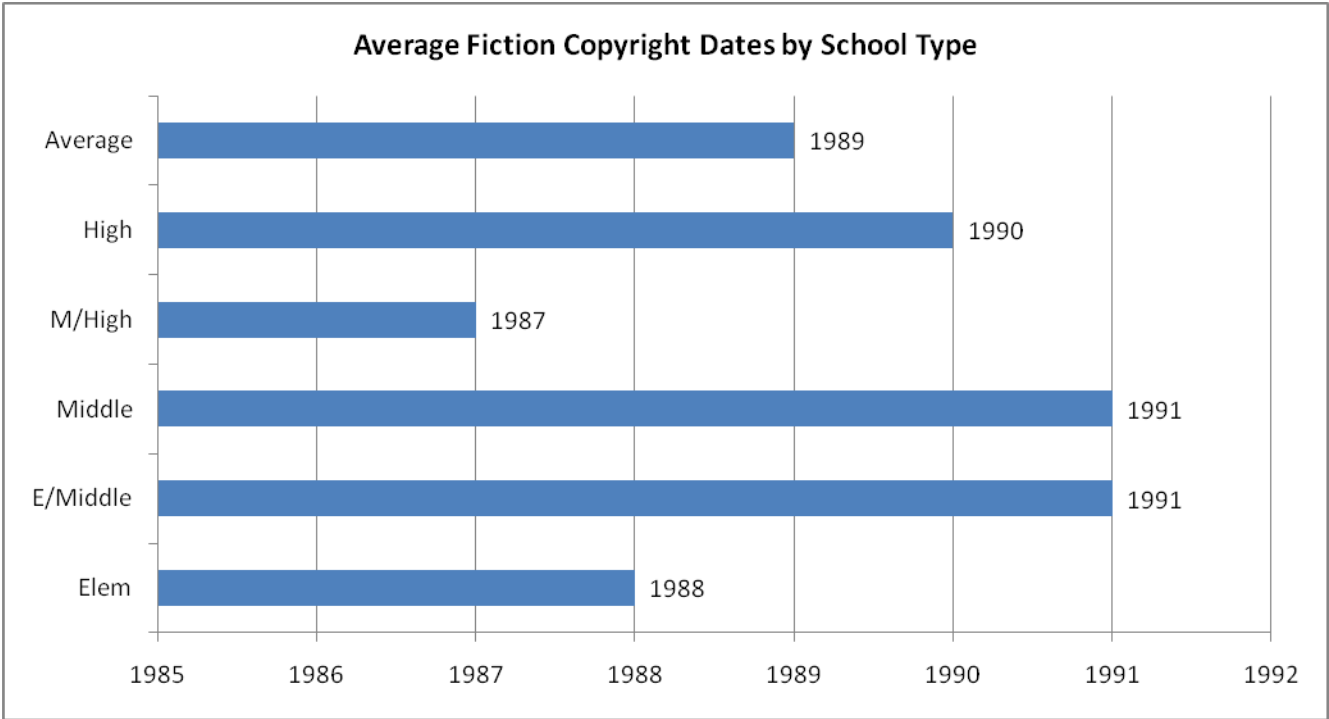


TitleWise analysis, n=298

An analysis of the currency of non-fiction books shows that eight of the 13 Dewey categories have copyright dates prior to 1990. The oldest category is 1984 for Literature/ Rhetoric (800s), which includes essays, drama, and poetry. Again, the opportunity to provide young readers with access to contemporary literature is lost. Religion (200s) and Geography/ History (900s) have copyright dates of 1986 and 1987 respectively.

The figure below presents the average fiction copyright dates by school type.

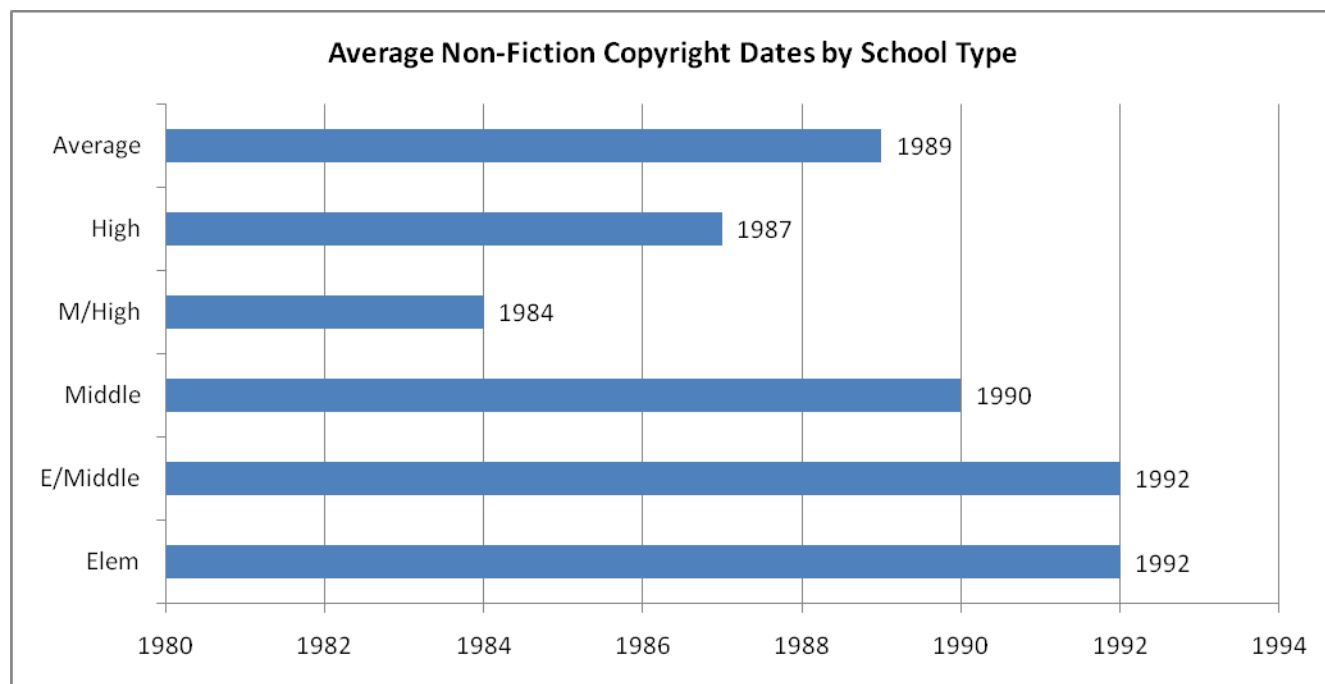
Average Fiction Copyright Dates by School Type



***TitleWise* analysis, n=298**
The average copyright date for fiction books is 1989. Middle/high school libraries have the oldest copyright date (1987), followed by elementary schools (1988). High school libraies have a average fiction date of 1990; elementary/middle and middle school libraries have an average copyright date of 1991.

The figure below displays the average non-fiction copyright dates across school types.

Average Non-fiction Copyright Dates by School Type



TitleWise analysis, n=298

The average copyright date of non-fiction books is 1989. Middle/High school libraries have the most aged non-fiction average copyright date of 1984, followed by high school libraries (1987) and middle school libraries (1990). Elementary/middle and elementary school libraries have the most recent average date of 1992.

Age sensitivity is another way to determine the relevance and currency of a collection. It is determined by calculating the average percentages of the books in the collection that are over three to five years old for nine sections of the Dewey Decimal System. The purpose identifying these books is to review and weed them for inaccurate and/or outdated information. These categories were adapted by Follett from the CREW guidelines (Larson, 2008). The categories listed in the table below are considered to have a short shelf life and are therefore labeled age sensitive because they are quickly outdated and likely to present misinformation.

Age Sensitive Dewey Subject Categories

| Dewey Range | Subjects |
|--------------------|---|
| 003-007 | Systems, data processing, computer science, computer programming, computer methods |
| 320-329 | Political science, civil and political rights, migration and colonization, slavery and emancipation, international relations, legal process |
| 361-369 | General social problems, social welfare, criminology, penal institution, miscellaneous associations |
| 371-379 | Education, school management, elementary and secondary education, adult education, curriculums, education of women, schools, higher education, government regulation |
| 380-389 | Internal commerce, international commerce, postal communication, communications, telecommunication, railroad and inland waterway transportation, water, air and space transportation, transportation, metrology |
| 520-529 | Astronomy, celestial mechanics, celestial bodies, ephemerides, chronology |
| 570-579 | Life sciences, biology, human races, physical anthropology, biology, evolution, genetics, microbiology |
| 610-619 | Medicine, health, human anatomy, physiology, disease prevention, surgery, gynecology, experimental medicine |
| 910-919 | Geography, travel, historical geography, graphic representation of the earth, ancient world, Asia, Africa, North America, South America, other areas |

The table below identifies how many titles in the collection are outside the Acceptable Age range for age sensitive categories.

Age Sensitivity Chart

| | Dewey Ranges | Acceptable Age (Years) | Items in Collection | No. Aged | Percentage Aged |
|---------|--|------------------------|---------------------|----------|-----------------|
| 003-007 | Systems Data, Computer Programs | 3 | 3,480 | 3,149 | 90% |
| 320-329 | Political Science | 5 | 29,371 | 25,467 | 87% |
| 361-369 | Social Problems and Services | 5 | 51,637 | 42,465 | 82% |
| 370-379 | Education | 5 | 13,595 | 10,977 | 81% |
| 380-389 | Commerce, Communications, and Transportation | 5 | 10,183 | 9,359 | 92% |
| 520-529 | Astronomy and Allied Sciences | 5 | 27,299 | 23,271 | 85% |
| 570-579 | Life Sciences, Biology | 5 | 33,273 | 28,282 | 85% |
| 610-619 | Medical Sciences, Medicine | 5 | 56,030 | 44,876 | 80% |
| 910-919 | Geography, Maps, Atlases | 5 | 57,137 | 53,023 | 93% |
| Totals | | | 282,005 | 240,869 | |
| Average | | | | | 85% |

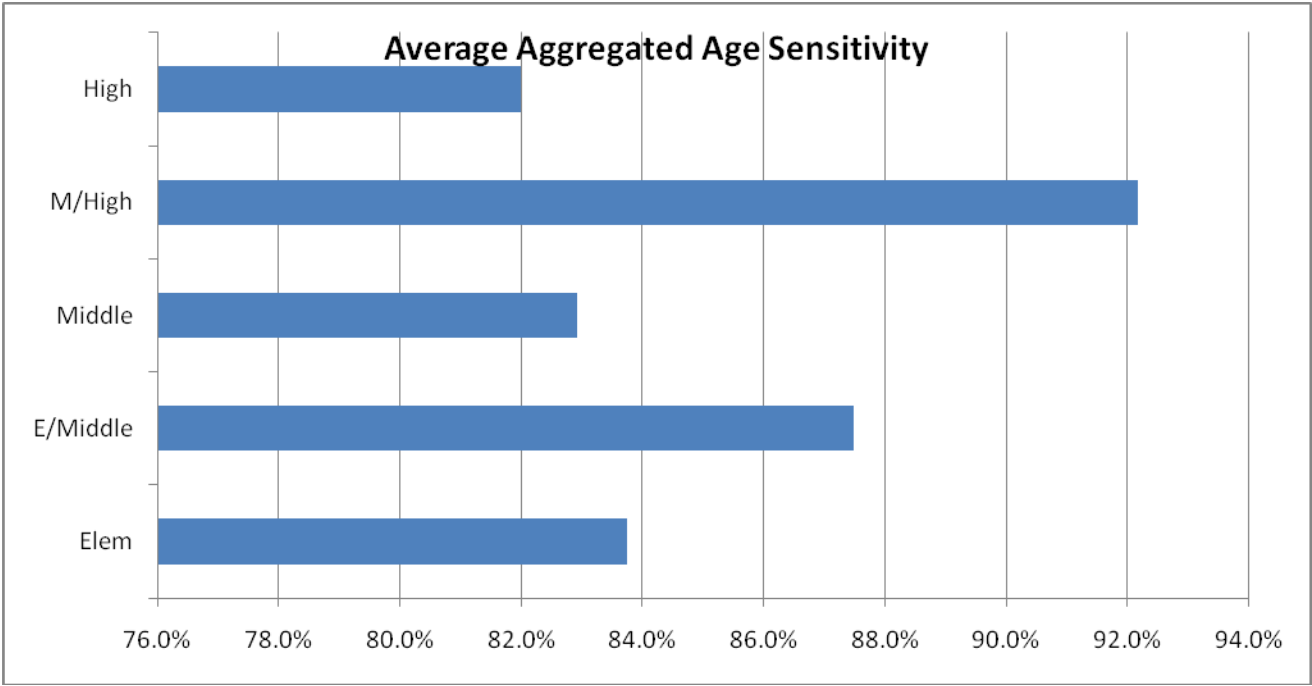
TitleWise analysis, n-298

Age sensitivity, as established by the CREW guidelines and adapted by Follett Library Resources, targets vulnerable Dewey subjects to establish the percentage of books outside the acceptable range, which is either three or five years from copyright date. 93% of Geography/History books are 5 years old or older. 90% of computer and program and system books are 3 years old or older. 92% of books on commerce, transportation, and communication are in the unacceptable range of 5 years or older. 87% of political science books are 5 years old or older. 85 % of books on astronomy and life sciences are five years old or older. 80-82% of books on social problems and services, medicine and disease, and education are five years old or older. The average percentage of age sensitive non-fiction books that are in jeopardy of carrying misinformation is 85%.

Age Sensitivity of Sample Collections by School Type

n=298

The figure below shows the average age sensitivity of books in the five types of school libraries identified in this study.

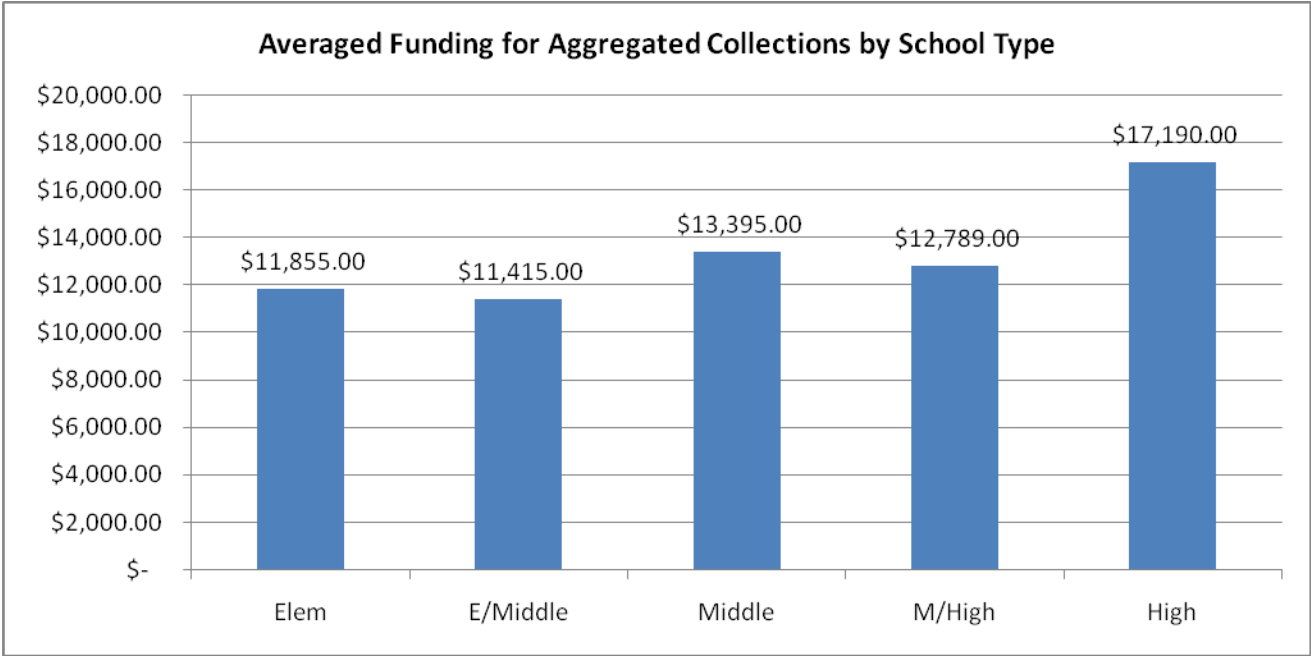


TitleWise analysis, n=298

An analysis of the average percentage of age sensitive books by school type reveals that 92% of the age sensitive books in middle high school libraries are in the unacceptable range of three to five years old, followed by elementary/middle school libraries (87%). High, middle, and elemntary school libraries have fewer age sensitive books that are likely to be outdated, with a range from 82% to 84%. The average of the percentages of aged titles for all five types of school libraries is 85.6 percent. This means that 14.4 percent of all the non-fiction books in the five types of libraries that participated in this study are less than five years old for the nine categories identified as age sensitive.

The figure below illustrates the average budgets of New Jersey school libraries by school type for the 2008-2009 school year. These data were obtained from the from the survey conducted by CISSL.

Averaged Funding for Collections by School Type

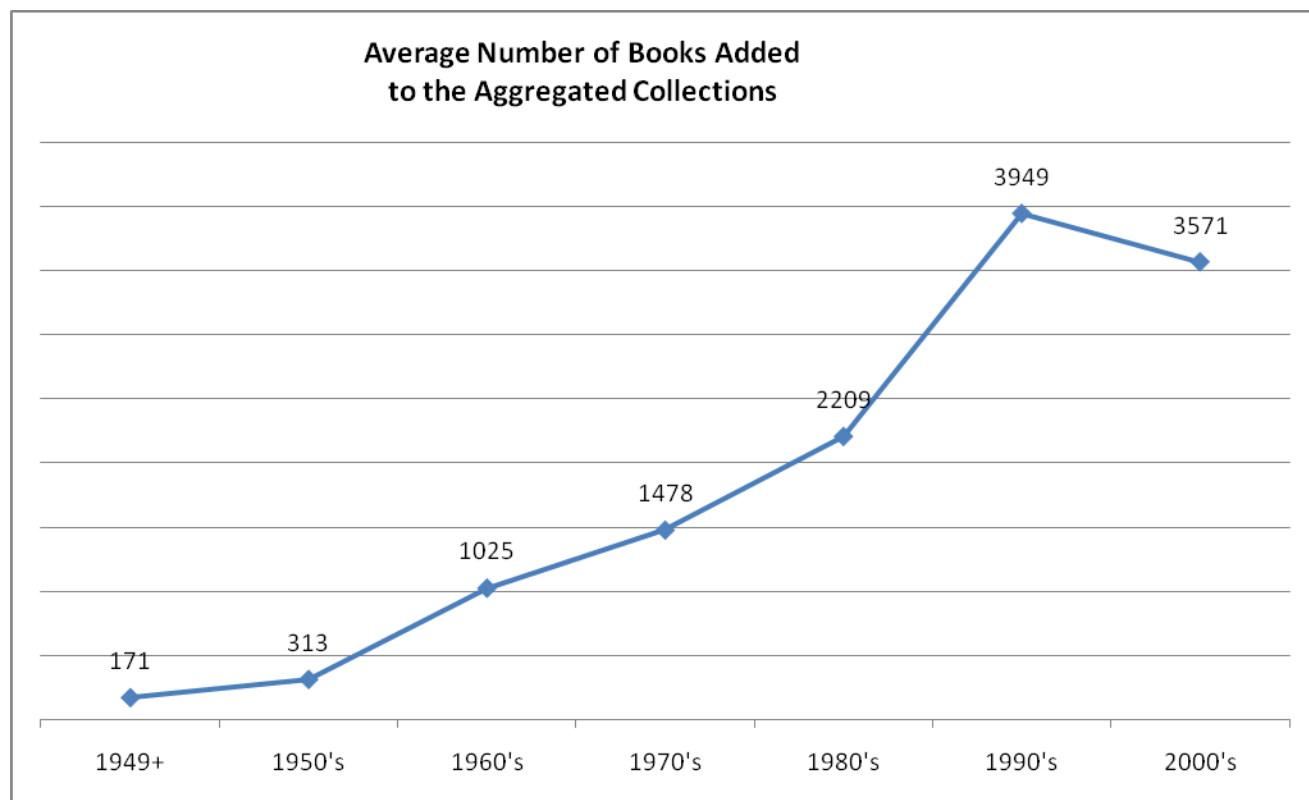


TitleWise analysis, n=298

Using 5 school types, school budgets range from about \$11,855 for the 2008-09 school year for elementary/middle school libraries to \$17,190 for high school libraries. Elementary, middle, and high school libraries fare better than libraries in mixed level school libraries, i.e., elementary/middle and middle/high libraries. Elementary/middle libraries receive 15 % less than middle school libraries; middle/high libraries receive 26% less than high school libraries. These inequities are reflected in size and currency of their collections.

The figure below charts the fluctuations in collection size by the number of books added to school libraries from 1949 to the 2000s..

Average Number of Books Added to New Jersey School Libraries



TitleWise analysis, n=298

Books added since 1949 were charted to look for patterns in the number of acquisition by decade since 1949. A calculation of books added to these collections since 1949 provides some insight funding. A steady increase in books added from 171 in 1949 to 3,949 in 1990 illustrates a strong trend. The decline in books added dropped in the years after 2000 to 3,571. The strong and steady growth of school library collections from the 1960's to 1990 is attributed to federal funding for schools through the Elementary and Secondary Education Act (ESEA) which contributed substantial funding for the development of school library collections, including audio visual equipment and materials. In the 1990's that growth trend was reversed when the ESEA was replaced with No Child Left Behind.

ANALYSIS OF THE SIZE AND CURRENCY OF THE COLLECTIONS BY SOCIO-ECONOMIC STATUS (SES) OF SCHOOLS

Participating schools are grouped using the District Factor Grouping (DFG) System to determine socioeconomic status of the school's attendees. The DFG system (State of New Jersey Department of Education, (<http://www.state.nj.us/education/finance/sf/dfg.shtml>)) was introduced in 1975 to provide a ranking of New Jersey school districts by socioeconomic status. Data from the decennial Census is used. Research conducted in the 1960's and 70's showed a strong relationship between socioeconomic status and educational outcomes. The DFG was intended to account for external factors affecting educational outcomes when evaluating the effectiveness of school systems. Although this measure is not mandated, its use is intended to reduce the variation in reported scores which is due to factors beyond the control of local educators. Results reported district-by-district, using the DFG, allows for comparisons between districts, rather than on a geographic basis. The DFG has been used by courts to calculate differences in district spending and to determine funding.

The DFG index of socioeconomic status uses data for several "indicators" available in the decennial Census of Population. Socioeconomic status, which cannot be measured directly, is considered a function of other measurable quantities (e.g., income, occupation, and education). The DFG is a "model of socioeconomic status that is a composite statistical index created using statistical procedures and input data for various socioeconomic traits. Seven indices were developed from the census data as follows:

1. Percentage of population with no high school diploma
2. Percentage with some college
3. Occupation
4. Population density
5. Income
6. Unemployment
7. Poverty

These indices were utilized in a principal components analysis to produce a statistical score which was used to rank the districts. Districts were then grouped so that each group would consist of districts having factor scores within an interval of one tenth of the distance between the highest and lowest scores.

