THE MASSACHUSETTS SCHOOL LIBRARY STUDY:

EQUITY AND ACCESS FOR STUDENTS IN THE COMMONWEALTH

REPORT OF FINDINGS AND RECOMMENDATIONS

OF THE SPECIAL COMMISSION ON SCHOOL LIBRARY SERVICES
IN MASSACHUSETTS

May 2, 2018

Dr. Carol A. Gordon, EdD
Dr. Robin Cicchetti, EdD
Executive Summary of the Research Report

The Massachusetts Study: *The Massachusetts School Library Study: Equity and Access for Students in the Commonwealth* aims to collect data on the status of school library facilities, resources, staffing, instruction, and information technology through the lens of access. This means that data were analyzed to determine the status of equitable access to school library resources and services in urban, suburban, and rural schools.

**The Charge.** The Commonwealth of Massachusetts Senate established the Special Commission on School Library Services in July 2013 (Bill S.1906). The charge of the Commission was to conduct a study on the status of school library programs in the Commonwealth and to make recommendations based on the findings. To accomplish this charge the Commission established *The Massachusetts School Library Study: Equity and Access for Students in the Commonwealth.*

The Commission identified 11 data points for investigation that served as indicators to determine the status of school library programs. These data points served as a baseline to determine equitable access to school library resources and services for school communities, i.e., students, educators, and parents.

Indicators include:

(i.) How school library programs can be further developed to ensure that the programs reflect changing technology and best serve the students;

(ii.) How many schools in each district have a school library and a licensed school librarian and in how many schools is the librarian a full-time position;

(iii.) The ratio of students per licensed school librarian;

(iv.) What other library support staff work in the school library program;

(v.) How many employees are scheduled to work in school libraries;

(vi.) How many hours school libraries are open each week for students and faculty to use the library;

(vii.) How many hours each week school librarians provide direct library-related instruction to students;

(viii.) The number of computers in school libraries for students to access;

(ix.) The size and age of the collection in each school library;

(x.) The extent to which electronic and digital materials are available for students to access;
Current funding for school library materials and services per student.

**Research Methods.** Data were obtained through an online survey that was designed, piloted, and uploaded to the internet in collaboration with the Massachusetts Department of Elementary and Secondary Education (DESE). A letter of support from the Commissioner of Education encouraged principals to support the study. The study was supported by the Center for International Scholarship in School Libraries [CISSL] at Rutgers, The State University of New Jersey through the provision of Institutional Review Board certification for Dr. Carol Gordon, access to state-of-the-art statistical analysis software, and the services of a doctoral candidate.

An online survey gathered quantitative and qualitative data on the dimensions outlined in the Commission charge. Participating school librarians self-identified as either serving suburban, urban, or rural populations. There were three types of data generated by the survey. The study posed questions that collected baseline data on the status of individual school libraries with regard to quantitative indicators of library staffing, print and digital information resources, information technology, funding and subsidized resources, and instruction and help. The survey also posed questions about access to the school library facility, staffing, and resources that indicate equitable provision of school library resources and services. These data were analyzed in three ways:

1) Descriptive statistics, such as percentages, displayed in charts and graphs measured the status of individual school library programs by aggregating these data to establish a baseline for the key indicators of library resources and services.

2) Statistical analyses of data, such as ANOVA and Pearson correlation tests, that measured access to school library resources and services to determine levels of significance of the differences among school libraries located in urban, rural, and suburban school districts. These statistical analyses determined whether there was equitable access to the eleven dimensions in the Legislature’s charge across school districts, i.e., urban, rural, and suburban.

3) Qualitative verbal data from survey respondents that described the barriers and enablers to adequate and equitable delivery of school library resources and services. These data also indicated how school library programs can be further developed to ensure that the programs reflect changing technology.

**The Sample.** The sample was self-selected from 351 districts in Massachusetts. Only one survey per school library was accepted. Survey responses were submitted by a total of 722 school librarians indicating at least that many schools currently have library programs. After incomplete surveys were removed, the total number of responders was 521. The researchers have constructed an argument that 521 viable responses to the survey represents at least 22% of the greater population of Massachusetts school libraries, which established the validity and reliability of statistical analysis and findings. 63.9% of respondents reported that they work in school libraries in suburban districts; 24.8% are in urban areas;
and 10.9% are in rural schools. This sample is representative of the general populations in these three district types.

**Summary of Findings.** This section presents the major findings of the study organized by the Legislative charge, or 11 dimensions of the study as shown in the figures below. The findings discussed in this Executive Summary describe the data that address the 11 categories in the Legislative’s charge with references to the figure in the main research report that provide more detail, interpretation, and discussion which builds the foundation for recommendations and long range plans.

**Access to library staff.** Access to library staff is critical to delivering information literacy education to students in the context of inquiry learning through the use of information and technology. These skills include information literacy or the organization, retrieval, and use to transform information to new knowledge in the academic content areas, digital literacy, or the responsible and useful technical knowledge to gain knowledge and create content, and critical thinking/problem-solving.