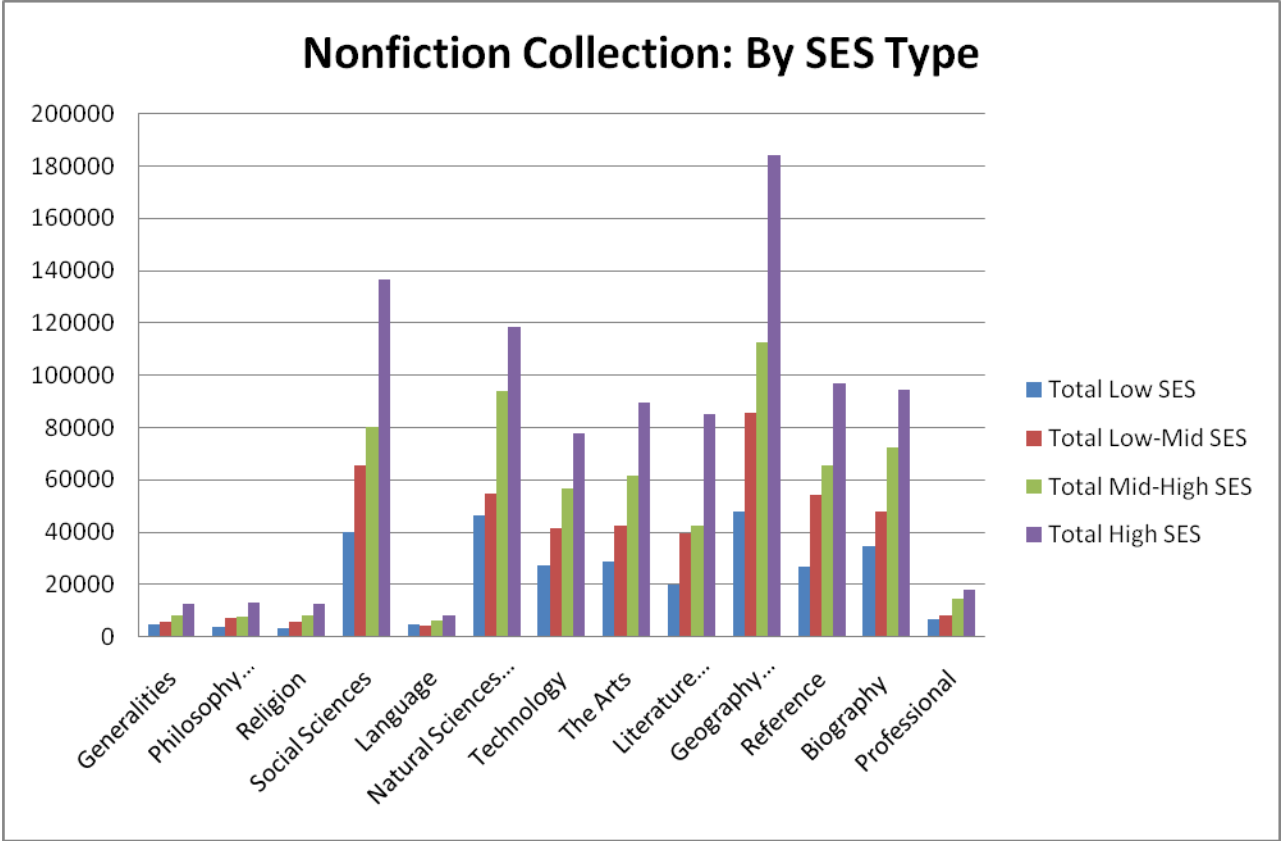
This study uses an adaptation of the deciles containing an approximately equal number of districts based on their socioeconomic status (SES) score. The districts in the bottom decile were classified as DFG A while districts in the highest decile were classified as DFG J. The New Jersey classification of schools consisted of eight categories: A,B,CD,DE,FG,GH,I,J. For the purposes of this study, these categories were collapsed into four categories:

- 1=Low SES (A, B)
- 2=Low-Middle SES (CD, DE)
- 3=Mid-High SES (FG, GH)
- 4=High SES (I, J)

The schools are evenly distributed across these four categories; Categories one and two comprise 51 percent of the schools and categories three and four comprise 49 percent. Category 1 includes 20 percent; Category 2, 31 percent; Category 3, 28 percent; and Category 4 includes 21 percent of school districts.

The figure below graphs the non-fiction collection by the SES type of the 298 school library collections included in this analysis.

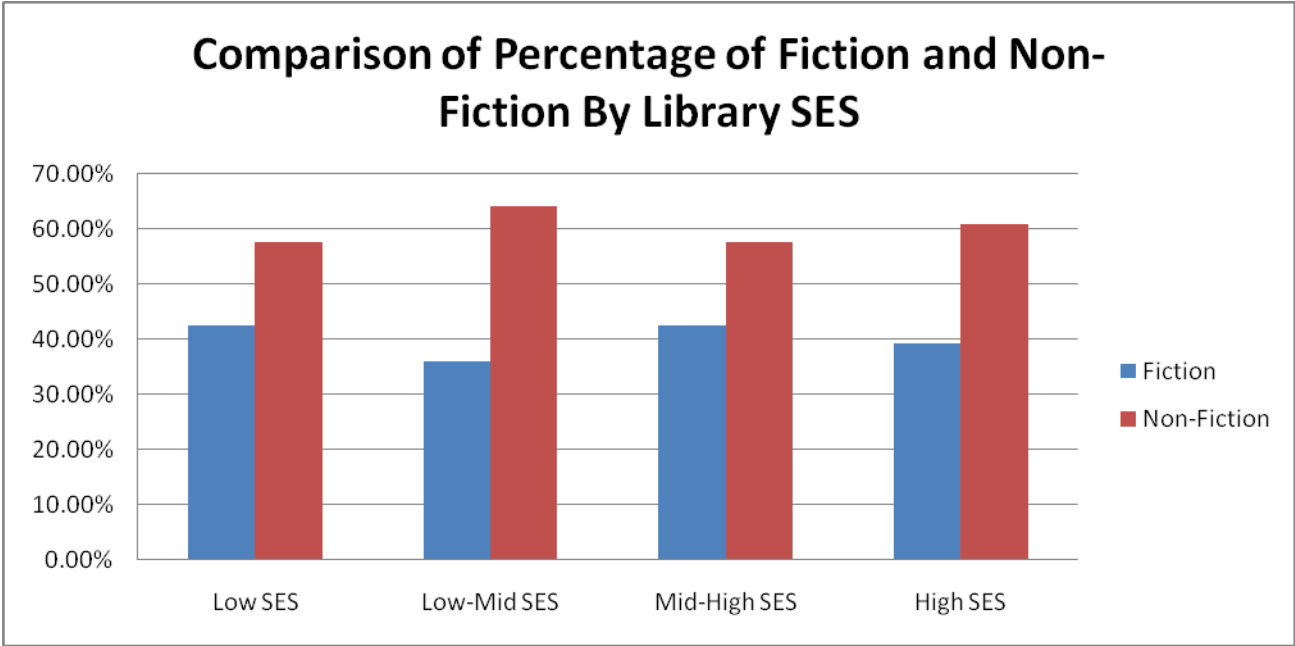
Non-Fiction Collection by SES Type
n=298



TitleWise analysis, n=298
A grouping and analysis of New Jersey school libraries using an adaptation of the New Jersey Department of Education’s District Factor Grouping (DFG) shows that the size of high socioeconomic school (SES) library collections is larger, with the largest discrepancies in the social sciences (300’s) and geography and history (900’s). There is consistency within each Dewey category, showing a strong trend that school libraries in low and low-mid SES DFGs have fewer books than school libraries in mid-high and high SES DFGs and fewer new acquisitions.

The figure below shows a comparison of the percent of fiction and non-fiction by SES categories.

Comparison of Percentage of Fiction and Non-Fiction by Library SES

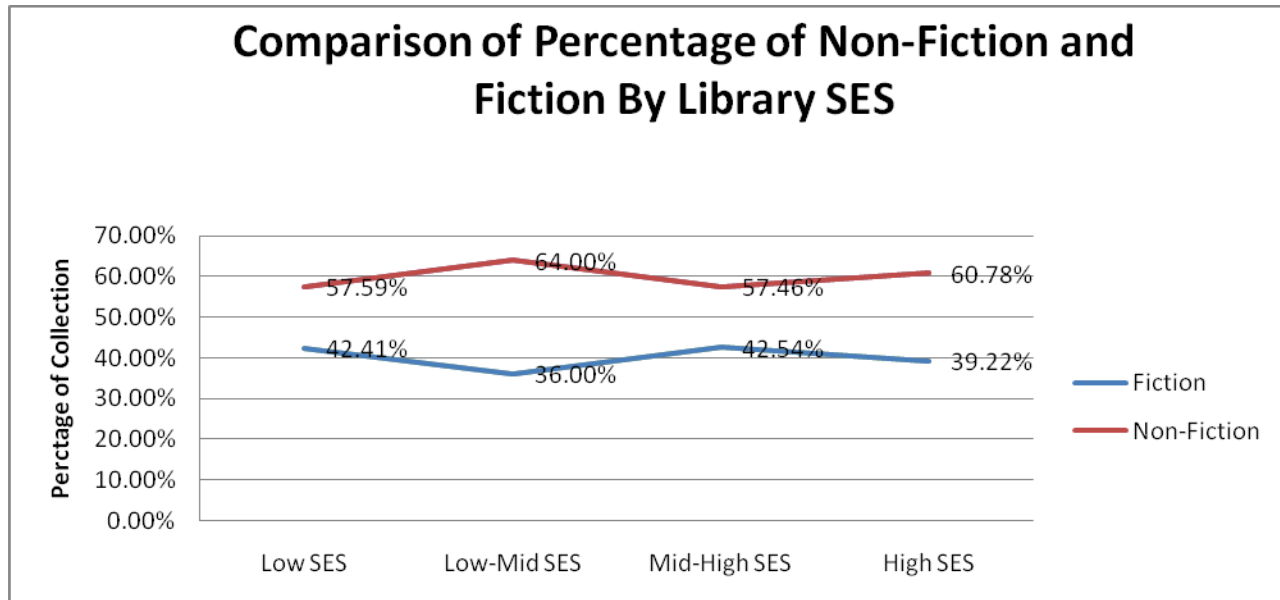


TitleWise analysis, n=298

A comparison of the percentage of non-fiction and fiction in school libraries by their schools’ socioeconomic status (SES) shows that across school types low and mid-low SES school libraries have consistently fewer fiction and non-fiction books than mid-high and high SES school libraries. The fiction-non-fiction gap increases from 15 percent in low SES school libraries to 22 percent in high SES school libraries. Low-mid SES school libraries have the largest fiction-non-fiction gap with a difference of 28 percent.

The figure below graphs the non-fiction/fiction comparison by the SES categories of school libraries.

Comparison of percentage of Non-Fiction and Fiction by Library SES

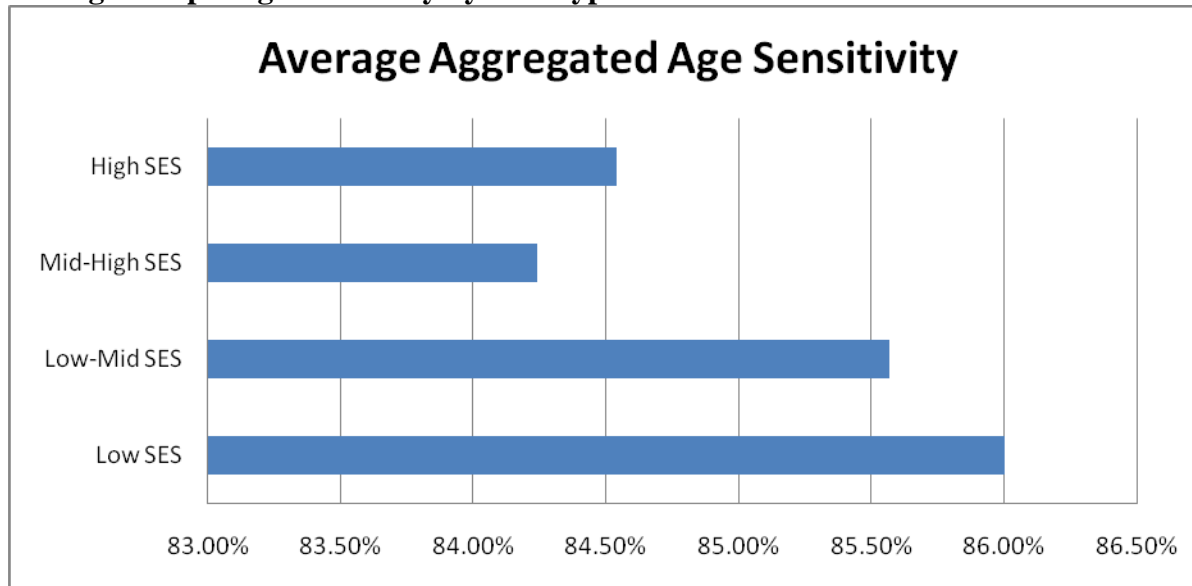


TitleWise analysis, n=298

A comparison of the percentage of non-fiction and fiction in school libraries by their schools socioeconomic status (SES) shows that across school types low and mid-low SES school libraries have consistently fewer fiction and non-fiction books than mid-high and high SES school libraries. The fiction-non-fiction gap increases from 15 percent in low SES school libraries to 22 percent in high SES school libraries. Low-mid SES school libraries have the largest fiction-non-fiction gap with a difference of 28 percent.

The average sample age sensitivity by SES type is shown in the figure below.

Average Sample Age Sensitivity by SES Type



TitleWise analysis, n=298

Analysis of the average sample age sensitivity by SES type reveals the difference in age sensitivity of school library collections by SES type. Collections in low SES school libraries have a slightly higher percentage of books that are considered age sensitive, or more than three to five years old in categories designated as age sensitive.

With respect to the School SES and the size of the library collection an ANOVA was run and there was a significant effect of the SES of the school and the number of books in the school library,

$$F(3,282) = 11.53, p < .01 \quad r = .33.$$

“F” represents the ratio of the average variability that is explained by the model to the average variability that cannot be explained. The larger the number, the greater the amount of variance that is explained. “r” refers to the total amount of variance explained. In this example a third (.33) of the variance in the size of a collection of a school library could be explained by the school’s SES.

The planned contrasts compared the size of collections in schools across the four SES groups. Here were the contrasts that were run:

- 1) LOW SES versus all other SES
- 2) MID LOW SES and Mid High SES
- 3) Mid High SES and High SES

Planned contrasts revealed that there was a significant increase in the size of the library collection between libraries in the lower SES and all other levels of SES,

$t(282) = 4.067, p < .01$ (one tailed), $r = .12$.

Those libraries in the highest SES had significantly larger collections than those libraries with mid-high SES. A t test shows that the results are significant. The r statistic states that there was a small effect on the school's SES and the size of its library collection,

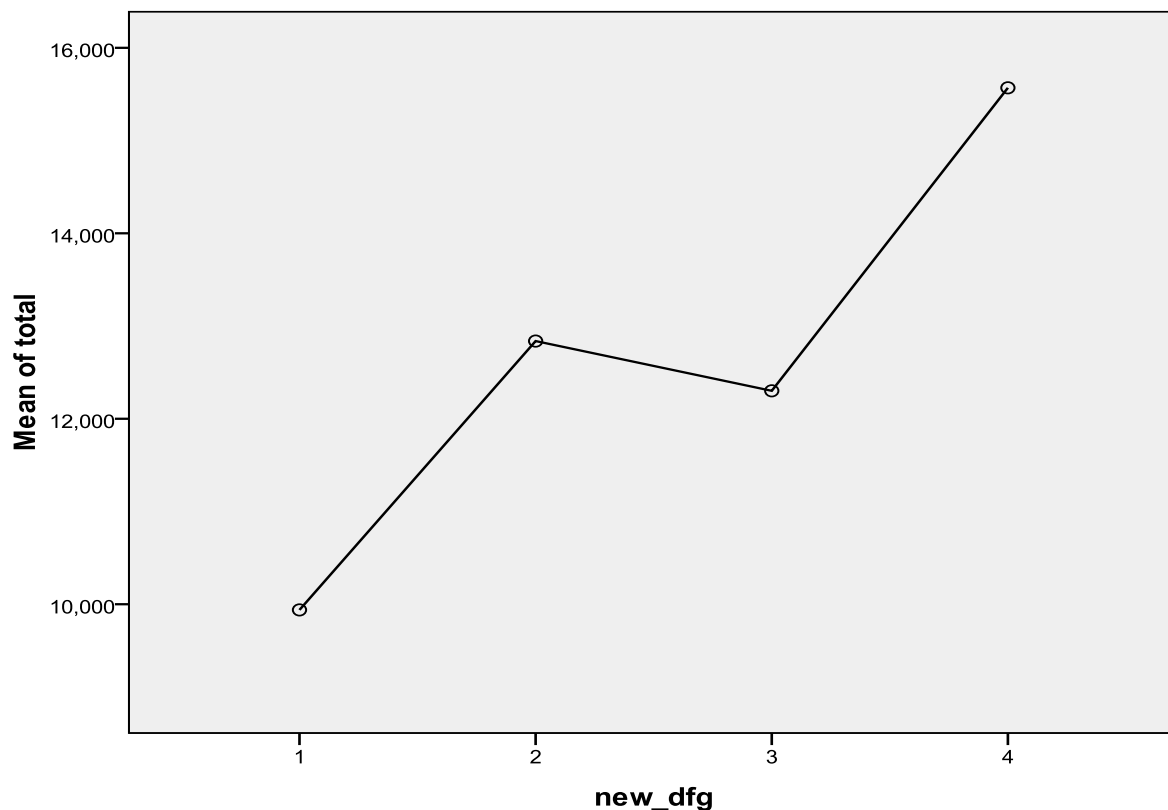
$t(282) = 3.85, p < .01$ (one tailed), $r = .11$.

However there was no significant difference between the sizes of low-mid SES libraries and mid-high SES libraries.

Contrast Tests

| Contrast | | Value of Contrast | Std. Error | t | df | Sig. (2-tailed) |
|----------|-----------------------------------|-------------------|------------|-------|---------|-----------------|
| total | Assume equal variances 1 | 10,891.72 | 2,678.075 | 4.067 | 282 | .000 |
| | 2 | 2,194.32 | 1,757.200 | 1.249 | 282 | .213 |
| | 3 | 3,267.38 | 848.543 | 3.851 | 282 | .000 |
| | Does not assume equal variances 1 | 10,891.72 | 2,546.684 | 4.277 | 75.134 | .000 |
| | 2 | 2,194.32 | 1,715.823 | 1.279 | 92.733 | .204 |
| | 3 | 3,267.38 | 860.077 | 3.799 | 157.035 | .000 |

The Size of School Library Collections by Socioeconomic Status Determined by District Factor Groups (DFG)



The new DFG (numbers 1-4) refers to the collapsed District factors Scores. 1 indicates low SES; 2 is mid-low; 3 is mid high and 4 indicates high SES school districts.

Planned contrasts revealed that there was a significant increase in the number of titles purchased between libraries in the lower SES and all other levels of SES,

$t(282) = 3.51, p < .01$ (one tailed), $r = .11$.

Those libraries in the mid-low SES had purchased significantly fewer books than the mid-high and high SES schools,

$t(282) = 3.03, p < .01$ (one tailed), $r = .10$.

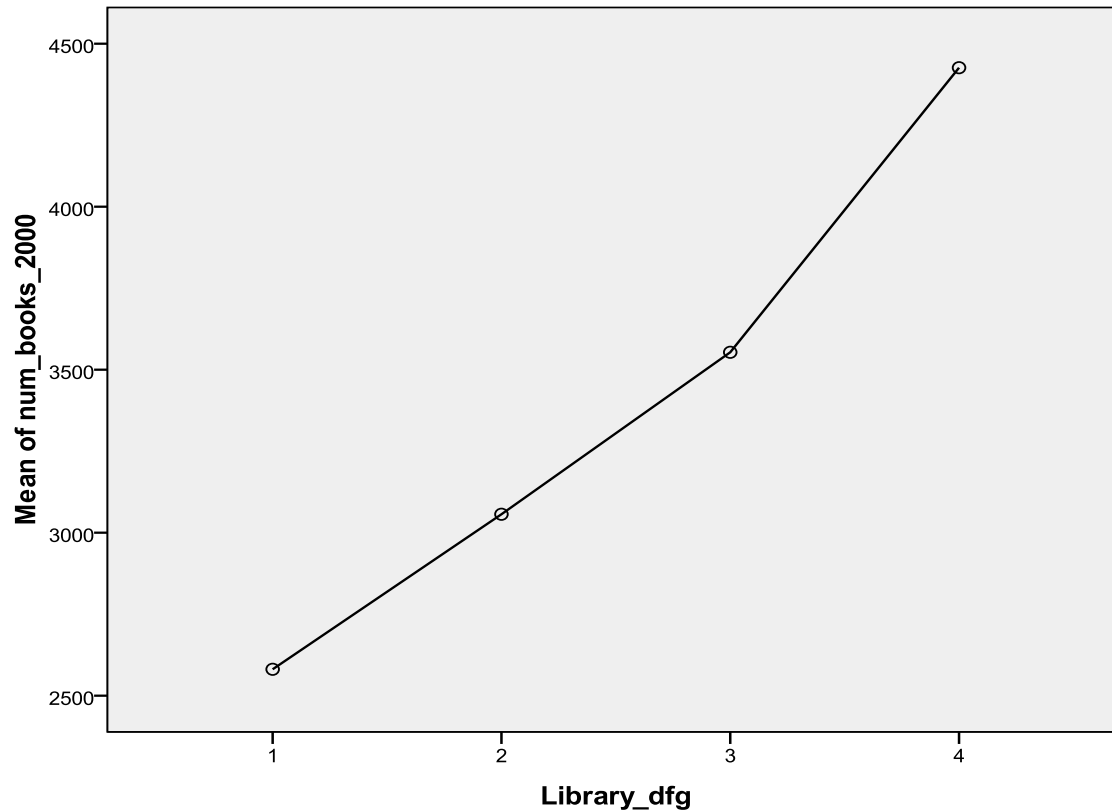
Finally those libraries with highest SES purchased more books then the libraries in the mid-SES schools,

$t(282) = 2.96, p < .01$ (one tailed), $r = .10$.

With respect to school SES and the number of books purchased since 2000 there was a significant effect of the SES of the school and the number of titles purchased,

$F(3,282) = 10.97, p < .01, r = .32$.

The Number of Books Purchased by Socioeconomic Status Determined by District Factor Groups (DFG)



The numbers 1-4 on the x axis of the graph indicate the collapsed categories of low to high SES districts. 1 indicates low SES; 2 is mid-low; 3 is mid high and 4 indicates high SES school districts.

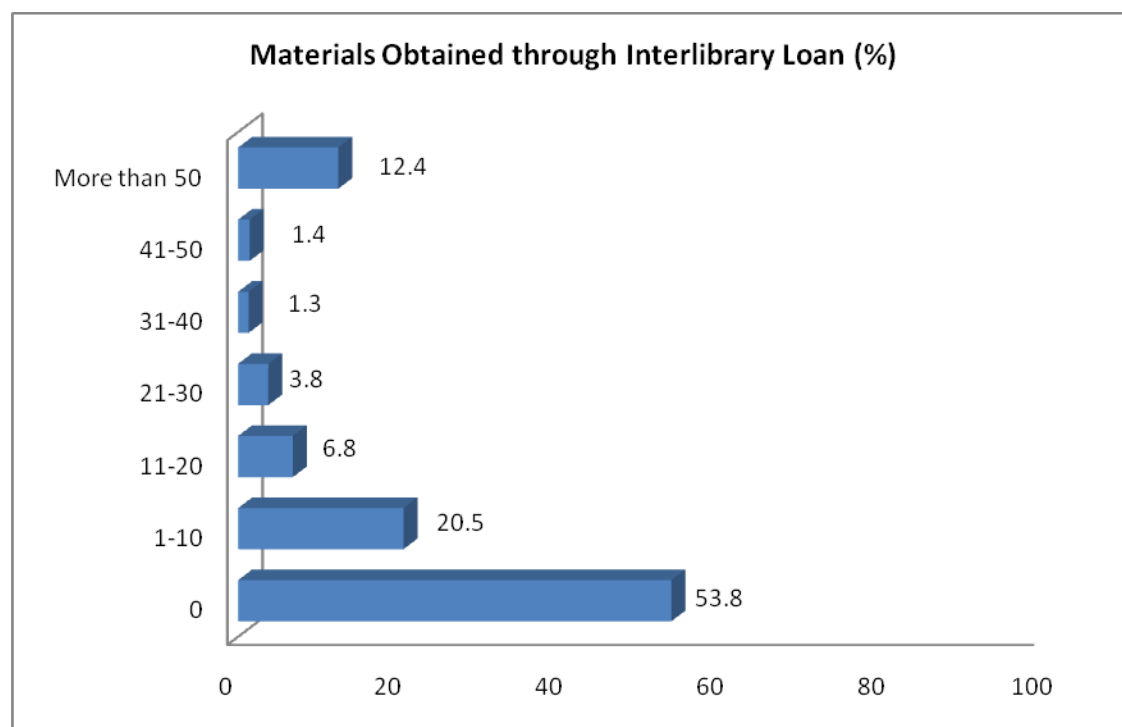
With respect to the School SES and the size of the library collection an ANOVA was run and there was a significant effect of the SES of the school and the number of books in the school library. Those libraries in the highest SES had significantly larger collections than those libraries with mid-high SES.

There was a statistically significant increase in the number of titles purchased between libraries in the lower SES and all other levels of SES. Those libraries in the mid-low SES purchased significantly fewer books than the mid-high and high SES schools. Those libraries with the highest SES purchased more books than the libraries in the mid-SES schools.

Question 87 gathered data on library materials obtained through interlibrary loan during the 2008-2009

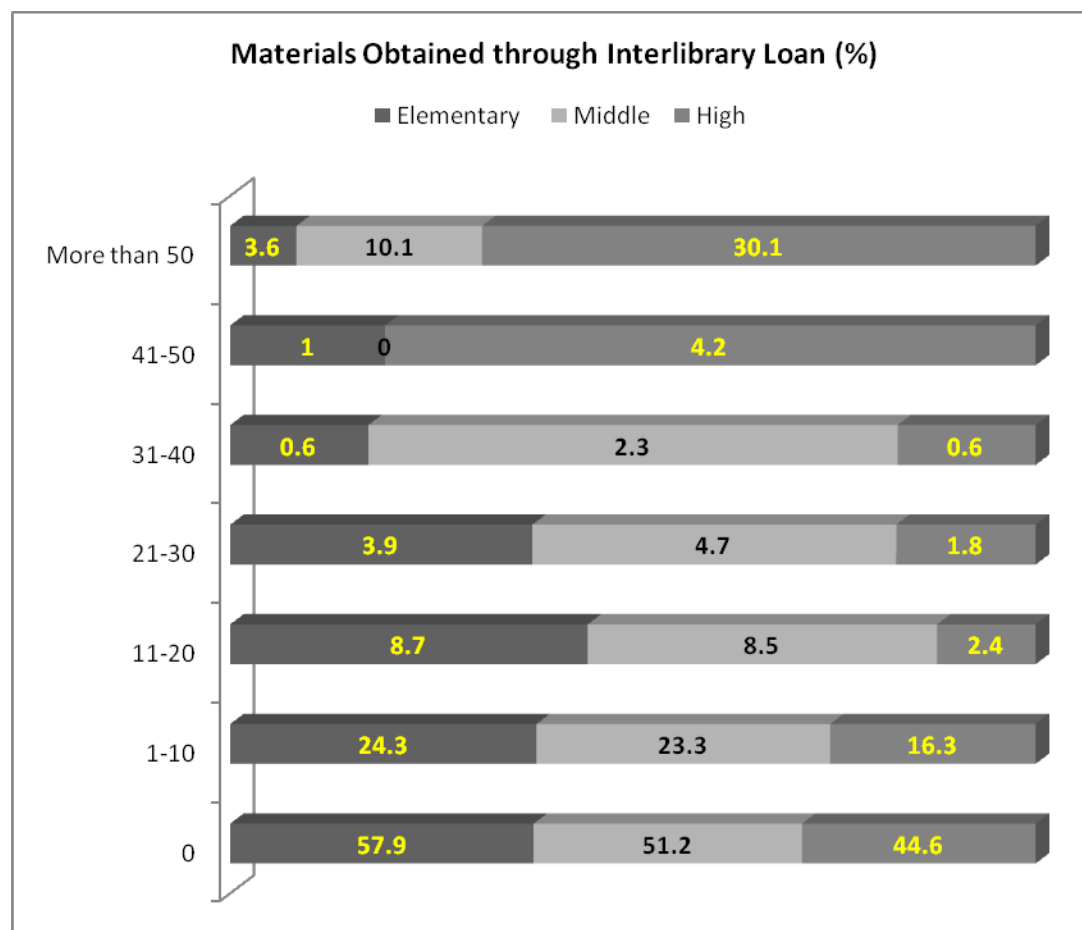
school year. The table below displays this data.

| | Frequency (%) |
|--------------|---------------|
| 0 | 372 (53.8) |
| 1-10 | 142 (20.5) |
| 11-20 | 47 (6.8) |
| 21-30 | 26 (3.8) |
| 31-40 | 9 (1.3) |
| 41-50 | 10 (1.4) |
| More than 50 | 86 (12.4) |
| Total | 692 |



Materials Obtained through Interlibrary Loan by School Type

| | Frequency (%) | | |
|--------------|---------------|-----------|-----------|
| | Elementary | Middle | High |
| 0 | 179 (57.9) | 66 (51.2) | 74 (44.6) |
| 1-10 | 75 (24.3) | 30 (23.3) | 27 (16.3) |
| 11-20 | 27 (8.7) | 11 (8.5) | 4 (2.4) |
| 21-30 | 12 (3.9) | 6 (4.7) | 3 (1.8) |
| 31-40 | 2 (0.6) | 3 (2.3) | 1 (0.6) |
| 41-50 | 3 (0.6) | 0 (0) | 7 (4.2) |
| More than 50 | 11 (3.3) | 13 (10.1) | 50 (30.1) |
| Total | 309 | 129 | 166 |



Overall, 47.2% of participants make use of interlibrary loans to meet resource needs in their schools. 12.4% of participants make extensive use of this process, with more than 50 loans per year provided through interlibrary loans.

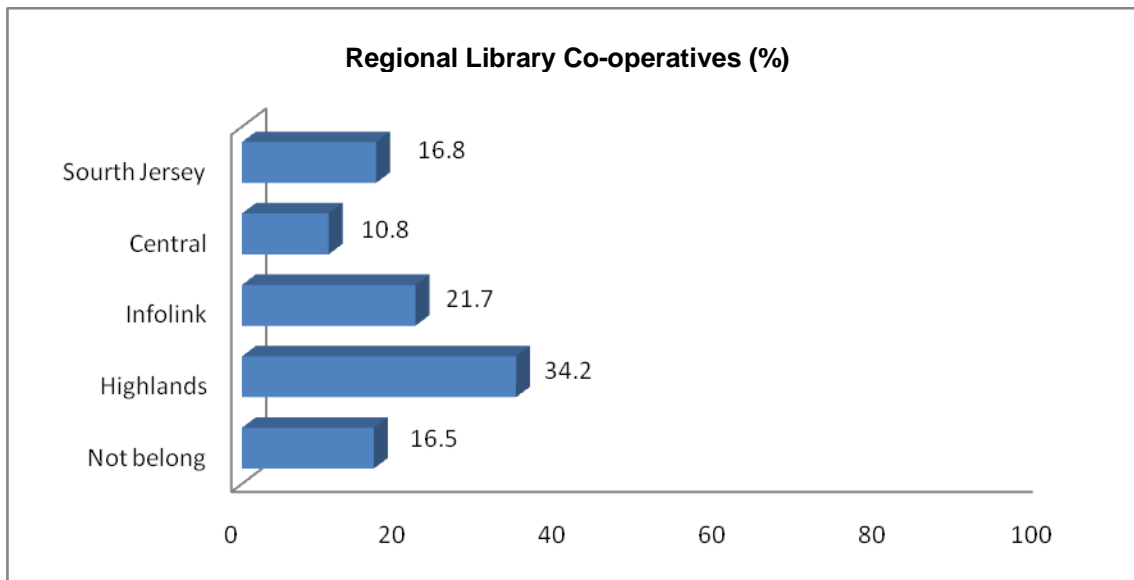
An ANOVA was conducted to evaluate the relationship between *Materials Obtained through Interlibrary Loan* and *School Type*. There was significant difference by school type. $F(2, 601) = 32.56$, $p < .001$.

According to the results of ANOVA, school type is associated with the number of materials obtained through interlibrary loan. The following tests displayed that all pairwise comparisons were significant. Therefore, it can be said that the higher the school level the more materials are obtained through interlibrary loan.

High school librarians make greater use of interlibrary loans than do middle and elementary school librarians. The differences between school types are significant.

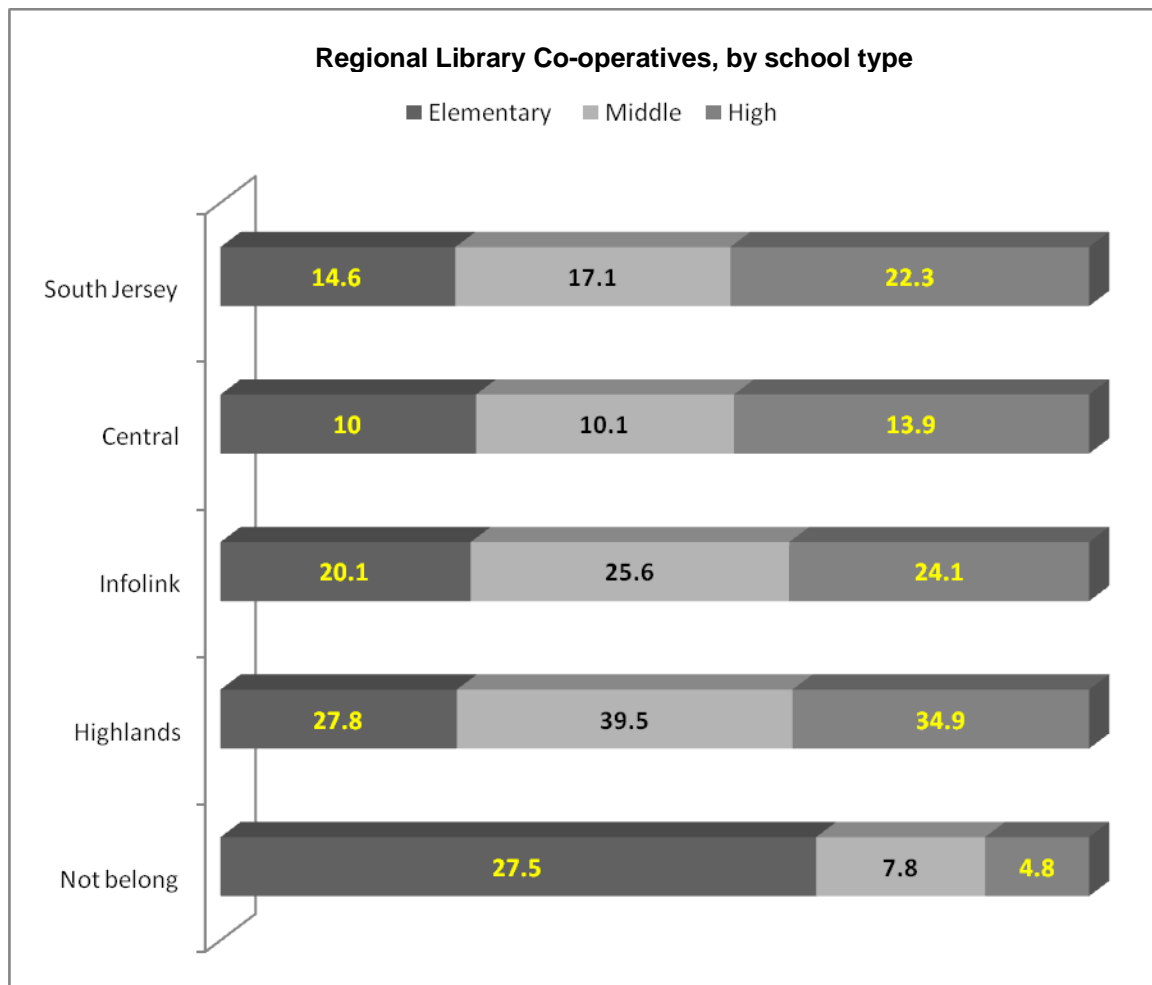
Question 88: Regional Library Co-operatives. The table below displays data on participation in Regional Library Co-operatives.

| | Frequency (%) |
|--------------|---------------|
| Not belong | 114 (16.5) |
| Highlands | 237 (34.2) |
| Infolink | 150 (21.7) |
| Central | 75 (10.8) |
| South Jersey | 116 (16.8) |
| Total | 692 |



Regional Library Co-operative to which School Library Belongs by School Type

| | Frequency (%) | | |
|--------------|---------------|-----------|-----------|
| | Elementary | Middle | High |
| Not belong | 85 (27.5) | 10 (7.8) | 8 (4.8) |
| Highlands | 86 (27.8) | 51 (39.5) | 58 (24.9) |
| Infolink | 62 (20.1) | 33 (25.6) | 40 (24.1) |
| Central | 31 (10.0) | 13 (10.1) | 23 (13.9) |
| South Jersey | 45 (14.6) | 22 (17.1) | 37 (22.3) |
| Total | 309 | 129 | 166 |



A χ^2 analysis was conducted to evaluate the relationship between *Regional Library Co-operative* and *School Type*. There was a significant association between the two factors. $\chi^2 (8, N=604) = 52.153, p < .001$, Cramér's $V = .21$.

The results showed that school type was significantly associated with *Regional Library Co-operative*. Elementary school libraries are significantly more likely to not be part of a co-operative service.

| | Frequency (%) | | | Total | χ^2 |
|------------|-----------------------|-------------------|-----------------|-------|-----------|
| | Elementary (N=309) | Middle (N=129) | High (N=166) | | |
| Not belong | 85 (82.5) | 10 (9.7) | 8 (7.8) | 103 | 51.153*** |
| Highlands | 86 (44.1) | 51 (26.2) | 58 (29.7) | 195 | |

| | | | | |
|--------------|-----------|-----------|-----------|-----|
| Infolink | 62 (45.9) | 33 (24.4) | 40 (29.6) | 135 |
| Central | 31 (46.3) | 13 (19.4) | 23 (34.3) | 67 |
| South Jersey | 45 (43.3) | 22 (21.2) | 37 (35.6) | 104 |
| Total | 309 | 129 | 166 | 604 |

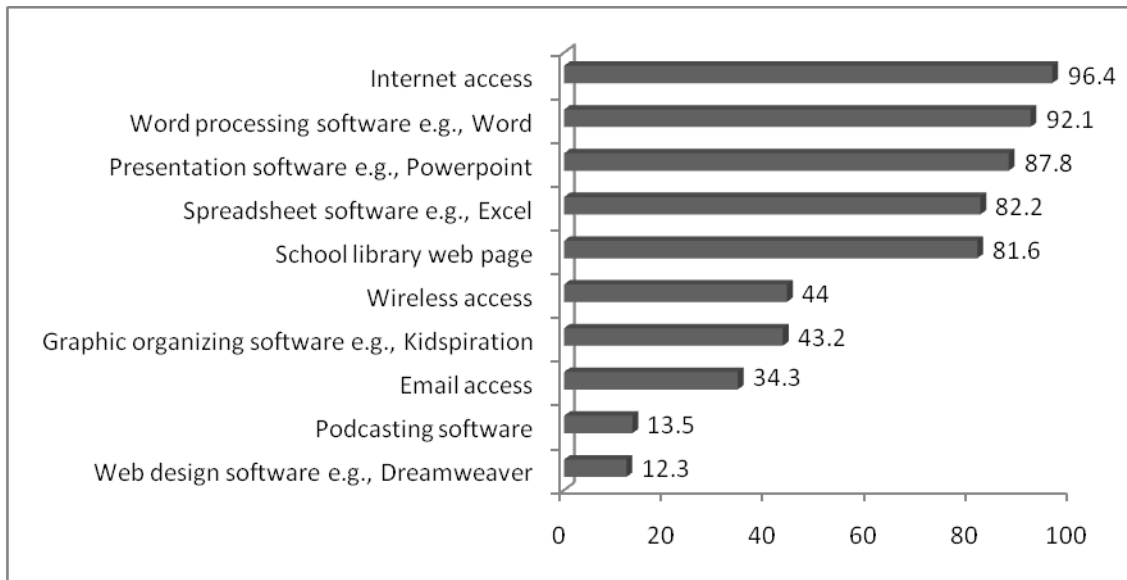
*** $p < .001$

83.2% of the school libraries in the study have membership in a regional library co-operative. High schools and middle schools are more likely to be members, as compared to elementary schools.

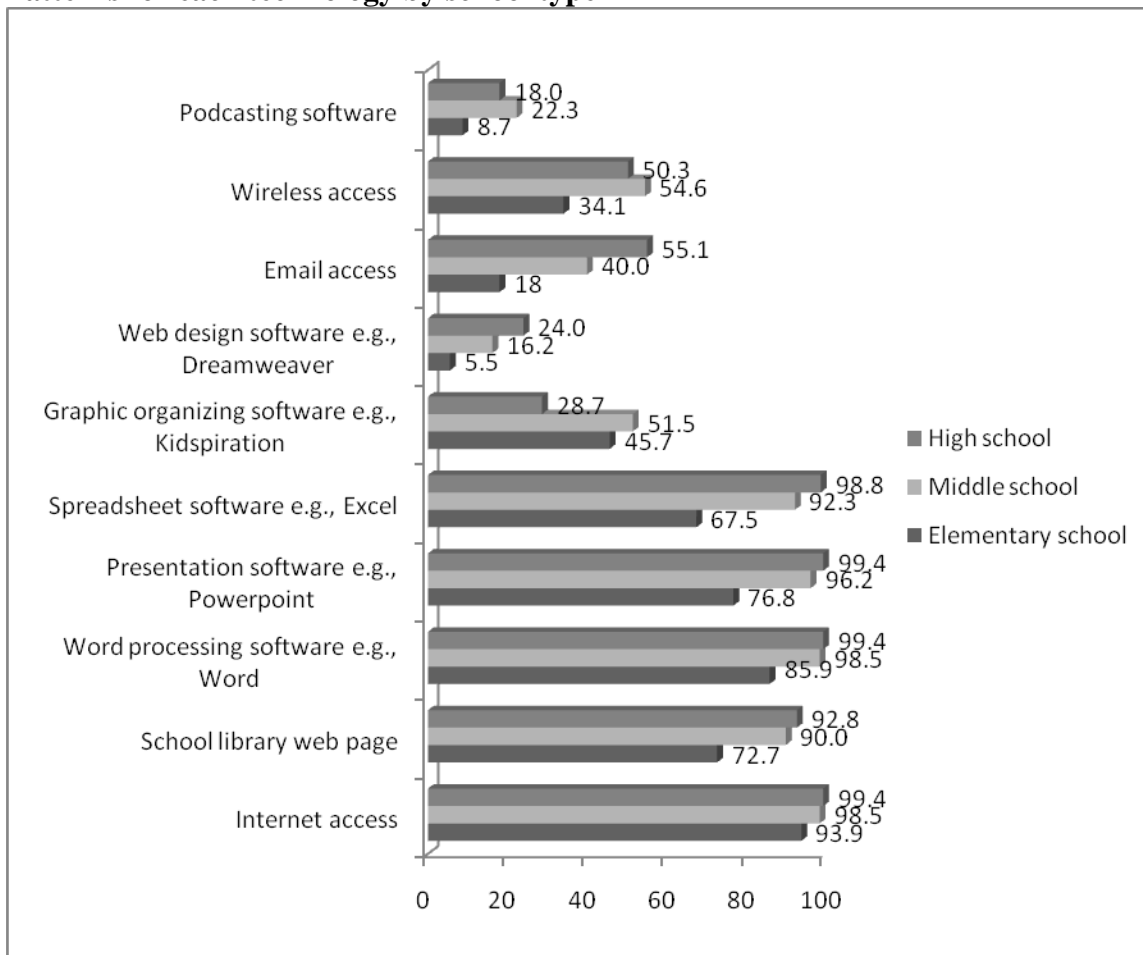
Question 89 gathered data on information technologies available through the school library. The tables and graphs below shows the extent of provision of a range of information technologies by school type.

| | All School Types (n=697) | Elementary School (n=311) | Middle School (n=130) | High School (n=167) |
|--|--------------------------------|---------------------------------|-----------------------------|------------------------|
| | Number (%) | Number (%) | Number (%) | Number (%) |
| Internet access | 672 (96.4) | 292 (93.9) | 128 (98.5) | 166 (99.4) |
| School library web page | 569 (81.6) | 226 (72.7) | 117 (90.0) | 155 (92.8) |
| Word processing software e.g., Word | 642 (92.1) | 267 (85.9) | 128 (98.5) | 166 (99.4) |
| Presentation software e.g., PowerPoint | 612 (87.8) | 239 (76.8) | 125 (96.2) | 166 (99.4) |
| Spreadsheet software e.g., Excel | 573 (82.2) | 210 (67.5) | 120 (92.3) | 165 (98.8) |
| Graphic organizing software e.g., Kidspiration | 301 (43.2) | 142 (45.7) | 67 (51.5) | 48 (28.7) |
| Web design software e.g., Dreamweaver | 86 (12.3) | 17 (5.5) | 21 (16.2) | 40 (24.0) |
| Email access | 239 (34.3) | 56 (18.0) | 52 (40.0) | 92 (55.1) |
| Wireless access | 307 (44.0) | 106 (34.1) | 71 (54.6) | 84 (50.3) |
| Podcasting software | 94 (13.5) | 27 (8.7) | 29 (22.3) | 30 (18.0) |

The chart below reports the overall provision of information technology. Percentages show the level of availability in schools



Patterns for each technology by school type



An analysis was undertaken to identify whether there were variations in the provision of information technology by school type.

| | Elementary School (N=311) | Middle School (N=130) | High School (N=167) | Total (N=608) | χ^2 |
|--|---------------------------------|-----------------------------|---------------------------|------------------|--------------|
| Internet access | 292 (49.8) | 128 (21.8) | 166 (28.3) | 586 (100.0) | 11.51** |
| School library web page | 226 (45.4) | 117 (23.5) | 155 (31.1) | 498 (100.0) | 37.06** * |
| Word processing software e.g., Word | 267 (47.6) | 128 (22.8) | 166 (29.6) | 561 (100.0) | 36.85** * |
| Presentation software e.g., PowerPoint | 239 (45.1) | 125 (23.6) | 166 (31.3) | 530 (100.0) | 61.35** * |
| Spreadsheet software e.g., Excel | 210 (42.4) | 120 (24.2) | 165 (33.3) | 495 (100.0) | 83.22** * |
| Graphic organizing software e.g., Kidspiration | 142 (55.3) | 67 (26.1) | 48 (18.7) | 257 (100.0) | 18.56** * |
| Web design software e.g., Dreamweaver | 17 (21.8) | 21 (26.9) | 40 (51.3) | 78 (100.0) | 34.84** * |
| Email access | 56 (28.0) | 52 (26.0) | 92 (46.0) | 200 (100.0) | 71.47** * |
| Wireless access | 106 (40.6) | 71 (27.2) | 84 (32.2) | 261 (100.0) | 20.88** * |
| Podcasting software | 27 (31.4) | 29 (33.7) | 30 (34.9) | 86 (100.0) | 16.78** * |

Follow-up pairwise comparisons were conducted to evaluate the difference. The Holm's sequential Bonferroni method was used to control for Type I error at the .05 across all three comparisons.