**Table 1. Summary of Findings About Access to a Licensed School Librarian and Staff**

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<th>Legislative Charge</th>
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<td>(ii) How many schools in each district have a school library and licensed school librarian and in how many schools is the librarian a full-time position.</td>
<td>Fig. 6. Licensed and Non-Licensed School Librarian Positions shows that 80.4% of schools have licensed school librarians who hold professional or initial licenses. 12% of schools have non-licensed personnel in library positions and 11.7% have paraprofessionals in library positions, which indicates that almost one-quarter [23.7%] of school libraries do not have licensed personnel in library positions.</td>
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<td>(iii) The ratio of students per licensed school librarian.</td>
<td>Fig. 7. Comparison of School Librarians’ Certification by District Types. There is no statistical difference with regard to district type, urban, rural, suburban, of licensed and non-licensed library personnel. This means that 20%, or one in five school libraries, across district types, do not have professionally licensed school librarians.</td>
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<td>(iv.) What other library support staff work in the school library program;</td>
<td>Fig. 8. Ratio of Students to Library Staff. A strong trend in the data shows there is one school librarian per school regardless of school populations that range from 500 to 1,900 students.</td>
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<td>Fig. 9. Total FTE Support Staff shows 61% of school libraries have no full-time equivalent support staff. The largest number of full time support employees who work in the school library is 1.0</td>
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(v.) How many employees are scheduled to work in school libraries; [one full-time equivalent] staff member in only 17.6% of school libraries.

Fig. 10. Comparison of FTE [Full Time Equivalent] Support Staff by District Types shows that urban and rural school libraries have significantly fewer FTE support staff than suburban school libraries.

Note: The data designated as figures in this summary refer to the figures found in the full report.

Access to the School Library

Access to the school library is critical to student interaction with information resources and digital technology in an independent learning environment with the instruction, intervention, and help needed to master information and technology skills.

A significant finding is that most urban school libraries are closed more days per year than suburban school libraries and that when there are closures they are most often attributed to the library being used for standardized testing (fig. 21, 22). Overall, children in urban schools have significantly less access to their school libraries than students in suburban schools. Significantly fewer urban and rural school libraries have flexible scheduling (open to students throughout the day) than suburban school libraries. After-school access is common, as is access during lunch, but most often provided by the school librarian without compensation. These findings are corroborated by the qualitative data (fig. 102) that indicates scheduling barriers due to school library closures for testing, other school duties, coverage of multiple school sites, and lack of support staff to keep the school library open when the librarian is unable to do so because of competing professional demands.

Table 2: Findings About Access to the School Library and the School Librarian

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Fig. 16. Weekly Access to School Library. The range of hours of access on a weekly basis ranges from more than 50 hours [2.5%] to less than 5 hours [1.9%]. These variations are tied to size of student population and grade levels. More than half of the libraries [53.2%] are open 36 to 50 hours per week. About one-third [34.9%] are open 21 to 31 hours per week. When combined, these two sets of data show that 88.1% of school libraries are open 21 to 50 hours per week. One librarian needs 25 hours per week of contact time dedicated to instruction to see 625 students. This means that in schools with populations of more than 625 students it is not possible for those students to have, on average, one week of library instruction.

Fig. 17. Comparison of Hours Per Week School Libraries are Open. An ANOVA test determined there is no statistically significant difference among urban, rural, and suburban school libraries with regard to the number of hours school libraries are open per week. This means that regardless of district type, school libraries are not open an adequate number of hours per week for one librarian to teach all students on a consistent basis.

Fig. 18. Access to Library Before and After School Hours
Students have additional access for extra curricular activities held in the library before school [10.8%] and after school [29.4%]. Librarians offer access to the library for extra curricular activities three times more often after than before school hours, with over 40% of librarians providing a venue for before and after school extracurricular activities. Only 2.7% of school libraries offer weekend service hours.

Fig. 19. Types of Library Services Outside of School Hours
Respondents selected the library services they offered outside of regular school hours. These services included book circulation, printing, readers’ advisory and research support, technical support, and access to resources. Fig. 19 shows the types of library services offered outside of school hours, including before and after school and on weekends. These services are categorized as teaching and non-teaching services and school activities. Teaching services include personalized help, in the library and electronically, for students, professional development for faculty, and classes for parents. School activities most often include programs, meetings, and events.
Student access to instruction varies with grade levels and how use of the school library is scheduled. Fixed schedules, usually found in elementary grades, provide one instructional hour [which varies from 30-50 minutes] per class for each grade level. During this time school librarians supervise and teach classes in the absence of the classroom teacher. Flexible schedules, or open access, are usually used in high schools and in some middle schools. The teacher schedules lessons or units of study relevant to school curriculum and often collaborates with the school librarian to plan and/or teach the lesson or lessons. This allows for information and technology skills to be taught in the context of state standards. Hybrid scheduling models combine fixed and flexible schedules.