Internet access

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | .65 | .422 | | NS | .05 |
| Elementary vs. high | 8.23 | .004 | .0167 | * | .13 |
| Elementary vs. middle | 4.22 | .040 | .025 | NS | .10 |

School library web page

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | .75 | .386 | .05 | NS | .05 |
| Elementary vs. high | 27.26 | .000 | .0167 | * | .24 |
| Elementary vs. middle | 15.93 | .000 | .0167 | * | .19 |

Word processing software e.g., Word

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | .65 | .422 | .05 | NS | .05 |
| Elementary vs. high | 23.39 | .000 | .0167 | * | .22 |
| Elementary vs. middle | 15.60 | .000 | .0167 | * | .19 |

Presentation software e.g., PowerPoint

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | 3.89 | .048 | .05 | * | .12 |
| Elementary vs. high | 42.71 | .000 | .0167 | * | .30 |
| Elementary vs. middle | 23.71 | .000 | .0167 | * | .23 |

Spreadsheet software e.g., Excel

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | 7.95 | .005 | .05 | * | .16 |
| Elementary vs. high | 62.88 | .000 | .0167 | * | .36 |
| Elementary vs. middle | 29.90 | .000 | .0167 | * | .26 |

Graphic organizing software e.g., Kidspiration

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | 16.01 | .000 | .0167 | * | .2 |
| Elementary vs. high | 12.98 | .000 | .0167 | * | .17 |
| Elementary vs. middle | 1.27 | .260 | .05 | NS | .05 |

Web design software e.g., Dreamweaver

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | 2.72 | .099 | .05 | NS | .10 |
| Elementary vs. high | 35.35 | .000 | .0167 | * | .27 |
| Elementary vs. middle | 13.30 | .000 | .0167 | * | .17 |

Email access

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | 6.66 | .010 | .05 | * | .15 |
| Elementary vs. high | 69.90 | .000 | .0167 | * | .38 |
| Elementary vs. middle | 23.98 | .000 | .0167 | * | .23 |

Wireless access

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | .55 | .460 | .05 | NS | .04 |
| Elementary vs. high | 11.93 | .001 | .025 | * | .16 |
| Elementary vs. middle | 16.09 | .000 | .0167 | * | .19 |

Podcasting software

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | .87 | .352 | .05 | NS | .05 |
| Elementary vs. high | 8.91 | .003 | .025 | * | .14 |
| Elementary vs. middle | 15.35 | .000 | .0167 | * | .19 |

The data show that there is a high level of penetration of key information technologies that enable access to and use of information resources. 96.4% of school libraries have internet access 92.1% make available word processing software; 87.8% make presentation software available, 82.8% make spreadsheet software available. 81.6% of school libraries have a school library website. Other technologies, such as wireless access and email access have a lower level of penetration (44% and 34.3% respectively).

Overall, high school libraries and middle school libraries in particular have a significantly stronger provision and access to a range of information technologies through the school library.

The presence of such access technologies plays a very important role in extending the information environment beyond the school, and access to internet-based automated catalogs enable students to work independently at home, and further develop their independent learning skills . Given the variations in access and socio-economic status, this access to information technology through the school library, and the instruction in its appropriate and ethical use, is an essential function of school libraries and represents a key arena for continuous improvement.

Question 90 was an open-ended question that gathered additional data on other information technologies available in schools. The following summary shows the breakdown of items listed. There is some repetition of those listed above.

Accelerated Reader program (quizzes and testing 6

Access 2

Audiobooks 2

Blogs 4

Cable TV 3

Databases 11

Digital Cameras 4

Document camera 3

Ebscohost 4

Garageband composition software 4

Geometers Sketchpad 2

iMovie 6

Inspiration 4

iphoto 2

iPods 4

itunes. 3

kidspiration 2

Kurzweil Reader 5

LCD projectors for presentations 3

Flashdrives 4

Microsoft Publisher 4

Movie/video production software 3

MP3 players 2

Nettrekker 3

NoodleTools bibliographic software 6

Photoshop 5

Scanner 11

Smartboard 29

Streaming video 3

Turn-it-in 4

Video camera 8

Videostreaming 7

Twitter 5

Wikis 4

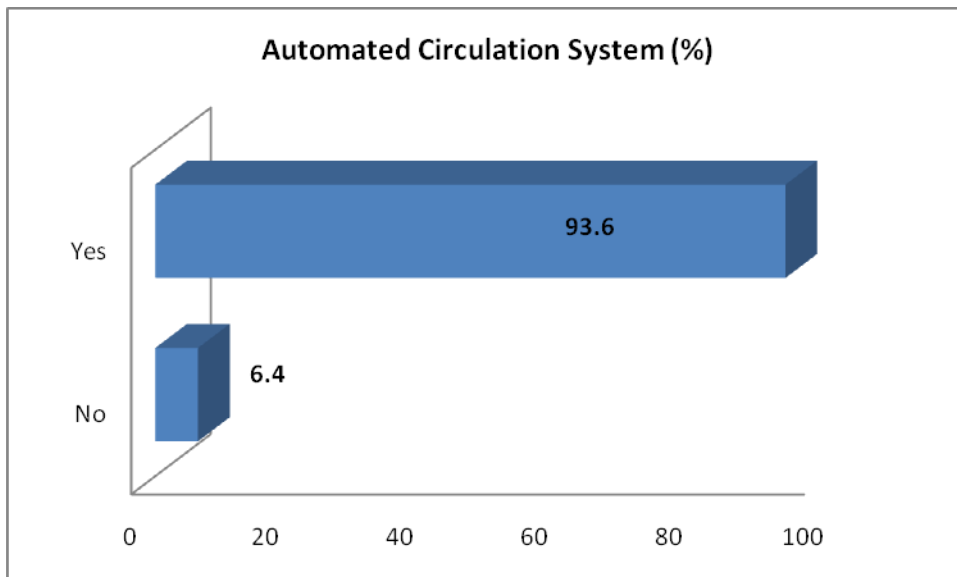
Wireless access 5

:

SmartBoards, scanners and video-based hardware and software were the predominant technologies identified.

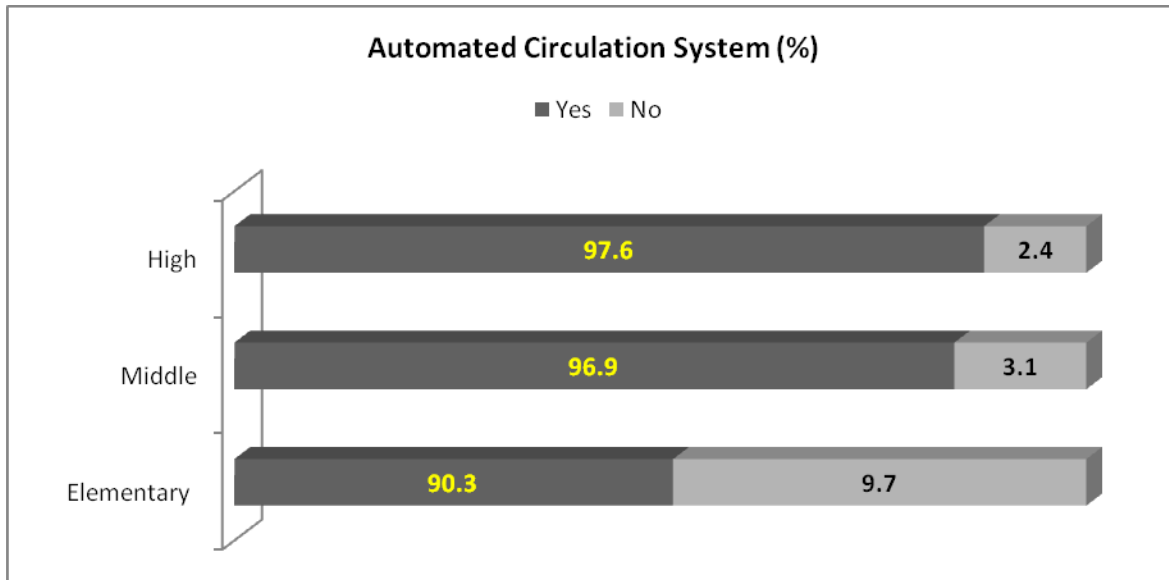
The table below shows data on the availability of Automated Circulation Systems, gathered in Question 91.

| | Frequency (%) |
|-------|---------------|
| Yes | 648 (93.6) |
| No | 44 (6.4) |
| Total | 692 |



Automated Circulation System, by School Type

| | Frequency (%) | | |
|-------|---------------|------------|------------|
| | Elementary | Middle | High |
| Yes | 279 (90.3) | 125 (96.9) | 162 (97.6) |
| No | 30 (9.7) | 4 (3.1) | 4 (2.4) |
| Total | 309 | 129 | 166 |



A χ^2 analysis was conducted to evaluate the association between *Automated Circulation System* and *School Type*. There was a significant association between the two factors. χ^2 (2, $N=604$) = 12.591, $p < .01$, Cramér's $V = .14$. The results show that school type was significantly associated with *automated Circulation Systems*. The following pairwise test revealed that elementary schools have significantly fewer numbers of automated circulation systems than middle and/or high schools. There was no significant difference between middle and high schools.

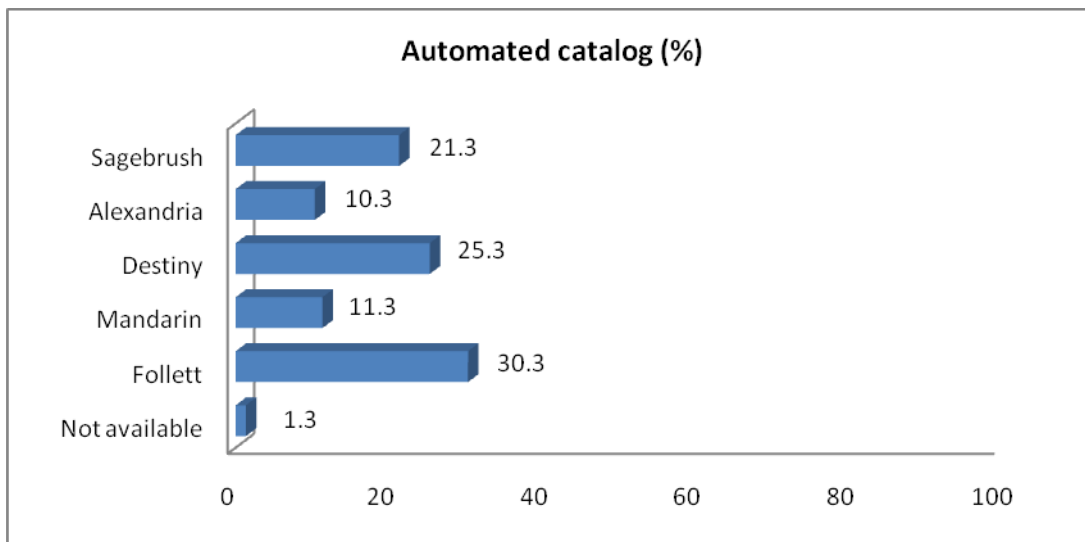
| | Frequency (%) | | | Total | χ^2 |
|-------|---------------------------|-----------------------|---------------------|-------|----------|
| | Elementary ($N=309$) | Middle ($N=129$) | High ($N=166$) | | |
| Yes | 279 (49.3) | 125 (22.1) | 162 (28.6) | 566 | 12.591** |
| No | 30 (78.9) | 4 (10.5) | 4 (10.5) | 38 | |
| Total | 309 | 129 | 166 | 604 | |

** $p < .01$

At least 90% of school libraries in participating schools have automated circulation systems. Elementary schools have statistically significantly fewer numbers of automated circulation systems than middle and/or high schools. There was no significant difference between middle and high schools.

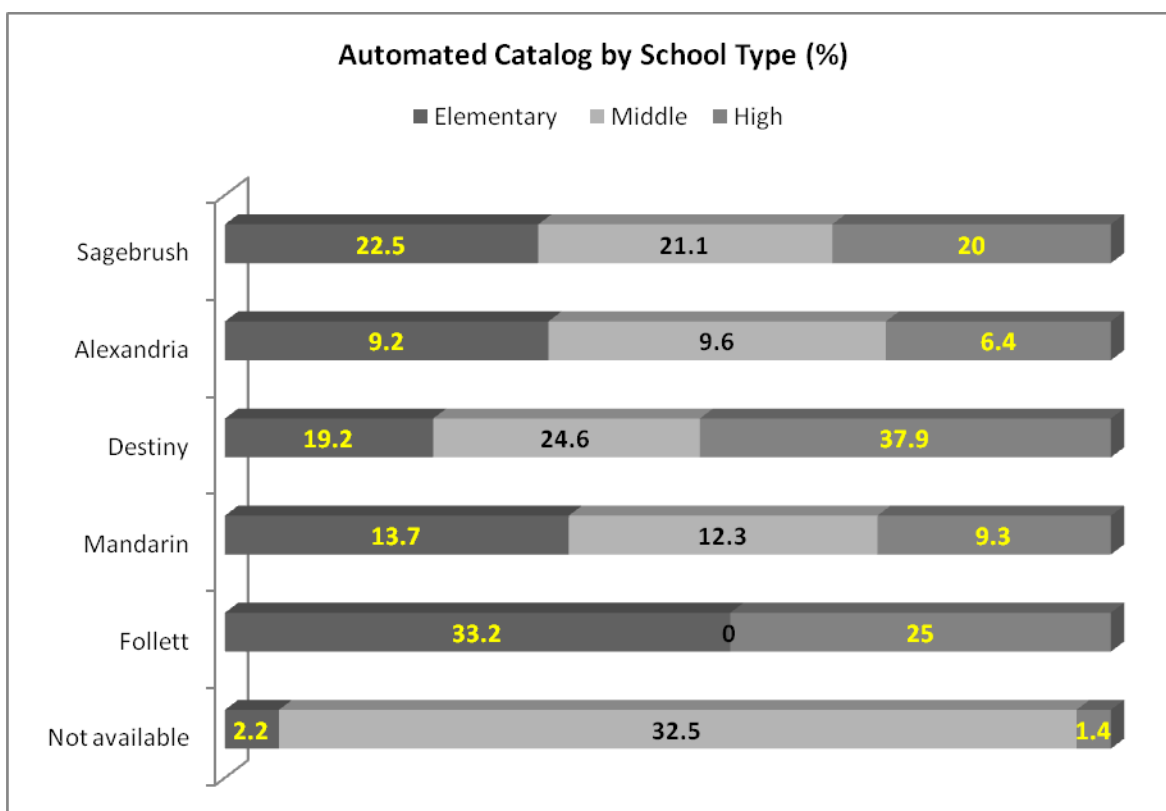
Question 94 gathered data on the provision of Automated Catalogs in the school libraries, as shown below.

| | Frequency (%) |
|---------------|---------------|
| Not available | 8 (1.3) |
| Follett | 182 (30.3) |
| Mandarin | 68 (11.3) |
| Destiny | 152 (25.3) |
| Alexandria | 62 (10.3) |
| Sagebrush | 128 (21.3) |
| Total | 600 |



Automated Catalog by School Type

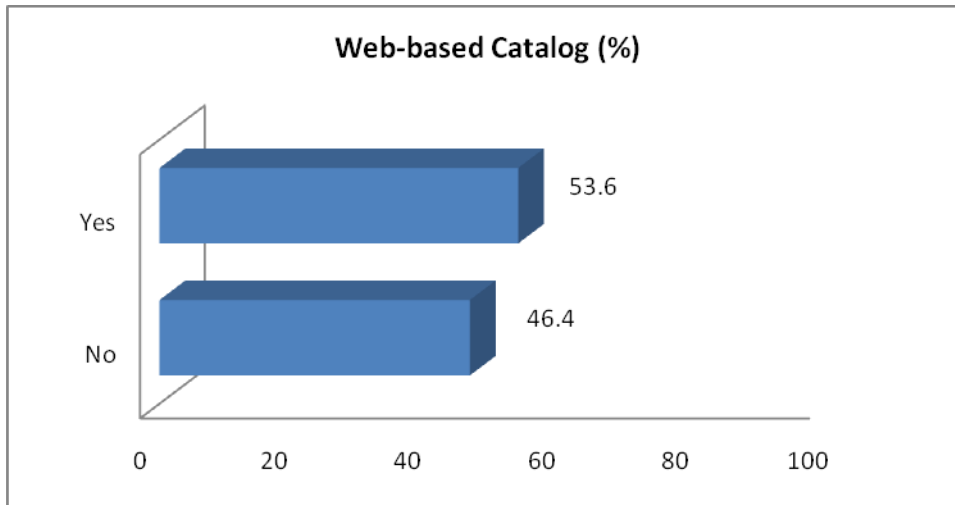
| | Elementary % | Middle % | High % |
|---------------|--------------|--------------|-----------|
| Not available | 6 (2.2) | 37 (32.5) | 2 (1.4) |
| Follett | 90 (33.2) | 0 (0) | 35 (25.0) |
| Mandarin | 37 (13.7) | 14 (12.3) | 13 (9.3) |
| Destiny | 52 (19.2) | 28 (24.6) | 53 (37.9) |
| Alexandria | 25 (9.2) | 11 (9.6) | 9 (6.4) |
| Sagebrush | 61 (22.5) | 24 (21.1) | 28 (20.0) |
| Total | 271 | 114 | 140 |



98.7% of the school libraries in the study have automated catalogs. Follett, Destiny and Sagebrush are the predominant providers (30.3%, 25.3% and 21.3% respectively). Follett is more frequently used in elementary schools, Destiny in high schools, and Sagebrush is more prevalent in middle schools. The largest gap in provision is in middle schools.

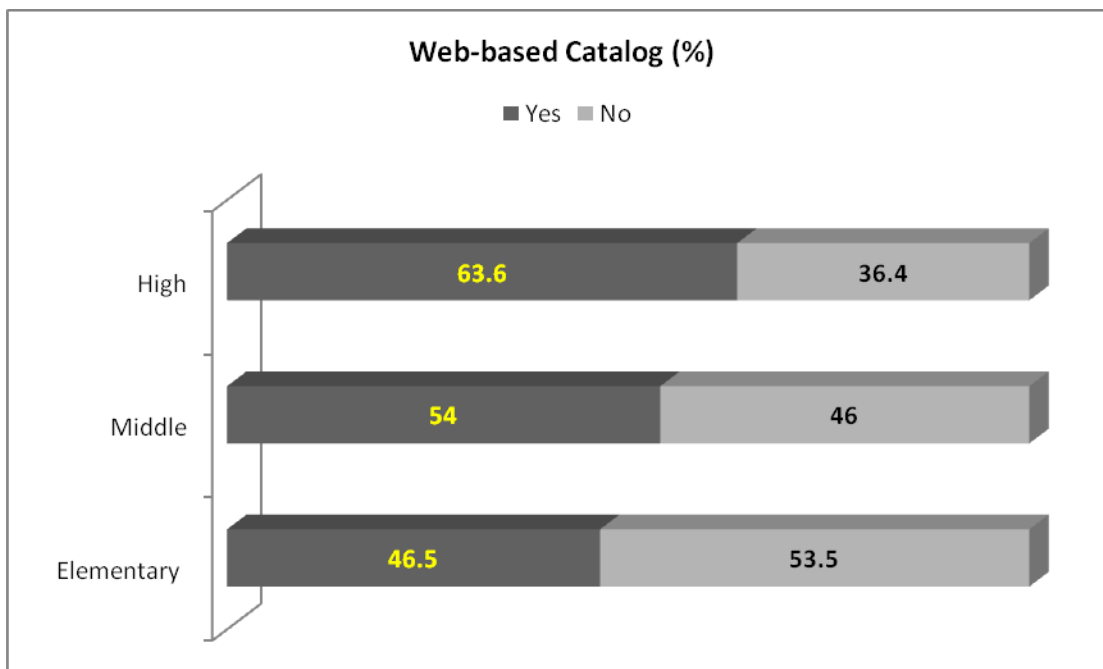
The table below reports data on the availability of web-based catalogs, gathered in Question 93

| | Frequency (%) |
|-------|---------------|
| Yes | 349 (46.4) |
| No | 302 (53.6) |
| Total | 651 |



Web-based Catalog, by School Type

| | Frequency (%) | | |
|-------|---------------|-----------|------------|
| | Elementary | Middle | High |
| Yes | 131 (46.5) | 68 (54.0) | 103 (63.6) |
| No | 151 (53.5) | 58 (46.0) | 59 (36.4) |
| Total | 282 | 126 | 162 |



A χ^2 analysis was conducted to evaluate the association between *Web-based Catalog* and *School Type*. There was a significant association between the two factors. $\chi^2 (2, N=570)$

= 12.178, $p < .01$, Cramér's $V = .15$. The results showed that school type was significantly associated with *Web-based Catalog*. The following pairwise test did not reveal any significant difference in all pairwise comparisons.

| | Frequency (%) | | | Total | χ^2 |
|-------|---------------|-----------|------------|-------|----------|
| | Elementary | Middle | High | | |
| Yes | 131 (43.4) | 68 (22.5) | 103 (34.1) | 302 | 12.178** |
| No | 151 (56.3) | 58 (21.6) | 59 (22.0) | 268 | |
| Total | 282 | 126 | 162 | 570 | |

** $p < .01$

46.4% of school libraries provide access to web-based catalogs. Specifically, 63.6% of high schools, 54.0% of middle schools, and 46.5% of elementary schools provide web-based catalogs. There is a statistical difference in relation to the availability of web-based catalogs in school libraries, with high school and middle school libraries more likely than elementary schools to provide these.

Given the importance of digital literacy, and the critical importance of access to high quality authoritative information sources, it is imperative that all school libraries, regardless of school type, provide such access.

Question 95 gathered data on the availability of computers and computers with internet connectivity.

| | Availability of Computers | Computers with Internet Connection |
|----------------------------|------------------------------|---------------------------------------|
| Number of responses (%) | 692 (90.6%) | 647 (84.7%) |

Overall, there was a high correspondence between availability of computers and availability of Internet access through them. The table below shows the average number of computers with Internet connection, by school type.

| Computers with Internet Connection | |
|------------------------------------|----|
| Elementary | 12 |
| Middle | 31 |
| High | 44 |

An ANOVA was conducted to evaluate the relationship between *Number of Computers with Internet Connection* and *School Type*. There was significant difference by school type. $F(2, 601) = 124.28, p < .001$. According to the results of ANOVA, school type is associated with the number of computers with Internet connections. The following tests displayed that all pairwise comparisons were significant. The results indicated that higher school levels had more computers with Internet connections. High schools have significantly more computers than elementary and middle schools.

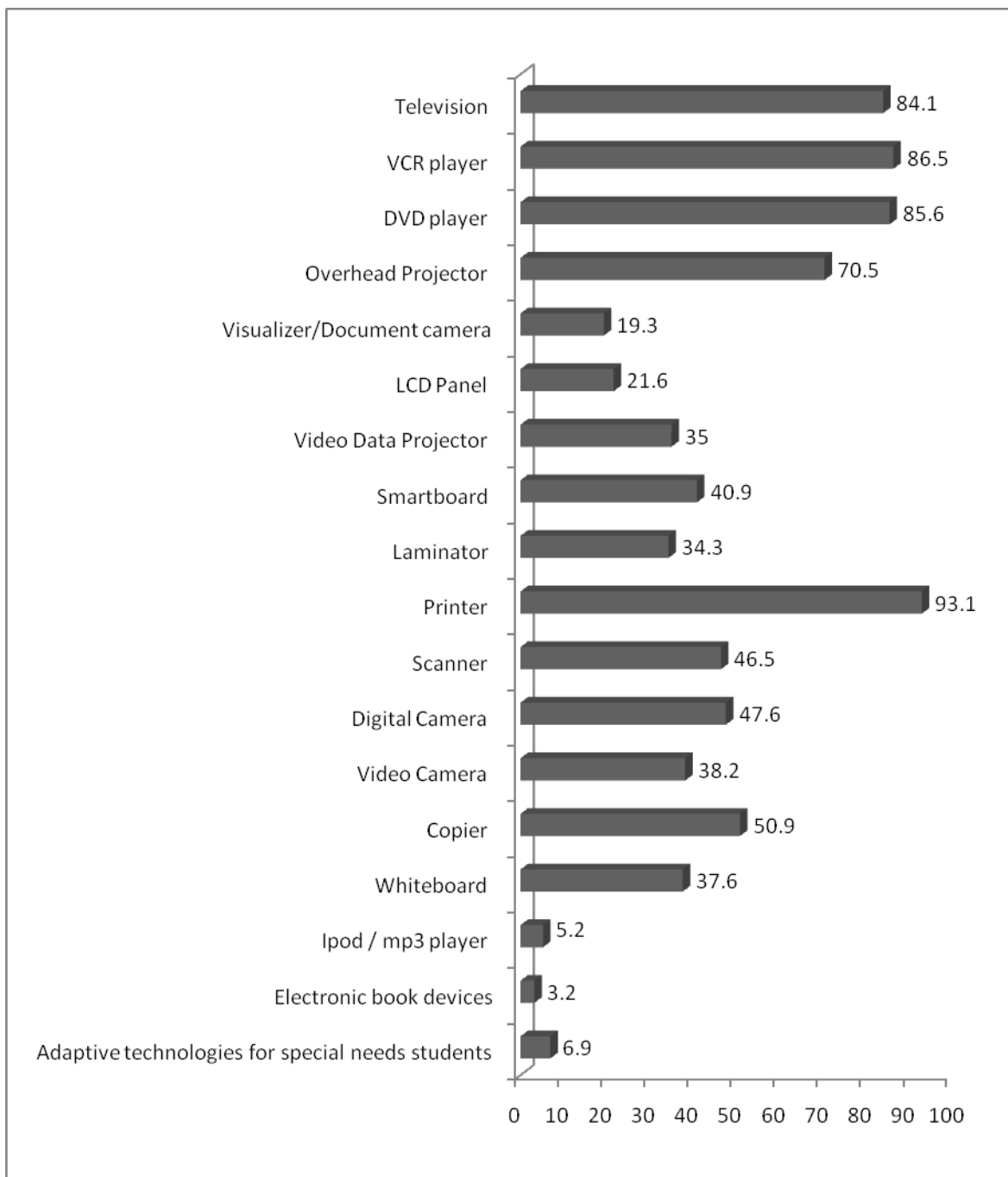
Computers with Internet Connection, by County

| County | Average number of computers with Internet Connection |
|-------------------|--|
| Atlantic County | 21 |
| Bergen County | 23 |
| Burlington County | 29 |
| Camden County | 40 |
| Cape May County | 22 |
| Cumberland County | 17 |
| Essex County | 20 |
| Gloucester County | 19 |
| Hudson County | 25 |
| Hunterdon County | 21 |
| Mercer County | 17 |
| Middlesex County | 29 |
| Monmouth County | 23 |
| Morris County | 27 |
| Ocean County | 45 |
| Passaic County | 20 |
| Salem County | 22 |
| Somerset County | 21 |
| Sussex County | 20 |
| Union County | 21 |
| Warren County | 22 |

The table below presents data on the availability of equipment in the school library, including the types of equipment and frequency of schools reporting availability of specific equipment.

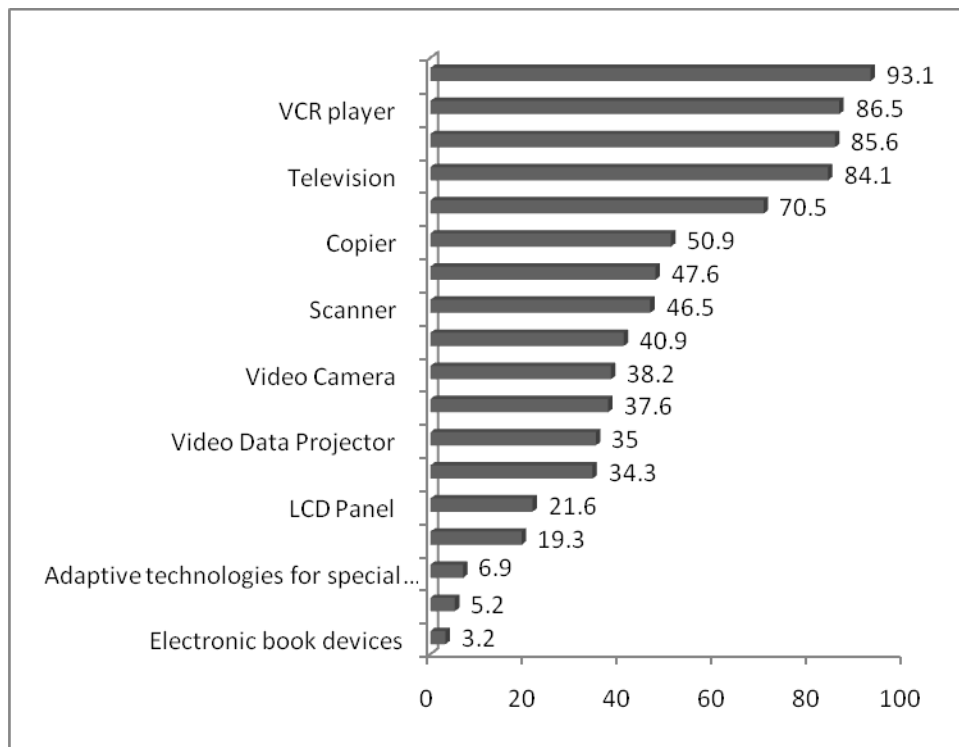
| | All School Types (N=694) | Elementary School (N=310) | Middle School (N=130) | High School (N=166) |
|---|--------------------------------|---------------------------------|--------------------------|------------------------|
| | Number (%) | Number (%) | Number (%) | Number (%) |
| Television | 584 (84.1) | 266 (85.8) | 103 (79.2) | 137 (82.5) |
| VCR player | 600 (86.5) | 286 (92.3) | 104 (80.0) | 134 (80.7) |
| DVD player | 594 (85.6) | 267 (86.1) | 112 (86.2) | 139 (83.7) |
| Overhead Projector | 489 (70.5) | 215 (69.4) | 96 (73.8) | 123 (74.1) |
| Visualizer/Document camera | 134 (19.3) | 59 (19.0) | 32 (24.6) | 28 (15.0) |
| LCD Panel | 150 (21.6) | 59 (19.0) | 32 (24.6) | 45 (27.1) |
| Video Data Projector | 243 (35.0) | 83 (26.8) | 53 (40.8) | 85 (51.2) |
| SmartBoard | 284 (40.9) | 137 (44.2) | 50 (38.5) | 57 (34.3) |
| Laminator | 238 (34.3) | 74 (23.9) | 53 (40.8) | 84 (50.6) |
| Printer | 646 (93.1) | 274 (88.4) | 125 (96.2) | 162 (97.6) |
| Scanner | 323 (46.5) | 125 (40.3) | 68 (52.3) | 87 (52.4) |
| Digital Camera | 330 (47.6) | 149 (48.1) | 80 (61.5) | 64 (38.6) |
| Video Camera | 265 (38.2) | 114 (36.8) | 72 (55.4) | 49 (29.5) |
| Copier | 353 (50.9) | 74 (23.9) | 81 (62.3) | 151 (91.0) |
| Whiteboard | 261 (37.6) | 118 (38.1) | 54 (41.5) | 56 (33.7) |
| Ipod / MP3 player | 36 (5.2) | 8 (2.6) | 12 (9.2) | 12 (7.2) |
| Electronic book devices e.g., Kindle | 22 (3.2) | 5 (1.6) | 6 (4.6) | 8 (4.8) |
| Adaptive technologies for special needs students e.g., Braille technology devices | 48 (6.9) | 6 (1.9) | 15 (11.5) | 22 (13.3) |

Equipment distribution, by all school types

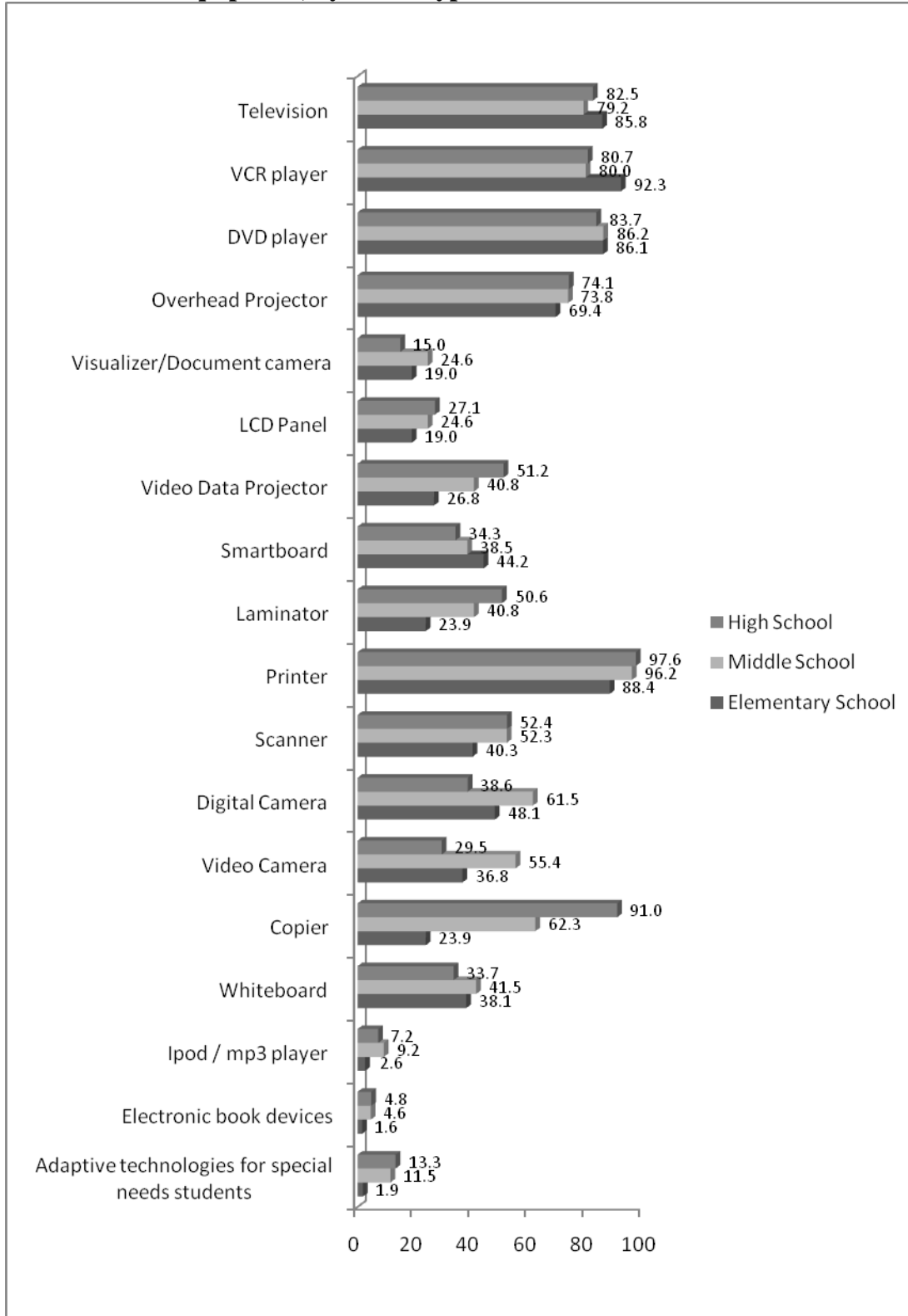


Equipment in all school, by type (by ranking)

| Ranking | Equipment (N=694) | Number (%) |
|---------|---|------------|
| 1 | Printer | 646 (93.1) |
| 2 | VCR player | 600 (86.5) |
| 3 | DVD player | 594 (85.6) |
| 4 | Television | 584 (84.1) |
| 5 | Overhead Projector | 489 (70.5) |
| 6 | Copier | 353 (50.9) |
| 7 | Digital Camera | 330 (47.6) |
| 8 | Scanner | 323 (46.5) |
| 9 | Smartboard | 284 (40.9) |
| 10 | Video Camera | 265 (38.2) |
| 11 | Whiteboard | 261 (37.6) |
| 12 | Video Data Projector | 243 (35.0) |
| 13 | Laminator | 238 (34.3) |
| 14 | LCD Panel | 150 (21.6) |
| 15 | Visualizer/Document camera | 134 (19.3) |
| 16 | Adaptive technologies for special needs students e.g., Braille technology devices | 48 (6.9) |
| 17 | Ipod / mp3 player | 36 (5.2) |
| 18 | Electronic book devices e.g., Kindle | 22 (3.2) |



Distribution of equipment, by school type



Test for significant differences between school types

| | Elementary School (N=310) | Middle School (N=130) | High School (N=166) | Total (N=606) | χ^2 |
|---|------------------------------|--------------------------|------------------------|------------------|-----------|
| Television | 266 (52.6) | 103 (20.4) | 137 (27.1) | 506 (100.0) | 3.03 |
| VCR player | 286 (54.6) | 104 (19.8) | 134 (25.6) | 524 (100.0) | 18.21*** |
| DVD player | 267 (51.5) | 112 (21.6) | 139 (26.8) | 518 (100.0) | .56 |
| Overhead Projector | 215 (49.5) | 96 (22.1) | 123 (28.3) | 434 (100.0) | 1.60 |
| Visualizer/Document camera | 59 (49.6) | 32 (26.9) | 28 (23.5) | 119 (100.0) | 2.92 |
| LCD Panel | 59 (43.4) | 32 (23.5) | 45 (33.1) | 136 (100.0) | 4.50 |
| Video Data Projector | 83 (37.6) | 53 (24.0) | 85 (38.5) | 221 (100.0) | 29.17*** |
| Smartboard | 137 (56.1) | 50 (20.5) | 57 (23.4) | 244 (100.0) | 4.59 |
| Laminator | 74 (35.1) | 53 (25.1) | 84 (39.8) | 211 (100.0) | 36.62*** |
| Printer | 274 (48.8) | 125 (22.3) | 162 (28.9) | 561 (100.0) | 16.41*** |
| Scanner | 125 (44.6) | 68 (24.3) | 87 (31.1) | 280 (100.0) | 8.84* |
| Digital Camera | 149 (50.9) | 80 (27.3) | 64 (21.8) | 293 (100.0) | 15.44*** |
| Video Camera | 114 (48.5) | 72 (30.6) | 49 (20.9) | 235 (100.0) | 21.62*** |
| Copier | 74 (24.2) | 81 (26.5) | 151 (49.3) | 306 (100.0) | 203.92*** |
| Whiteboard | 118 (51.8) | 54 (23.7) | 56 (24.6) | 228 (100.0) | 1.94 |
| Ipod / mp3 player | 8 (25.0) | 12 (37.5) | 12 (37.5) | 32 (100.0) | 9.83** |
| Electronic book devices e.g., Kindle | 5 (26.3) | 6 (31.6) | 8 (42.1) | 19 (100.0) | 4.85 |
| Adaptive technologies for special needs students e.g., Braille technology devices | 6 (14.0) | 15 (34.9) | 22 (51.2) | 43 (100.0) | 25.96*** |

VCR player

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|---------------|
| Middle vs. high | .02 | .876 | .05 | NS | .01 |
| Elementary vs. high | 13.86 | .000 | .0167 | * | .17 |
| Elementary vs. middle | 13.66 | .000 | .0167 | * | .18 |

Video Data Projector

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | 3.19 | .074 | .05 | NS | .10 |
| Elementary vs. high | 28.25 | .000 | .0167 | * | .24 |
| Elementary vs. middle | 8.40 | .004 | .025 | * | .14 |

Laminator

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | 2.84 | .092 | .05 | NS | .10 |
| Elementary vs. high | 34.84 | .000 | .0167 | * | .27 |
| Elementary vs. middle | 12.74 | .000 | .0167 | * | .17 |

Printer

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | .51 | .475 | .05 | NS | .04 |
| Elementary vs. high | 11.90 | .001 | .0167 | * | .16 |
| Elementary vs. middle | 6.54 | .011 | .025 | * | .12 |

Scanner

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | .00 | .986 | .05 | NS | .00 |
| Elementary vs. high | 6.39 | .011 | .0167 | * | .12 |
| Elementary vs. middle | 5.34 | .021 | .025 | * | .11 |

Digital Camera

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | 15.42 | .000 | .0167 | * | .23 |
| Elementary vs. high | 3.96 | .047 | .05 | * | .09 |
| Elementary vs. middle | 6.66 | .010 | .025 | * | .12 |

Video Camera

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | 20.18 | .000 | .0167 | * | .26 |
| Elementary vs. high | 2.53 | .112 | .05 | NS | .07 |
| Elementary vs. middle | 13.00 | .000 | .0167 | * | .17 |

Copier

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | 35.33 | .000 | .0167 | * | .35 |
| Elementary vs. high | 195.24 | .000 | .0167 | * | .64 |
| Elementary vs. middle | 59.30 | .000 | .0167 | * | .37 |

Ipod / mp3 player

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | .39 | .531 | .05 | NS | .04 |

| | | | | | |
|-----------------------|------|------|-------|---|-----|
| Elementary vs. high | 5.80 | .016 | .025 | * | .11 |
| Elementary vs. middle | 9.34 | .002 | .0167 | * | .15 |

Adaptive technologies for special needs students e.g., Braille technology devices

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | .20 | .658 | .05 | NS | .03 |
| Elementary vs. high | 25.01 | .000 | .0167 | * | .23 |
| Elementary vs. middle | 18.58 | .000 | .0167 | * | .21 |

Printers, VCR players, DVD players, Televisions, and Overhead Projectors, and copiers are the most common equipment available in school libraries. To a much lesser extent, digital cameras, scanners, SmartBoards, video cameras, whiteboards, and video data projectors are available, although less than half of the school libraries have this type of equipment. High schools have significantly more equipment than middle schools and elementary schools. Elementary schools in particular are missing out on major access to contemporary technologies.

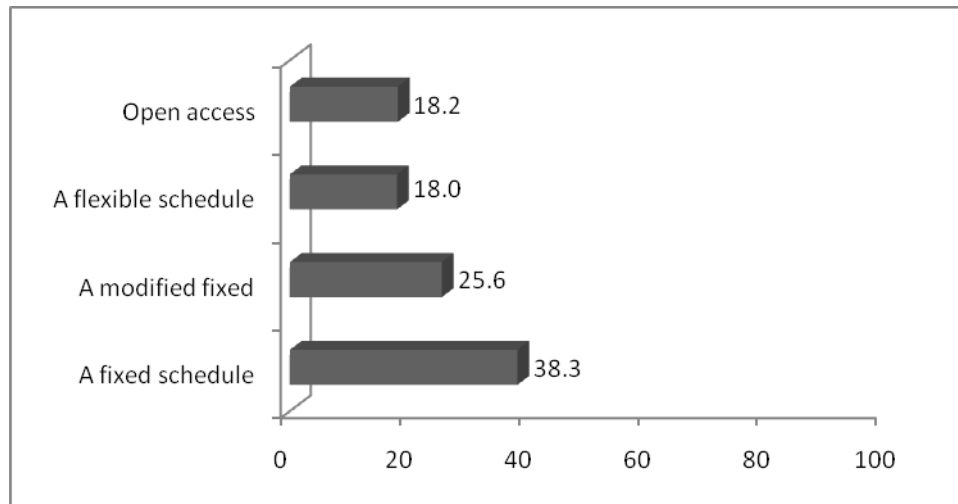
PART 6 SCHOOL LIBRARY ACCESS

Question 97 gathered data on access to the school library. The following categories were used to analyze data on users' access to the school library: a fixed schedule (classes at regularly scheduled times); a modified fixed schedule (some open access in addition to scheduled access); a flexible schedule (open access throughout the school day); open access including extended hours outside the school day.

The following table shows the types of access, by type of school.

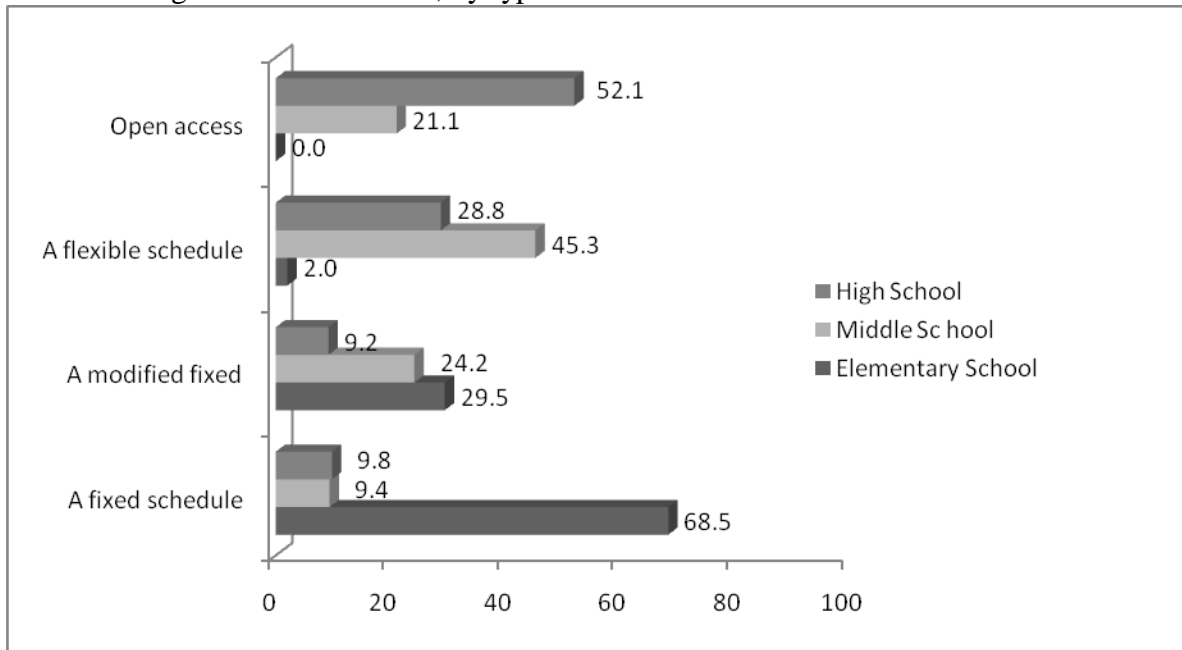
| | All School Types (N=677) | Elementary School (N=302) | Middle School (N=128) | High School (N=163) |
|---------------------|-----------------------------|------------------------------|--------------------------|------------------------|
| | Number (%) | Number (%) | Number (%) | Number (%) |
| A fixed schedule | 259 (38.3) | 207 (68.5) | 12 (9.4) | 16 (9.8) |
| A modified fixed | 173 (25.6) | 89 (29.5) | 31 (24.2) | 15 (9.2) |
| A flexible schedule | 122 (18.0) | 6 (2.0) | 58 (45.3) | 47 (28.8) |
| Open access | 123(18.2) | 0 (0.0) | 27 (21.1) | 85 (52.1) |

Type of access



36.2% of schools provide full flexible access, and 61.8% of school libraries provide all or some flexible access.

The following table shows access, by type of school



A statistical comparison (Chi Square) was undertaken to see if differences exist according

| | Elementary School (N=302) | Middle School (N=128) | High School (N=163) | Total (N=593) | χ^2 |
|---------------------|------------------------------|--------------------------|------------------------|------------------|---------------|
| A fixed schedule | 207 (88.1) | 12 (5.1) | 16 (6.8) | 235 (100.0) | 404.37 *** |
| A modified fixed | 89 (65.9) | 31 (23.0) | 15 (11.1) | 135 (100.0) | |
| A flexible schedule | 6 (5.4) | 58 (52.3) | 47 (42.3) | 111 (100.0) | |
| Open access | 0 (0.0) | 27 (24.1) | 85 (75.9) | 112 (100.0) | |

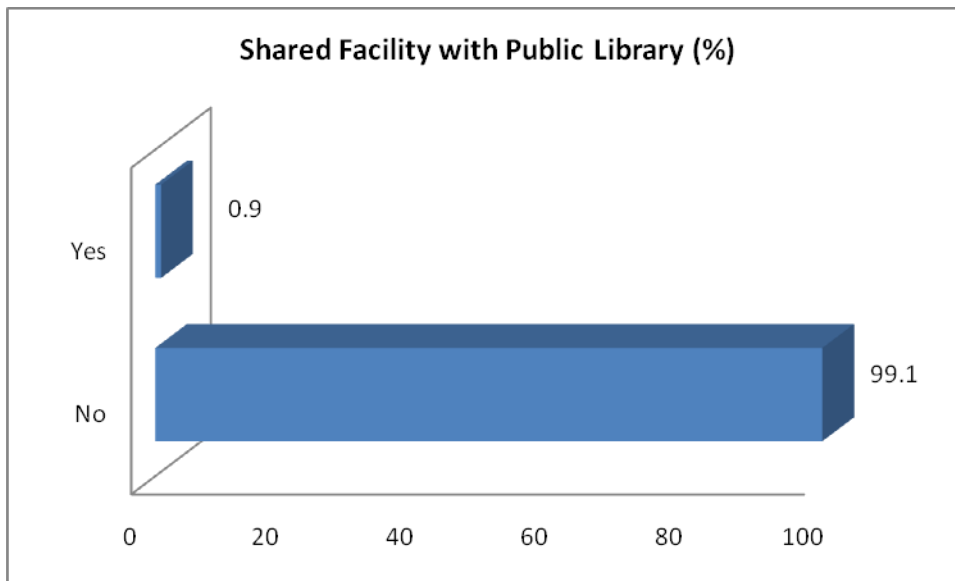
to school type.

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|--------------------------|-----------------------|---------|--------------------------------------|--------------|------------|
| Middle vs. high | 33.60 | .000 | .0167 | * | .34 |
| Elementary vs. high | 320.01 | .000 | .0167 | * | .83 |
| Elementary vs. middle | 239.76 | .000 | .0167 | * | .75 |

There is a significant difference in types of access according to school type. 98% of elementary schools operate on a fixed or modified fixed schedule (compared to 33.6% of middle schools and 19% of high schools). 2% of elementary schools provide flexible and open access, compared to 66.4% of middle schools and 80.9% of high schools.

Question 98 gathered data on the existence of joint-use facilities. The table and figure below show data on the provision of shared facilities with the public library.

| | Frequency (%) |
|-------|---------------|
| Yes | 6 (0.9) |
| No | 686 (99.1) |
| Total | 692 |



Of the sample in this study, 99.1% of school libraries operate as single rather than shared facility..

PART 7 SCHOOL LIBRARY BUDGET

Questions 99, 100 and 101 gathered data on school library budgets. The tables below present school library budget data.

| Budget (\$) | |
|---------------------|--------|
| Number of responses | 672 |
| <i>M</i> | 15,603 |

672 participants provided budget data. The average budget for all schools in the study is \$15,603.

The following table provides budget amounts, by school type:

| Budget (\$) | | | |
|---------------------|------------|--------|--------|
| | Elementary | Middle | High |
| Number of responses | 300 | 128 | 158 |
| <i>M</i> | 8,299 | 17,932 | 29,228 |

The average elementary school library budget is \$8,299; average middle school library budget is \$17,932; and average high school budget is \$29,228.

An ANOVA was conducted to evaluate the relationship between *Budget* and *School Type*. There was significant difference by school type. $F(2, 583) = 48.23, p < .001$.

According to the results of ANOVA, school type is associated with amount of the budget. The following tests displayed that all pairwise comparisons were significant. The results indicated that the higher the school level, the larger the amount of funding for the school library.

The absence of complete records on school size made it impossible to compare budget allocations per student..

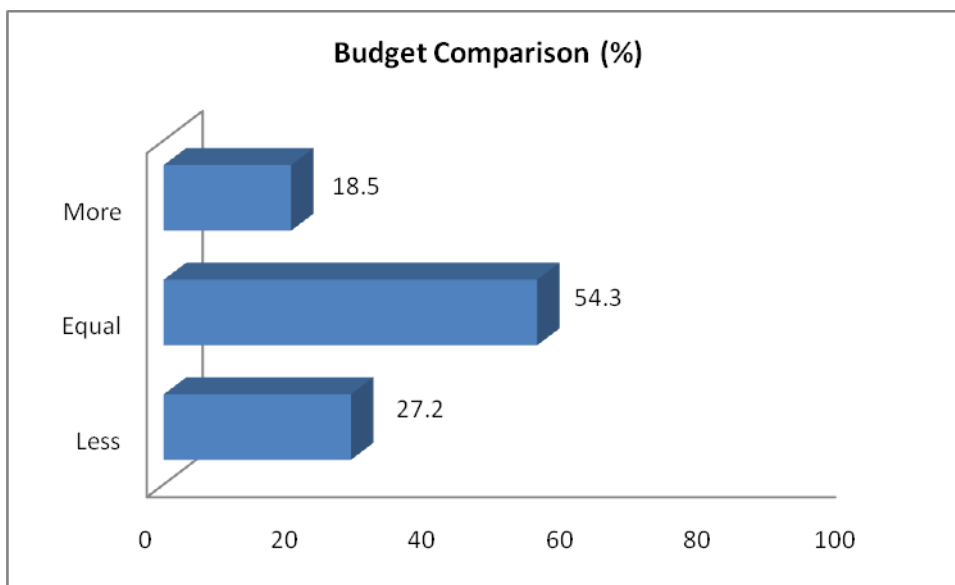
The following table shows average budget allocations, by County, based on specified number of schools

| Budget (\$) | Number | <i>M</i> |
|-------------------|--------|----------|
| Morris County | 52 | 24,432 |
| Cape May County | 8 | 22,750 |
| Gloucester County | 32 | 20,960 |
| Burlington County | 34 | 20,831 |
| Mercer County | 19 | 20,498 |
| Hunterdon County | 26 | 19,001 |
| Somerset County | 27 | 17,734 |
| Middlesex County | 73 | 17,115 |
| Cumberland County | 16 | 15,497 |
| Atlantic County | 11 | 14,427 |
| Bergen County | 68 | 14,413 |
| Monmouth County | 49 | 14,240 |
| Salem County | 10 | 14,215 |
| Union County | 38 | 13,871 |
| Ocean County | 15 | 13,581 |
| Camden County | 34 | 11,748 |
| Sussex County | 19 | 11,130 |
| Hudson County | 13 | 10,843 |
| Passaic County | 59 | 10,495 |
| Essex County | 54 | 10,416 |
| Warren County | 15 | 10,055 |
| Total | 672 | 15,603 |

The highest average budget allocations are in Morris, Cape May, Gloucester, Burlington and Mercer Counties, and the lowest average budget allocations are in Warren, Essex, Passaic and Hudson Counties. Thirteen counties have average budgets below the state wide average of \$15,603.

The table below shows data on how budget allocations, as specified above, compare to the previous year.

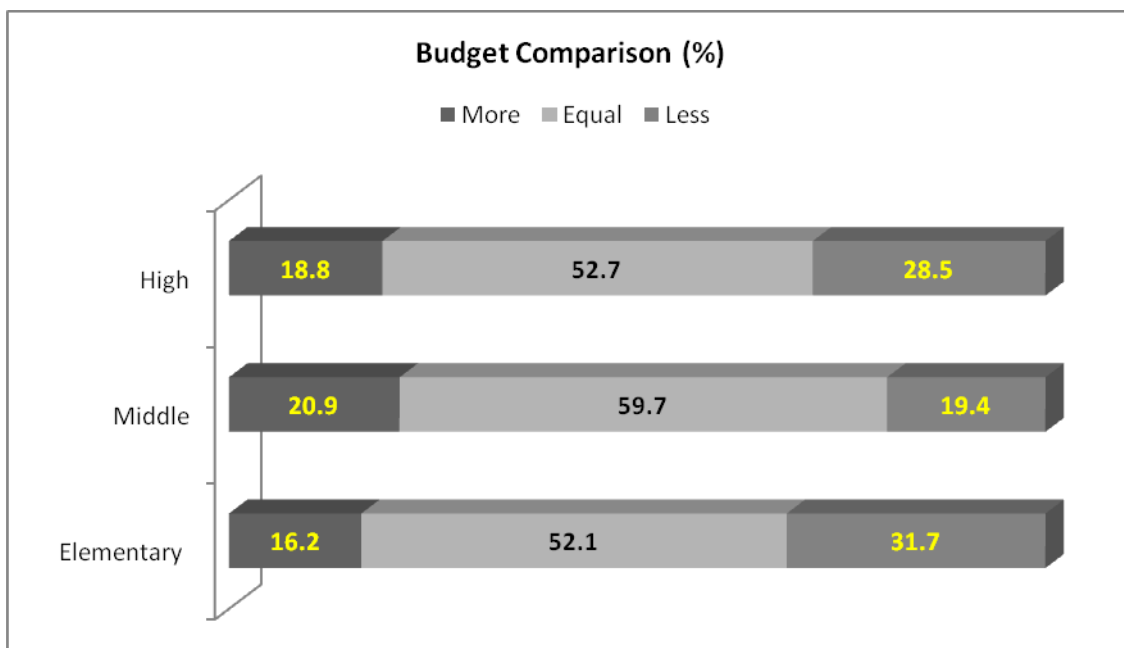
| | Frequency (%) |
|-------|---------------|
| More | 128 (18.5) |
| Equal | 375 (54.3) |
| Less | 188 (27.2) |
| Total | 691 |



54.5% of school library budgets remained unchanged in 2007-2008 and 2008-2009 school years. 18.5% of school library budgets increased, and 27.2 decreased during these times.

Budget Comparison (2007-2008 and 2008-2009), by School Type

| | Frequency (%) | | |
|-------|---------------|-----------|-----------|
| | Elementary | Middle | High |
| More | 50 (16.2) | 27 (20.9) | 31 (18.8) |
| Equal | 161 (52.1) | 77 (59.7) | 87 (52.7) |
| Less | 98 (31.7) | 25 (19.4) | 47 (28.5) |
| Total | 300 | 129 | 165 |

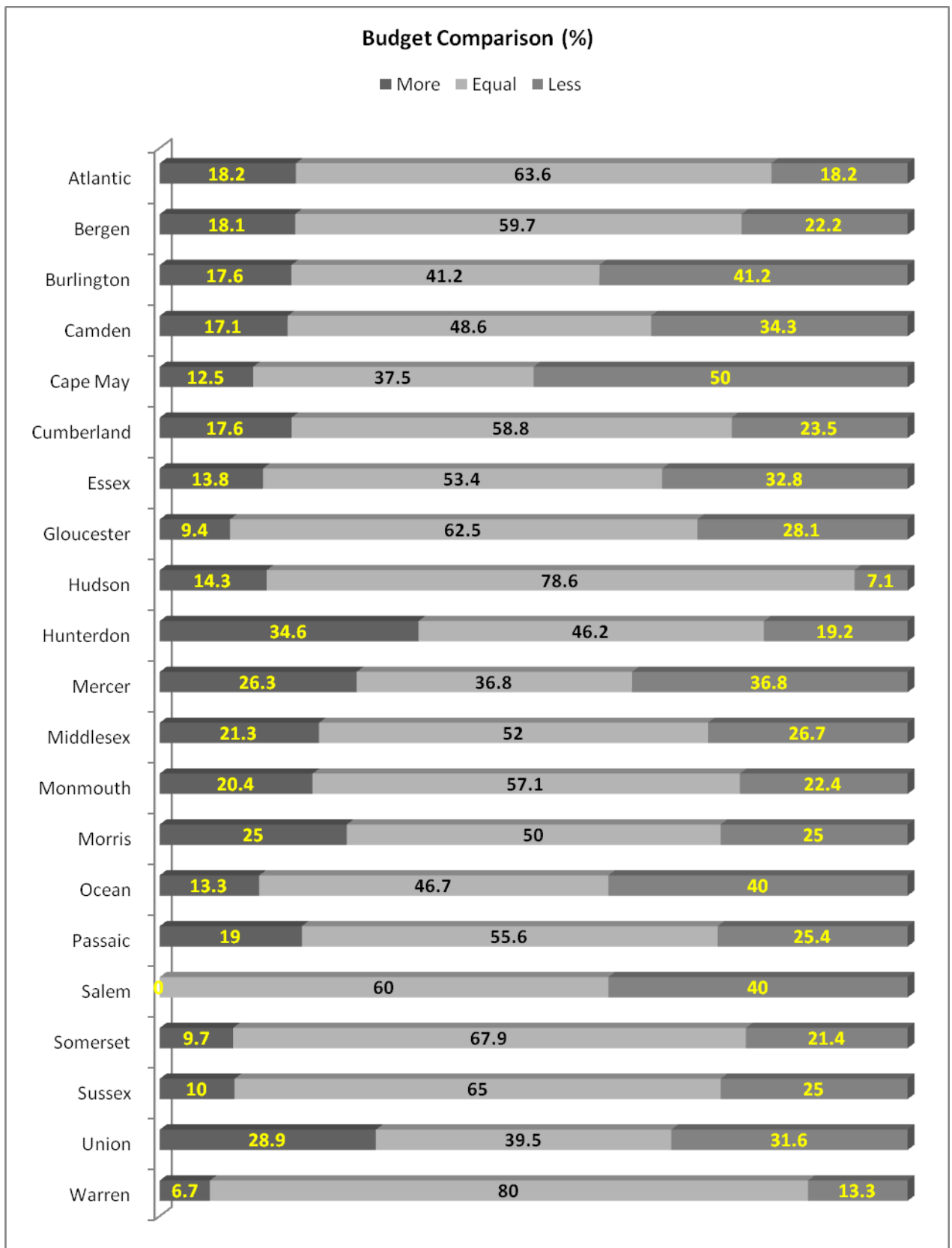


An ANOVA was conducted to evaluate the relationship between *Budget Comparison* and *School Type*. There was no significant difference by school type

The data analysis shows that no one school type – elementary, middle or high – appeared to suffer more budget cuts compared to other types of schools.

Budget Comparison (2007-2008 and 2008-2009), by County

| Budget Comparison | Frequency (%) | | | Total |
|-------------------|---------------|-----------|-----------|-------|
| | More | Equal | Less | |
| Atlantic County | 2 (18.2) | 7 (63.6) | 2 (18.2) | 11 |
| Bergen County | 13 (18.1) | 43 (59.7) | 16 (22.2) | 72 |
| Burlington County | 6 (17.6) | 14 (41.2) | 14 (41.2) | 34 |
| Camden County | 6 (17.1) | 17 (48.6) | 12 (34.3) | 35 |
| Cape May County | 1 (12.5) | 3 (37.5) | 4 (50.0) | 8 |
| Cumberland County | 3 (17.6) | 10 (58.8) | 4 (23.5) | 17 |
| Essex County | 8 (13.8) | 31 (53.4) | 19 (32.8) | 58 |
| Gloucester County | 3 (9.4) | 20 (62.5) | 9 (28.1) | 32 |
| Hudson County | 2 (14.3) | 11 (78.6) | 1 (7.1) | 14 |
| Hunterdon County | 9 (34.6) | 12 (46.2) | 5 (19.2) | 26 |
| Mercer County | 5 (26.3) | 7 (36.8) | 7 (36.8) | 19 |
| Middlesex County | 16 (21.3) | 39 (52.0) | 20 (26.7) | 75 |
| Monmouth County | 10 (20.4) | 28 (57.1) | 11 (22.4) | 49 |
| Morris County | 13 (25.0) | 26 (50.0) | 13 (25.0) | 52 |
| Ocean County | 2 (13.3) | 7 (46.7) | 6 (40.0) | 15 |
| Passaic County | 12 (19.0) | 35 (55.6) | 16 (25.4) | 63 |
| Salem County | 0 (0) | 6 (60.0) | 4 (40.0) | 10 |
| Somerset County | 3 (9.7) | 19 (67.9) | 6 (21.4) | 28 |
| Sussex County | 2 (10.0) | 13 (65.0) | 5 (25.0) | 20 |
| Union County | 11 (28.9) | 15 (39.5) | 12 (31.6) | 38 |
| Warren County | 1 (6.7) | 12 (80.0) | 2 (13.3) | 15 |
| Total | 128 | 375 | 188 | 691 |



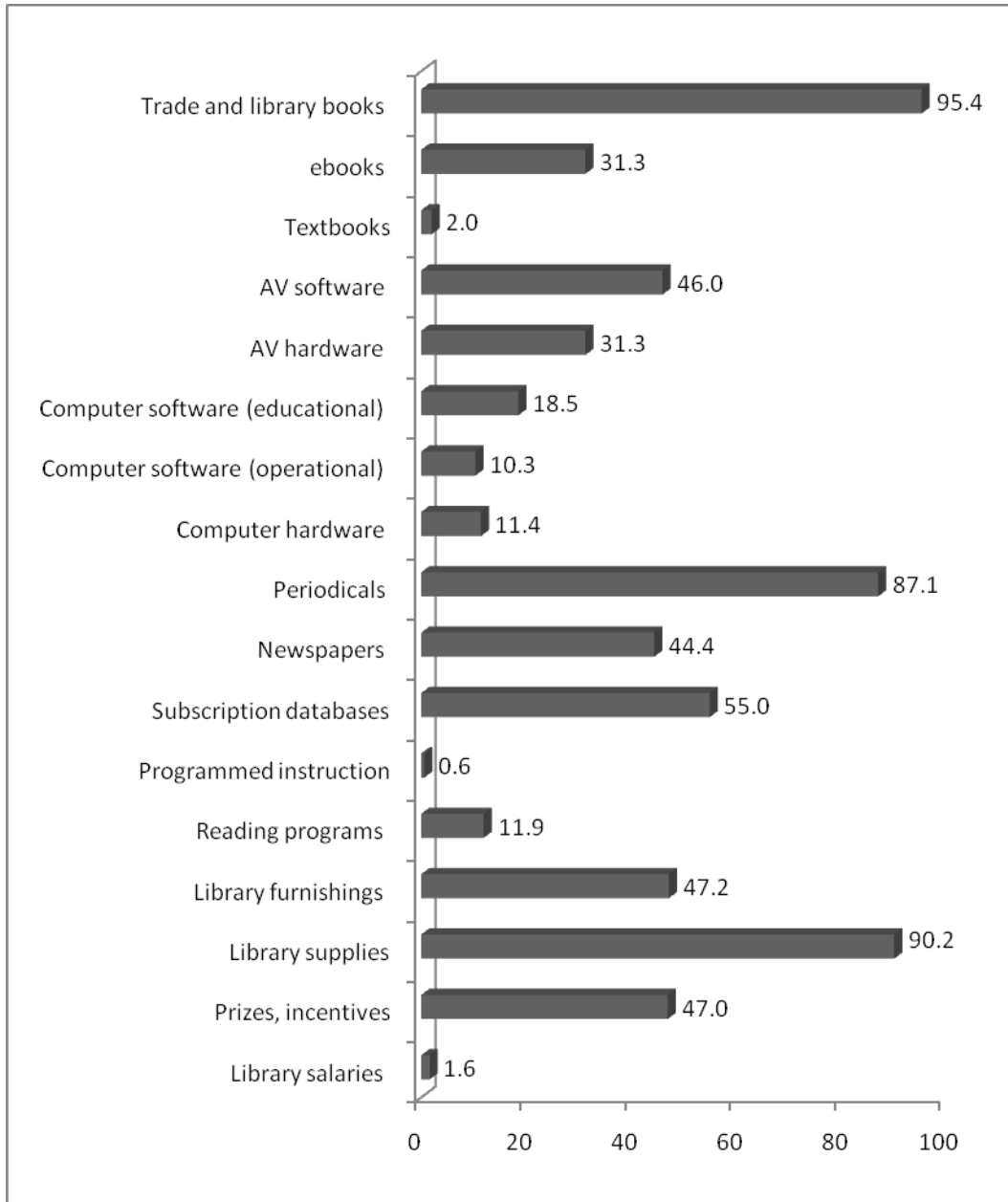
The table below presents data on the components of library budget allocation.

Library Budget Allocation

| | All School Types (N=691) | Elementary School (N=309) | Middle School (N=129) | High School (N=165) |
|---|--------------------------------|---------------------------------|-----------------------------|------------------------|
| | Number (%) | Number (%) | Number (%) | Number (%) |
| Trade and library books | 659 (95.4) | 298 (96.4) | 128 (99.2) | 157 (95.2) |
| ebooks | 216 (31.3) | 39 (12.6) | 48 (37.2) | 109 (66.1) |
| Textbooks | 14 (2.0) | 0 (0.0) | 1 (0.8) | 10 (6.1) |
| AV software | 318 (46.0) | 149 (48.2) | 58 (45.0) | 78 (47.3) |
| AV hardware | 216 (31.3) | 91 (29.4) | 48 (37.2) | 57 (34.5) |
| Computer software (educational) | 128 (18.5) | 45 (14.6) | 26 (20.2) | 39 (23.6) |
| Computer software (operational) | 71 (10.3) | 18 (5.8) | 11 (8.5) | 25 (15.2) |
| Computer hardware | 79 (11.4) | 19 (6.1) | 13 (10.1) | 37 (22.4) |
| Periodicals | 602 (87.1) | 261 (84.5) | 116 (89.9) | 157 (95.2) |
| Newspapers | 307 (44.4) | 50 (16.2) | 84 (65.1) | 140 (84.8) |
| Subscription databases | 380 (55.0) | 90 (29.1) | 94 (72.9) | 150 (90.9) |
| Programmed instruction (such as SRE kits) | 4 (0.6) | 1 (0.3) | 1 (0.8) | 1 (0.6) |
| Reading programs (such as Accelerated Reader) | 82 (11.9) | 42 (13.6) | 23 (17.8) | 7 (4.2) |
| Library furnishings (such as shelving, furniture) | 326 (47.2) | 138 (44.7) | 61 (47.3) | 88 (53.3) |
| Library supplies (such as circulation and processing materials) | 623 (90.2) | 275 (89.0) | 119 (92.2) | 157 (95.2) |
| Prizes, incentives | 325 (47.0) | 160 (51.8) | 60 (46.5) | 64 (38.8) |
| Library salaries | 11 (1.6) | 1 (0.3) | 3 (2.3) | 4 (2.4) |

Library Budget allocation by all school types for those libraries reporting purchases

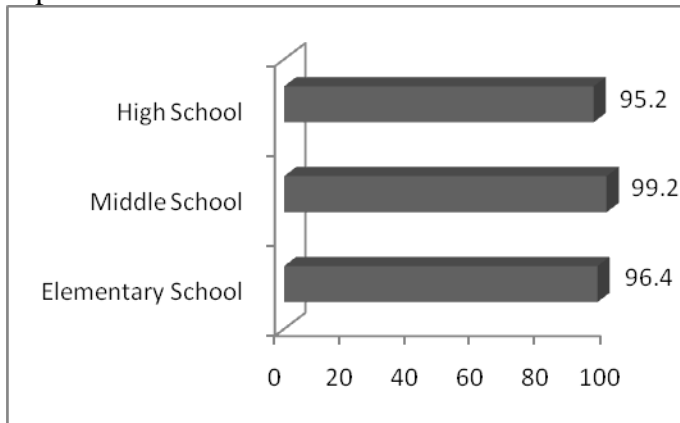
(The numbers shown below may be skewed because they show data from libraries that budget for these items. We can reconcile the discrepancy noted below by stating that these figures are for those libraries that allocate for the specified purchases. (The mode analysis that I did for questions 76-81 show that in many instances, the libraries that do not purchase periodicals, databases, etc. constitute the largest group as opposed to those who report numbers.)



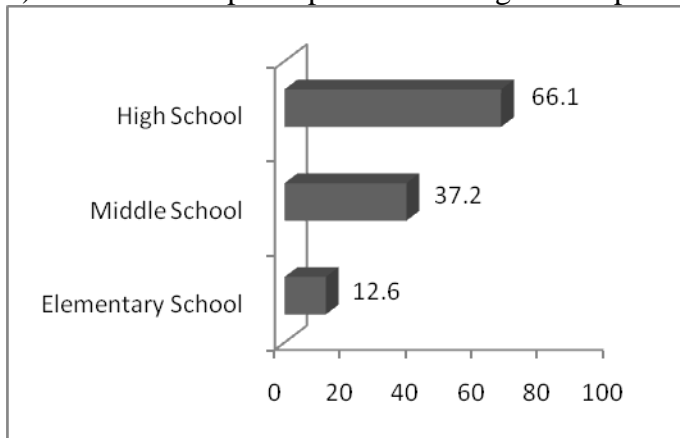
The data show that there is considerable variation across school libraries in terms of what is purchased with school library funds, and this variation also occurs across different school types.

These findings are illustrated in the following comparisons across school types.

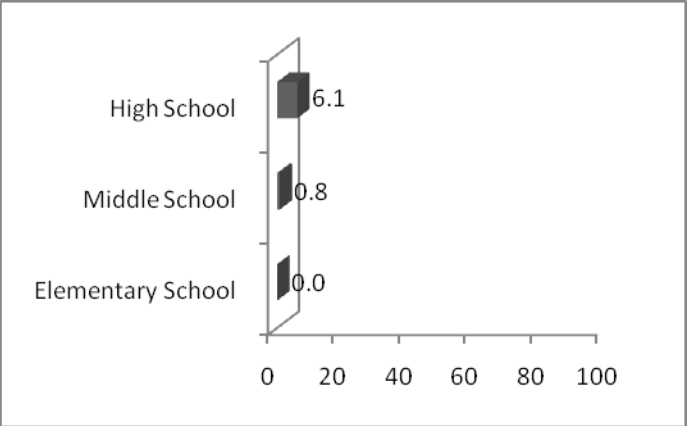
1) Trade and library books - % of participants indicating item is part of budget expenditure



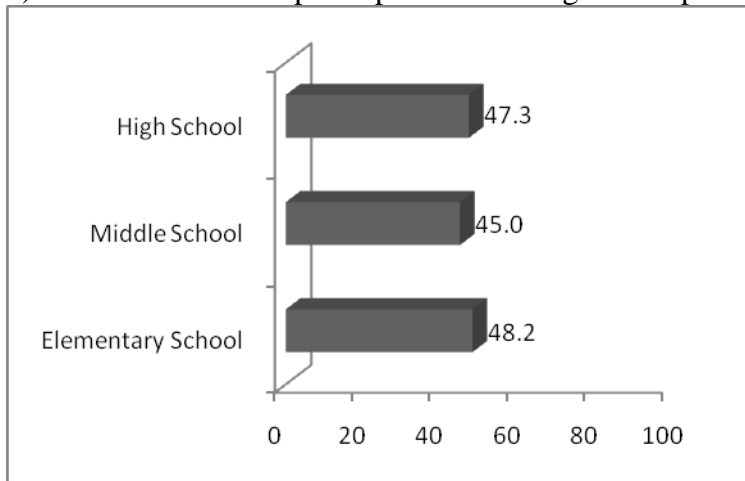
2) ebooks - % of participants indicating item is part of budget expenditure



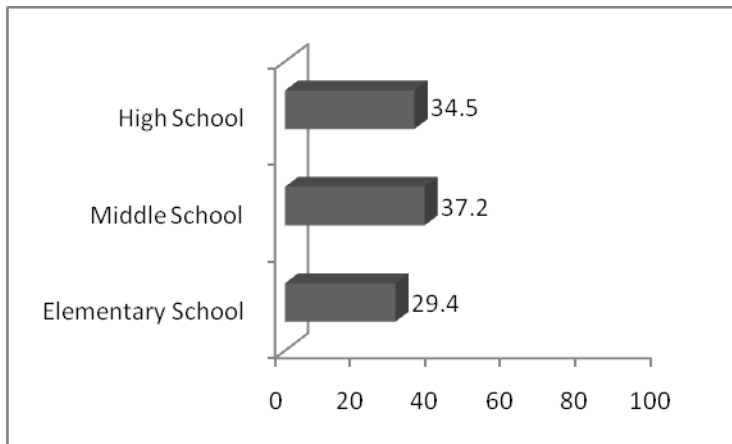
3) Textbooks - % of participants indicating item is part of budget expenditure



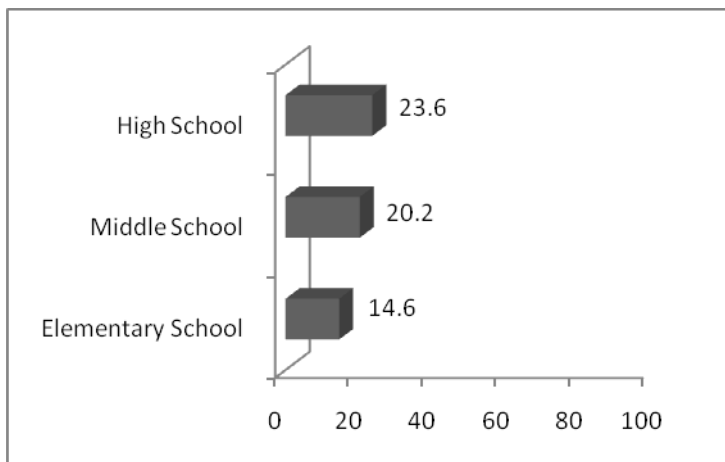
4) AV software - % of participants indicating item is part of budget expenditure



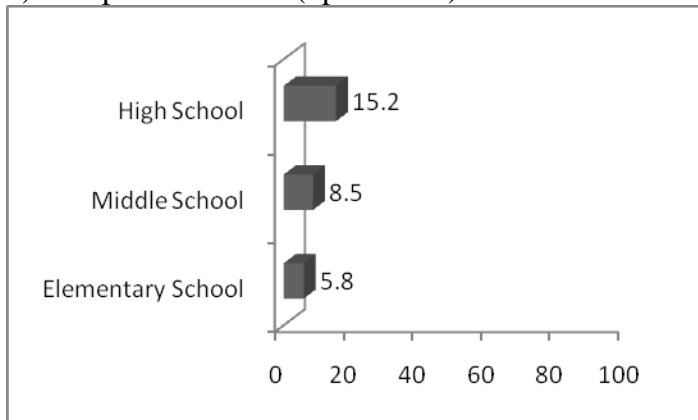
5) AV hardware - % of participants indicating item is part of budget expenditure



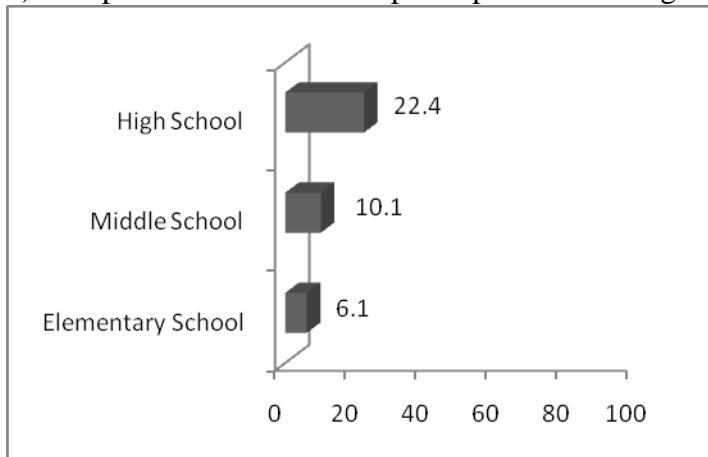
6) Computer software (educational) - % of participants indicating item is part of budget expenditure



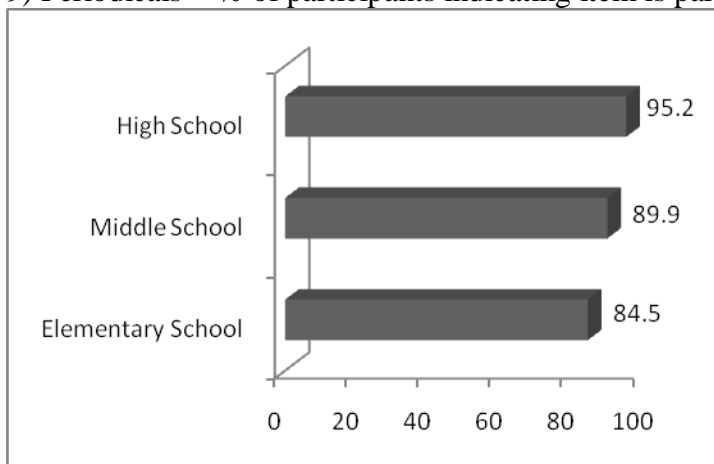
7) Computer software (operational)



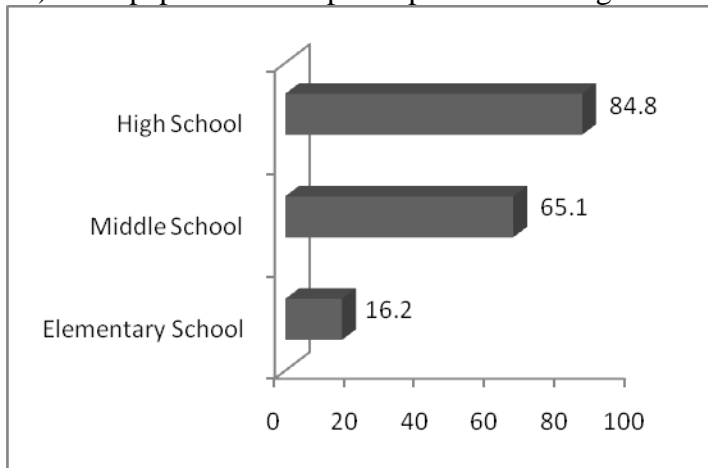
8) Computer hardware - % of participants indicating item is part of budget expenditure



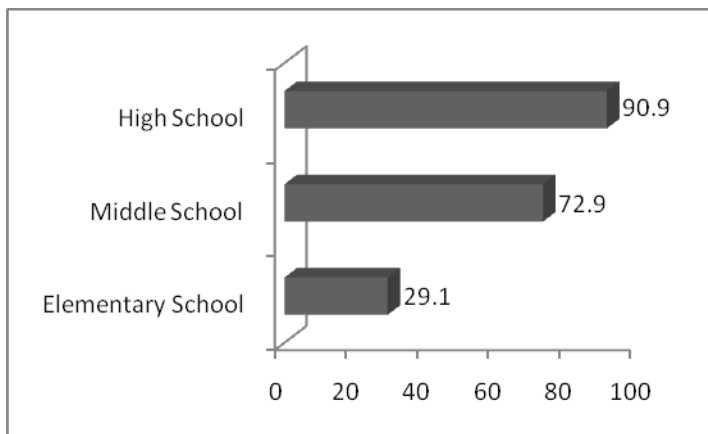
9) Periodicals - % of participants indicating item is part of budget expenditure



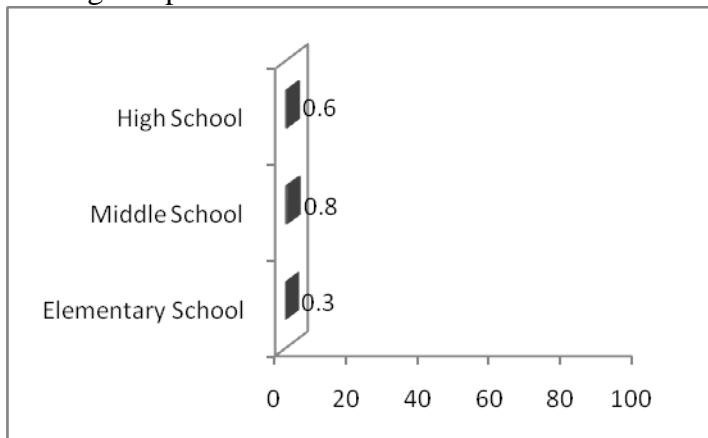
10) Newspapers - - % of participants indicating item is part of budget expenditure



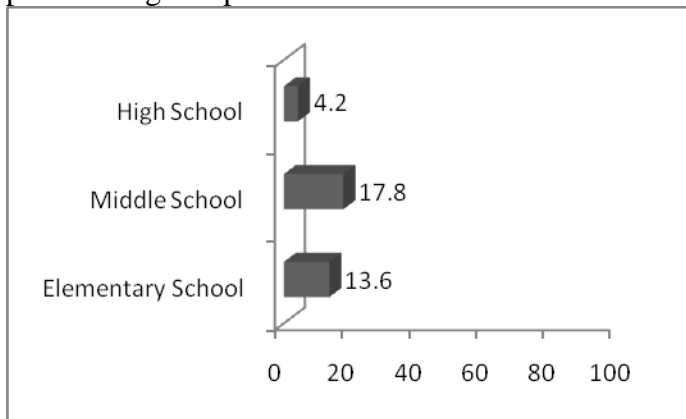
11) Subscription databases - % of participants indicating item is part of budget expenditure



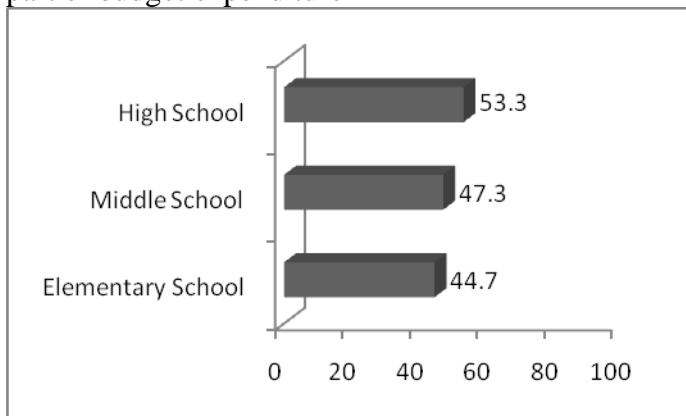
12) Programmed instruction (such as SRE kits) - % of participants indicating item is part of budget expenditure



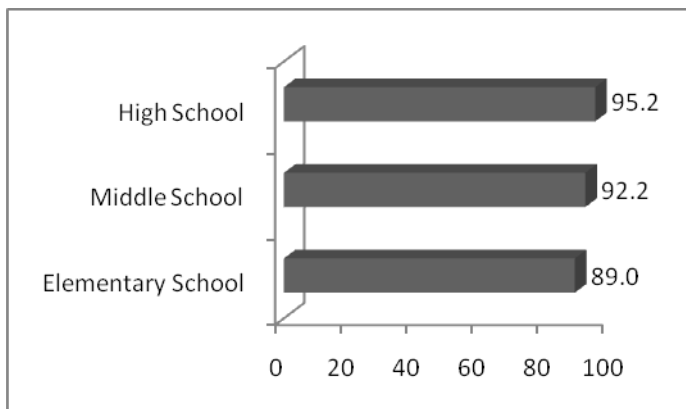
13) Reading programs (such as Accelerated Reader) - % of participants indicating item is part of budget expenditure



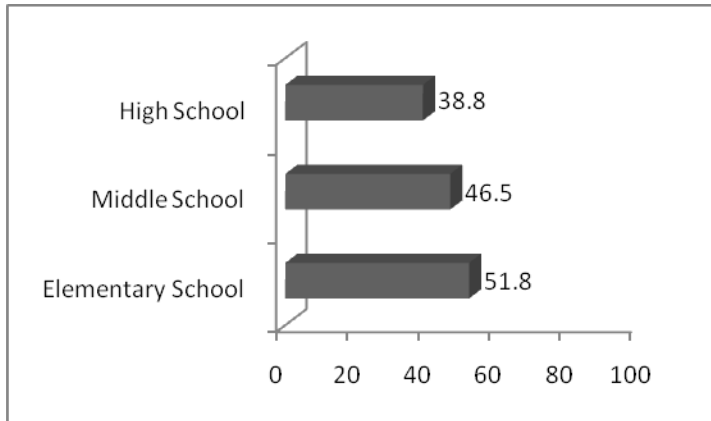
14) Library furnishings (such as shelving, furniture) - % of participants indicating item is part of budget expenditure



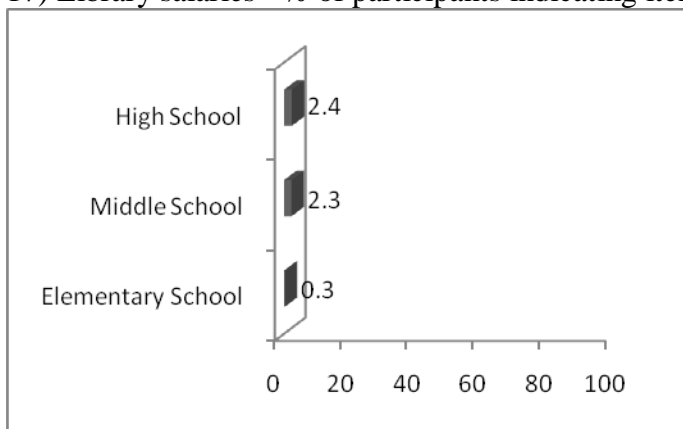
15) Library supplies (such as circulation and processing materials) - % of participants indicating item is part of budget expenditure



16) Prizes, incentives - % of participants indicating item is part of budget expenditure



17) Library salaries - % of participants indicating item is part of budget expenditure



The following analysis examines statistical differences in budget allocations by school type.

| | Elementary School (N=309) | Middle School (N=129) | High School (N=165) | Total (N=603) | χ^2 |
|---------------------------------|------------------------------|--------------------------|------------------------|------------------|---------------|
| Trade and library books | 298 (51.1) | 128 (22.0) | 157 (26.9) | 583 (100.0) | 3.86 |
| ebooks | 39 (19.9) | 48 (24.5) | 109 (55.6) | 196 (100.0) | 141.67* ** |
| Textbooks | 0 (0.0) | 1 (9.1) | 10 (90.9) | 11 (100.0) | 23.07** * |
| AV software | 149 (52.3) | 58 (20.4) | 78 (27.4) | 285 (100.0) | .39 |
| AV hardware | 91 (46.4) | 48 (24.5) | 57 (29.1) | 196 (100.0) | 2.93 |
| Computer software (educational) | 45 (40.9) | 26 (23.6) | 39 (35.5) | 110 (100.0) | 6.34* |
| Computer software (operational) | 18 (33.3) | 11 (20.4) | 25 (46.3) | 54 (100.0) | 11.51** |

| | | | | | |
|---|------------|------------|------------|-------------|---------------|
| Computer hardware | 19 (27.5) | 13 (18.8) | 37 (53.6) | 69 (100.0) | 28.42** * |
| Periodicals | 261 (48.9) | 116 (21.7) | 157 (29.4) | 534 (100.0) | 12.42** |
| Newspapers | 50 (18.2) | 84 (30.7) | 140 (51.1) | 274 (100.0) | 230.20* ** |
| Subscription databases | 90 (26.9) | 94 (28.1) | 150 (44.9) | 334 (100.0) | 186.45* ** |
| Programmed instruction (such as SRE kits) | 1 (33.3) | 1 (33.3) | 1 (33.3) | 3 (100.0) | .43 |
| Reading programs (such as Accelerated Reader) | 42 (58.3) | 23 (31.9) | 7 (9.7) | 72 (100.0) | 14.36** |
| Library furnishings (such as shelving, furniture) | 138 (48.1) | 61 (21.3) | 88 (30.7) | 287 (100.0) | 3.25 |
| Library supplies (such as circulation and processing materials) | 275 (49.9) | 119 (21.6) | 157 (28.5) | 551 (100.0) | 5.33 |
| Prizes, incentives | 160 (56.3) | 60 (21.1) | 64 (22.5) | 284 (100.0) | 7.31* |
| Library salaries | 1 (12.5) | 3 (37.5) | 4 (50.0) | 8 (100.0) | 4.88 |

ebooks

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | 24.22 | .000 | .0167 | * | .29 |
| Elementary vs. high | 143.04 | .000 | .0167 | * | .55 |
| Elementary vs. middle | 34.57 | .000 | .0167 | * | .28 |

Textbooks

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | 5.62 | .018 | .025 | * | .14 |
| Elementary vs. high | 19.13 | .000 | .0167 | * | .20 |
| Elementary vs. middle | 2.40 | .121 | .05 | NS | .07 |

Computer software (educational)

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | .51 | .475 | .05 | NS | .04 |
| Elementary vs. high | 6.07 | .014 | .0167 | * | .11 |
| Elementary vs. middle | 2.10 | .148 | .025 | NS | .07 |

Computer software (operational)

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | 2.96 | .086 | .025 | NS | .10 |
| Elementary vs. high | 11.34 | .001 | .0167 | * | .16 |
| Elementary vs. middle | 1.08 | .300 | .05 | NS | .05 |

Computer hardware

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | 7.82 | .005 | .025 | * | .16 |
| Elementary vs. high | 27.35 | .000 | .0167 | * | .24 |
| Elementary vs. middle | 2.07 | .150 | .05 | NS | .07 |

Periodicals

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | 2.99 | .084 | .025 | NS | .10 |
| Elementary vs. high | 11.79 | .001 | .0167 | * | .16 |
| Elementary vs. middle | 2.26 | .133 | .05 | NS | .07 |

Newspapers

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | 15.54 | .000 | .0167 | * | .23 |
| Elementary vs. high | 211.18 | .000 | .0167 | * | .67 |
| Elementary vs. middle | 102.63 | .000 | .0167 | * | .48 |

Subscription databases

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | 16.70 | .000 | .0167 | * | .24 |
| Elementary vs. high | 164.26 | .000 | .0167 | * | .59 |
| Elementary vs. middle | 71.48 | .000 | .0167 | * | .40 |

Reading programs (such as Accelerated Reader)

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|-----------------------|--------------------|---------|-----------------------------------|--------------|------------|
| Middle vs. high | 14.59 | .000 | .0167 | * | .22 |
| Elementary vs. high | 10.15 | .001 | .025 | * | .15 |
| Elementary vs. middle | 1.29 | .256 | .05 | NS | .05 |

Prizes, incentives

| Comparison | Pearson Chi Square | P-value | Required p-value for significance | Significance | Cramer's V |
|------------|--------------------|---------|-----------------------------------|--------------|------------|
|------------|--------------------|---------|-----------------------------------|--------------|------------|

| | | | | | |
|-----------------------|------|------|-------|----|-----|
| Middle vs. high | 1.77 | .183 | .025 | NS | .08 |
| Elementary vs. high | 7.28 | .007 | .0167 | * | .12 |
| Elementary vs. middle | 1.01 | .315 | .05 | NS | .05 |

Questions 101 and 102 gathered additional data on whether participants were continuing in their position for the next school year. If there were personnel changes, reasons were sought.

689 responses were collected. 94% (648) indicated that they will be returning to their position in the 2009-10 school year. 6% (41) indicated that they will not be returning, with the reasons specified below.

| Reason | Responses | % |
|--|-----------|----|
| Retirement | 9 | 22 |
| Accepted another job offer | 2 | 5 |
| School librarian position eliminated | 23 | 57 |
| Lost job, for any other reason | 3 | 8 |
| Other, such as career change or resuming education | 3 | 8 |

94% (648) indicated that they will be returning to their position in the 2009-10 school year. Elimination of school library position is the predominant reason for 57% of the participants who indicated that they will not be returning to their school in the new school year.

Appendix A

NJASL- CISSL SCHOOL LIBRARY SURVEY ONE COMMON GOAL: STUDENT LEARNING

This document is a worksheet for the survey, and is designed to give you an overview of the questions being asked and to help you prepare, complete and submit the survey quickly and efficiently online. Please note that the online survey is the only way to submit your responses.

The survey instrument is in 7 parts, and will gather information on the following themes:

- Part 1: Contact information and school details
- Part 2: School library staff
- Part 3: Teaching activities in the school library, and professional activities
- Part 4: Reading and related activities in the school library
- Part 5: Administration of the school library
- Part 6: School library access
- Part 7: School library budget

Consent

1. I agree to participate in this study:

☐ Yes ☐ No

☐ If YES, please provide your name and date:

Part 1: Contact Information and School Details

This information is required to track the completion of the survey only. Your contact information and school details will be deleted prior to data analysis.

2. Please enter your email address at work:

In which county is your school?

- 3.

In Questions #4 to 24, the survey will ask you to select the county your school, and to choose the district from a corresponding drop-down list. (The questions #4 to 24 list individual counties).

25. Please enter your school name and complete address here.

26. What is the school's enrollment as of September, 2008?

Number of students:

27 Please indicate your school type (click on more than one if relevant):

| | Elementary School | Middle School | High School |
|-------------|--------------------------|--------------------------|--------------------------|
| School Type | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

28. Your school is:

☐ Public ☐ Private ☐ Charter

29 Which grades are in your school? Please click all that apply.

| | PreK | K | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Grades in school | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

30. What is the phone number for your school?

Part 2: School Library Staff

31. For the person completing this survey, are you a professional librarian?

☐ Yes ☐ No

☐ If NO, please specify your job title:

32. How long have you been in your current position?

- ☐ 1-3 years
☐ 4-10 years
☐ 11-20 years
☐ More than 20 years

33. Were you the SLMS at this school in 2007-2008?

☐ Yes ☐ No

34. Indicate your job title in your school (SLMS #1), and the job title for any other SLMS (SLMS #2 / #3) working in your school:

| | SLMS #1 | SLMS #2 | SLMS #3 |
|---|--------------------------|--------------------------|--------------------------|
| Educational Media Specialist | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| School Library Media Specialist | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| School Librarian | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Associate Educational Media Specialist | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Associate School Library Media Specialist | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Teacher Librarian | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Teacher | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

35. If you have a job title not listed above, please specify here:

36. Indicate your type of certification (SLMS #1), and the type of certification for any other SLMS (SLMS #2 / #3) working in your school:

For each SLMS, check all that apply.

| | SLMS #1 | SLMS #2 | SLMS #3 |
|--|--------------------------|--------------------------|--------------------------|
| State certified School Library Media Specialist (master's level certification, formerly called "Educational Media Specialist" or "School Librarian") | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| State certified Associate School Library Media Specialist (18 credit certification, formerly called "Associate Educational Media Specialist" or "Teacher Librarian") | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Emergency certified School Library Media Specialist | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Emergency certified Associate School Library Media Specialist | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Working toward standard School Library Media Specialist certificate (includes CE, CEAS, Provisional) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Working toward
standard Associate
School Library Media
Specialist certificate
(includes CE, CEAS,
Provisional)

☐
☐
☐

Teacher certified in
another area with no
library preparation

☐
☐
☐

County Substitute

☐
☐
☐

None

☐
☐
☐

- 37 . Indicate the number of years that each of the SLMS working in the school has held the certification marked above:

| | SLMS #1 | SLMS #2 | SLMS #3 |
|--------------------|--------------------------|--------------------------|--------------------------|
| 1-5 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6-10 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11-15 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 16-20 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| More than 20 years | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

38. If there are other types of certifications held by you and any other SLMS that may work in your school, please list below:

- 39 What is the employment status of each SLMS working in your school?

| | SLMS #1 | SLMS #2 | SLMS #3 |
|---|--------------------------|--------------------------|--------------------------|
| Full-time | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Less than full-time, but more than half time | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Half time | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Less than half time | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

40. Please choose one answer to indicate the total number of Full-time Equivalent (FTE) **support staff** employed in the school library. For example, if you have one support staff who is half time (=0.5 FTE), and another support staff who is full-time (=1.0 FTE), then you have a total of 1.5 FTE.

☐

None

☐

1.5 FTE

☐

1.0 FTE

☐

2.5 FTE

☐

2.0 FTE

☐

More than 3.0 FTE

☐

3.0 FTE

☐

0.5 FTE

41. Are you responsible for technology hardware support within the school library?

☐ Always ☐ Sometimes ☐ Never

42. What is the average amount of time per week that you spend on technology hardware support within the school library?

☐ None
☐ Less than 1 hour per week
☐ From 1 to 2 hours per week
☐ Up to 3 hours per week
☐ More than 3 hours per week

43. If you rely on outside technology support, what is the average response time for technology support for your library?

☐ I do not know
☐ One day
☐ 2-3 days
☐ 4-5 days
☐ 6-7 days
☐ More than 7 days

44. What is the average amount of time per week that you spend on technology support outside of the school library?

☐ none
☐ less than one hour per week
☐ from one to two hours per week
☐ up to three hours per week
☐ more than three hours per week

Part 3: Teaching and Professional Activities

45. This question asks you to indicate the approximate number of cooperations, coordinations and instructional collaborations in major curriculum areas that were done during the current school year, 2008-2009. Use the following definitions to guide your decisions:

DEFINITIONS:

Cooperation: The teacher and the school librarian may communicate informally about a short term project, but work independently.

Coordination: The teacher and the school librarian may meet together to discuss a lesson/unit of study. However, the individual goal setting, learning experience design, teaching, and evaluation are done independently.

Instructional Collaboration: The teacher and school librarian jointly set goals, design learning experiences, teach and evaluate a comprehensive unit of study.

Please provide the totals for each category. Insert "0" if you do none.

| | Number of Cooperations | Number of Coordinations | Number of Instructional Collaborations |
|-----------------------|---------------------------|----------------------------|---|
| Approximate Number | <input type="text"/> | <input type="text"/> | <input type="text"/> |

46. List up to three curriculum/subject areas where **cooperations** have taken place:
47. List up to three curriculum/subject areas where **coordinations** have taken place:
48. List up to three curriculum/subject areas where **instructional collaborations** have taken place:
49. Please mark the number of times during the current school year, 2008-2009, you have made formal and/or informal presentations at grade level meetings:
- ☐ There are no grade level meetings in our school.
 - ☐ 0
 - ☐ 1-5
 - ☐ 6-10
 - ☐ More than 10

50. Please mark the number of times during the current school year, 2008-2009, you have made formal and/or informal presentations at team level meetings:

- ☐ There are no team level meetings
- ☐ 0
- ☐ 1-5
- ☐ 6-10
- ☐ More than 10

51. Please mark the number of times during the current school year, 2008-2009, you have made formal and/or informal presentations at department level meetings:

- ☐ There are no department level meetings
- ☐ 0
- ☐ 1-5
- ☐ 6-10
- ☐ More than 10

52. Please mark the number of times you have you have made formal and/or informal presentations at faculty meetings during the current school year, 2008-2009:

- ☐ 0
- ☐ 1-5
- ☐ 6-10
- ☐ More than 10

53. Please mark the number of times you have made formal and/or informal presentations at parent/community organization meetings during the current school year, 2008-2009:

- ☐ 0
- ☐ 1-5
- ☐ 6-10
- ☐ More than 10

54. Please mark the number of times you have provided formal and/or informal professional development on information literacy during the current school year, 2008-2009:

- ☐ 0
- ☐ 1-5
- ☐ 6-10
- ☐ More than 10

55. Please mark the number of times you have provided formal and/or informal professional development on the use of information technology during the current school year, 2008-2009:

- ☐ 0
- ☐ 1-5
- ☐ 6-10
- ☐ More than 10

56. Please mark the number of times you have met with the principal during the current 2008-2009 school year:

- ☐ 0
- ☐ 1-5
- ☐ 6-10
- ☐ More than 10

57. Please mark the number of times you have met with any curriculum supervisor during the current 2008-2009 school year:

- ☐ 0
- ☐ 1-5
- ☐ 6-10
- ☐ More than 10

58. Please mark the number of times you have met with the superintendent during the current 2008-2009 school year:

- ☐ 0
- ☐ 1-5
- ☐ 6-10
- ☐ More than 10

59. Indicate your participation in the following district and school committees. Click the appropriate box to indicate if you participate in these committees. If the district and/or school does not have the committee, click N/A (Not Applicable)

| | District Yes | District No | District N/A | School Yes | School No | School N/A |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Any Curriculum Committee | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Technology | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Professional Development | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| School Improvement | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Other | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

60. List the activities you have undertaken during 2008-2009 for your own professional development / education / learning / (for example, attended the NJASL annual conference:

61. List the professional associations in which you have current membership/affiliation:

62. This question focuses on the information literacy instruction that SLMSs have provided **FOR STUDENTS**. The following list is based on the *AASL Information Power Information Literacy Standards* and the recently released *Standards for the 21st Century Learner*. Check those items that you have explicitly taught and/or used in classes with students:

| | Check all that apply. |
|---|--------------------------|
| Knowing about the school library | <input type="checkbox"/> |
| Accessing information efficiently and effectively | <input type="checkbox"/> |
| Strategies for finding, evaluating, and selecting appropriate sources to answer questions | <input type="checkbox"/> |
| Knowing how to use the different sources and formats of information | <input type="checkbox"/> |
| Evaluating information for its relevance to the task | <input type="checkbox"/> |
| Identifying inaccurate and misleading information | <input type="checkbox"/> |
| Identifying main ideas in information sources (analyzing information) | <input type="checkbox"/> |

| | |
|--|--------------------------|
| Integrating new information into one's own knowledge | <input type="checkbox"/> |
| Producing and communicating information and ideas in appropriate formats | <input type="checkbox"/> |
| Applying new knowledge and skills to different contexts | <input type="checkbox"/> |
| Understand the different strategies in doing effective research | <input type="checkbox"/> |
| Forming questions based on information needs | <input type="checkbox"/> |
| Knowing about different sources and formats of information | <input type="checkbox"/> |
| Evaluating information for quality | <input type="checkbox"/> |
| Distinguishing among fact, point of view, and opinion | <input type="checkbox"/> |
| Selecting information appropriate to the problem or question at hand | <input type="checkbox"/> |
| Sorting and organizing ideas (synthesizing information) | <input type="checkbox"/> |
| Developing critical thinking and problem solving skills | <input type="checkbox"/> |
| Seeking information for personal and recreational pursuits | <input type="checkbox"/> |
| Deriving meaning from information presented in a variety of formats | <input type="checkbox"/> |
| Developing creative products in a variety of formats | <input type="checkbox"/> |
| Ethical use of information (plagiarism, citation, bibliography) | <input type="checkbox"/> |
| Sharing knowledge and information with others | <input type="checkbox"/> |
| Accommodating differentiated learning styles and abilities. | <input type="checkbox"/> |
| Strategies for revising, improving, and updating existing knowledge | <input type="checkbox"/> |
| Using information technology responsibly | <input type="checkbox"/> |
| Working in teams on research activities | <input type="checkbox"/> |

63. This question focuses on the professional development provided by SLMSs **FOR STUDENTS** specifically in relation to the use of information technology. Check all that apply.

Please check all that apply

| | |
|---|--------------------------|
| Searching strategies for the World Wide Web | <input type="checkbox"/> |
| Evaluating the quality of websites | <input type="checkbox"/> |

| | |
|--|--------------------------|
| Using software applications, such as Power Point or Excel, to do school work | <input type="checkbox"/> |
| Using electronic searching in subscription databases | <input type="checkbox"/> |
| Using library catalogs | <input type="checkbox"/> |
| Using e-books | <input type="checkbox"/> |
| Using the Internet and other electronic sources ethically | <input type="checkbox"/> |
| Using Web 2.0 tools such as wikis, blogs, podcasts, or twitter | <input type="checkbox"/> |
| If you have taught other skills not listed above, please specify: | |

64. This question focuses on the professional development provided by SLMSs **FOR FACULTY** specifically in relation to the use of information technology. Check all that apply.

Please check all that apply

| | |
|--|--------------------------|
| Searching strategies for the World Wide Web | <input type="checkbox"/> |
| Evaluating the quality of websites | <input type="checkbox"/> |
| Using software applications, such as Power Point or Excel, to do school work | <input type="checkbox"/> |
| Using electronic searching and subscription databases | <input type="checkbox"/> |
| Using library catalogs | <input type="checkbox"/> |
| Using e-books | <input type="checkbox"/> |
| Using the Internet and other electronic sources ethically | <input type="checkbox"/> |
| Using Web 2.0 tools, such as wikis, blogs, podcasts, or twitter | <input type="checkbox"/> |

65. If you have provided professional development for faculty in relation to the use of information technology not listed above, please specify:

66. Describe student learning outcomes that result from your school library program. These may include: meeting curriculum standards; mastery of information, media, and technology skills;

mastery of inquiry or research processes; test score achievement; changes in attitudes, interests, or motivation.

Part 4: Reading and Related Activities

67. Indicate the focus of reading/writing initiatives that you have undertaken during the current 2008-2009 school year. Check all that apply:

| | Check all that apply |
|--|--------------------------|
| Book talks to promote literature for recreational reading | <input type="checkbox"/> |
| Book talks to promote curriculum related reading | <input type="checkbox"/> |
| Use databases and/or websites to encourage reading | <input type="checkbox"/> |
| Author visit | <input type="checkbox"/> |
| Book clubs or literature discussion groups, where students share ideas and discuss their reading | <input type="checkbox"/> |
| Encouraging any voluntary reading activities, such as DEAR, inside of school | <input type="checkbox"/> |
| Encouraging any free voluntary reading outside of school | <input type="checkbox"/> |
| Literature displays | <input type="checkbox"/> |
| Creative writing activities related to literature | <input type="checkbox"/> |
| Readers' theater | <input type="checkbox"/> |
| Storytelling | <input type="checkbox"/> |
| Summer reading programs | <input type="checkbox"/> |
| Music and rhymes | <input type="checkbox"/> |
| Electronic gaming | <input type="checkbox"/> |
| Literature-related programs for students with special needs | <input type="checkbox"/> |
| Collaboration with public libraries in reading or writing programs | <input type="checkbox"/> |
| Self-help information such as brochures, web links, or book lists | <input type="checkbox"/> |
| Books or information to help students cope with challenges or sensitive topics | <input type="checkbox"/> |
| Any reading incentive program within the school | <input type="checkbox"/> |
| Integrating reading for understanding strategies in units of inquiry | <input type="checkbox"/> |
| Interpretation of print and digital images | <input type="checkbox"/> |
| Production of print and digital images | <input type="checkbox"/> |

68. Please provide any additional information you wish for any of the reading/writing activities above:

69. If you could change anything in your school, what would be your top three (3) priorities? Why?

Part 5: Administration of the School Library

70. In the next set of questions, select the box that best describes how often you engaged in the following activities:

| | Daily | Weekly | Monthly | Twice Yearly | Yearly | Never | Not available |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Administrative tasks | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Clerical tasks | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Supervision of paraprofessional/student/volunteer aides | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Maintenance of equipment, such as computers or projectors | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Other assigned duties, such as bus duty, cafeteria duty, or other duties | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

71. In addition to the above, please list below any other activities you have undertaken:

72. **The next few questions ask you to describe your resource collection.**

Do you use Follett TitleWise Collection Analysis as the basis for school library collection analysis? If **NO**, please go to question 74.

☐ Yes ☐ No

73. If you answered **YES** above, do you give permission for CISSL to use your Follett TitleWise Collection Analysis data to describe your resource collection? (You may need to get this permission from your school administration or district personnel). This data will be kept confidential.

☐ Yes ☐ No

74. **Only answer questions #74 to #85 if you do not provide access to Follett TitleWise Collection Analysis data, or the information is not available in your Follett TitleWise Collection Analysis data, for example, magazines and databases.**

Approximately how many materials were in your library collection during the 2008-2009 school year?

Materials:

75. Approximately how many of these materials were books?

How many books:

76. Approximately how many materials were ADDED to your library collection during the 2008-2009 school year?

New materials:

77. Approximately how many of these ADDED materials in 2008-09 were books?

New books:

78. What is the total number of your school library magazine (print) subscriptions? (Exclude any online subscriptions)

Total magazine
subscriptions:

79. What is the total number of your school library newspaper (print) subscriptions? (Exclude any online subscriptions)

Total newspaper
subscriptions:

80. How many electronic databases provided by the State Library do you subscribe to?

How many State
Library e-databases:

81. Other subscription databases?

Other subscription
databases:

82. Approximately how many DVDs were in your library collection during the 2008-2009 school year?

How many DVDs:

83. Approximately how many CDs were in your library collection during the 2008-2009 school year?

How many CDs:

84. Approximately how many audio cassettes were in your library collection during the 2008-2009 school year?

How many audio
cassettes:

85. Approximately how many video cassettes were in your library collection during the 2008-2009 school year?

How many video cassettes:

86. If you have any other material, please specify the type, and give approximate numbers.

87. Approximately how many materials did your library obtain through interlibrary loan during the 2008-2009 school year?

| | 0 | 1-10 | 11-20 | 21-30 | 31-40 | 41-50 | More than 50 |
|---------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| How many materials through ILL: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

88. Does your school library belong to a regional library cooperative?

| | Does not belong | Highlands | Infolink | Central | South Jersey |
|----------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Regional Cooperative | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

89. What information technology is available to your students through the library? Check all that apply:

Click all that apply

| | |
|--|--------------------------|
| Internet access | <input type="checkbox"/> |
| School library web page | <input type="checkbox"/> |
| Word processing software e.g., Word | <input type="checkbox"/> |
| Presentation software e.g., PowerPoint | <input type="checkbox"/> |
| Spreadsheet software e.g., Excel | <input type="checkbox"/> |
| Graphic organizing software e.g., Kidspiration | <input type="checkbox"/> |
| Web design software e.g., Dreamweaver | <input type="checkbox"/> |
| Email access | <input type="checkbox"/> |
| Wireless access | <input type="checkbox"/> |
| Podcasting software | <input type="checkbox"/> |

90. If your library has other information technology available to the students, please list it below.

91. Do you have an automated circulation system? If NO, go to #94.

Yes

No

Automated Circulation System

☐☐

92. Which automated catalog is available to your students?

No automated
catalog is
available

Follett

Mandarin

Destiny

Alexandria

Sagebrush
(Winnebago)

Automated catalog:

☐☐☐☐☐☐

93. Is your school library catalog searchable via the Internet?

Yes

No

Catalog searchable via Internet?

☐☐

94. How many computers are available for student use in your library?

Number of computers:

95. How many of your school library computers are connected to the Internet?

Computers with
Internet connection:

96. Check which of the following equipment is available in your library:

☐

Television

☐

VCR player

☐

DVD player

☐

Overhead Projector

☐

Visualizer/Document camera

☐

LCD Panel

☐

Video Data Projector

☐

Smartboard

- ☐ Laminator
- ☐ Printer
- ☐ Scanner
- ☐ Digital Camera
- ☐ Video Camera
- ☐ Copier
- ☐ Whiteboard
- ☐ Ipod / mp3 player
- ☐ Electronic book devices e.g., Kindle
- ☐ Adaptive technologies for special needs students e.g., Braille technology devices

Part 6: School library access

97. Please click one of the following: Our school library operates with . . .

- ☐ a fixed schedule (classes at regularly scheduled times)
- ☐ a modified fixed schedule (some open access in addition to scheduled access)
- ☐ a flexible schedule (open access throughout the school day)
- ☐ open access including extended hours outside the school day
- ☐ Other, please specify

98. Is your school library part of a shared facility with a public library?

- ☐ Yes ☐ No

Part 7: School Library Budget

99. What was the total 2008-2009 school year budget allocation from district and/or building funds for your school library materials?

100. How did this allocation compare to district and/or building funds for your school library materials for the 2007-2008 school year?

- ☐ More
- ☐ Equal
- ☐ Less

101. Check the following items that are part of your library budget allocation:

- ☐ Trade and library books
- ☐ ebooks
- ☐ Textbooks
- ☐ AV software
- ☐ AV hardware
- ☐ Computer software (educational)
- ☐ Computer software (operational)
- ☐ Computer hardware
- ☐ Periodicals
- ☐ Newspapers
- ☐ Subscription databases
- ☐ Programmed instruction (such as SRE kits)
- ☐ Reading programs (such as Accelerated Reader)
- ☐ Library furnishings (such as shelving, furniture)
- ☐ Library supplies (such as circulation and processing materials)
- ☐ Prizes, incentives
- ☐ Library salaries
- ☐ Other, please specify

Some Additional Information

102. Will you be returning to this position for the 2009-2010 school year?

☐ Yes

☐ No

103. If you answered NO above, please check a reason below:

☐ Retirement

☐ Accepted another job offer

☐ School librarian position eliminated

☐ Lost job for any other reason

☐ Other, such as career change, or resuming education:

104. Please provide any additional information that you would like:

References

- American Association of School Librarians (2007). Standards for the 21st-Century Learner. Available at:
<http://www.ala.org/ala/mgrps/divs/aasl/guidelinesandstandards/learningstandards/standards.cfm>
- Gaver, M. (1963). Effectiveness of centralized library service in elementary schools. New Brunswick, N.J: Rutgers University Press.
- Gaver, M. (1958). "Every child needs a school library." Opening Address at School Libraries, Information Literacy. Chicago, IL: American Library Association.
- Guthrie, J.T., Hoa, L.W., Wigfield, A., Tonks, S.M., Mumenick, N.M., & Littles, E. (2007). Reading motivation and reading comprehension growth in the later elementary years. *Contemporary Educational Psychology*, 32, 282–313
- Kuhlthau, C. C., L. K. Maniotes, and A. K. Caspari. (2007). Guided inquiry: Learning in the 21st century. Westport, CT: Libraries Unlimited.
- Rowlands, I. & Nicholas, D.. (2008). Information behaviour of the research of the future. A CIBER briefing paper. Commissioned by British Library & Joint Information Systems Committee. Centre for Information Behaviour & the Evaluation of Research (CIBER), University College of London (UCL), 11 January, Retrieved 2 February 2008,
<http://www.bl.uk/news/pdf/googlegen.pdf>
- Scholastic. (2008). School libraries work! Research foundation paper. New York: Scholastic Library Publishing. Available at
http://www2.scholastic.com/content/collateral_resources/pdf/s/slw3_2008.pdf
- Todd, R. J. (2006). "From information to knowledge: Charting and measuring changes in students' knowledge of a curriculum topic." *Information Research*, 11(4). Available at:
<http://www.informationr.net/ir/11-4/paper264.html>
- Todd, R.. J. & Kuhlthau, C. (2005a). Student learning through Ohio school libraries, Part 1: How effective school libraries help students. *School Libraries Worldwide*, 11(1), 63-88.
- Todd, R. J. & Kuhlthau, C. (2005). Student learning through Ohio school libraries, Part 2: Faculty perceptions of effective school libraries. *School Libraries Worldwide*, 11(1), 89-110.