**Fig 14. School Library Schedules.** 28% of respondents have a fixed schedule. 12.1% have a modified fixed schedule. This means 41.9% of schools offer a library program based on fixed scheduling in which students visit the library one time per week. 24% of respondents reported that their library schedules are flexible with some open access. Librarians who provide open access are more likely to work in library environments that have flexible rather than fixed scheduling.  

**Fig 15. Comparison of Flexible Schedules by District Types.** There were significant differences in flexible scheduling among school libraries in urban, rural and suburban districts. Since 41.9% of school libraries have fixed scheduling, almost half of students across district types may not benefit from sustained instructional time that develops reading comprehension, critical thinking and information technology skills. Given that these types of scheduling are a function of traditional school schedules, school districts across the Commonwealth struggle with the issue of time on task, especially on the elementary level.

**Fig. 20. Library Closings During School Hours.** Respondents provided the number of days during the past school year that their libraries were closed, for any reason, to students and faculty. 20.5% of respondents reported they were closed 0-1 day a year. 45.5% said they were closed 2-10 days per year and over 31.7% were closed 11-21 days per year. Over 11.9% were closed more than 22 days.

**Fig. 21. Comparison of Days Per Year School Libraries are Closed:** Analysis determined that urban and rural school libraries are closed significantly more days per year compared with school libraries in suburban schools.
Fig. 22. Reasons for Lack of Access to School Libraries: Over 63.7% of respondents cited standardized testing as the most common reason for library closings during school time. This finding suggests that urban schools may spend more time on preparing students for standardized tests and that the library may be the venue for “practice testing.” Further study is needed on this equity issue.

Table 3: How Access to a School Library can be Improved to Develop School Library Programs?

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<td>i) How school library programs can be further developed to ensure that the programs reflect changing technology and best serve the students with regard to access to the school library?</td>
<td>Respondents suggested how to expand school library hours. “Because I stay late to get administrative work done, I end up providing services to students and to staff. It’s not required, but somewhat expected.” “I stay late 2-4 days a week and provide services as [the need] arises, but the library is not required to be open. However, I cannot get all my instructional work done if I don’t stay late.” “I also support student research by email seven days a week.” “I try to stay available through technology on the evenings and weekends to provide support.” A school librarian explained why she offers before and after school hours: “Students do not have ‘free periods’ in their schedules so their access is limited to before and after school hours, and whether or not their teachers bring/send them to the library.” Another respondent observed, “The library is open to classes all the time but to individual students only half the time.”</td>
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Access to information resources

Access to information resources is basic to hands-on, personalized learning that aims to develop self-sufficient, confident information and technology users. The school library, where librarians and teachers collaborate, provides a unique learning environment to develop complex skills.

There are statistically significant inequities in access to library resources. More suburban school libraries have school library websites when compared to urban and rural schools. Additionally, urban and rural school libraries have significantly fewer print materials, e-book subscriptions, and alternative reading material (non-book materials such as magazines, graphic novels, and websites) in their collections than suburban school libraries. Significantly fewer urban and rural school libraries utilize interlibrary loan through the public library system as a way to supplement their collections. These findings are corroborated by the qualitative data (fig. 103) that indicates there is pressure for teachers to cover content-based curriculum and test preparation, squeezing out time during the school calendar for information literacy skills instruction and time for interest-based “free reading.” Sub-sets of students, included but not limited to, special education, ELL, and METCO, and other sub-sets that have additional scheduling demands or would benefit from targeted outreach, experience a greater negative impact from the lack of access to information resources and instruction.

Table 4: Findings About Access to the Library Collection and Information Resources

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Fig. 23. Automated Circulation system in School Libraries. 93.28% of respondents have automated circulation systems in their libraries to access print and digital collections.

Fig. 24. Comparison of School Libraries with Automated Circulations Systems by District Type. A Chi-square analysis that found no significant difference among urban, rural, and suburban school libraries with regard to automated circulation systems.

Fig. 25. Electronic, Remote Access to School Library Catalogs. 88.9% of respondents reported their school communities have electronic access to print and digital resources and help through the library website.

Fig. 26. Comparison of School Libraries' Access to Library Catalogs by District Types. Findings show that despite the high percentage of school libraries with electronic, remote access to library catalogs, urban and rural school libraries have significantly less remote access to their library catalogs than suburban school libraries. Most suburban school library users can access the library catalog and library resources 24/7 while most urban and rural library users cannot.

Fig. 27. Cataloged Print Materials. 47.1% of school libraries have 10,001 to 20,000 books and almost one-third [30.9% of libraries] report between 5,001 and 10,000 books. Combining these numbers we can determine that 78% of school libraries have catalogued print collections that range from 5,000 to 20,000 items.

Fig. 28. Comparison of Print Collections by District Types.

Fig. 29. Added Print Materials to School Library Collections. 73.3% of respondents added 400 materials or fewer print materials to their collections for one school year. This chart shows an uneven distribution of added materials to the library collections.

Fig. 30. Comparison of School Libraries’ Added Materials. Shows that an Anova test showed no significant difference in the number of print materials added to school libraries in urban, rural, and suburban districts. Given the overall low rate of added materials for replacement and new books, this finding is interpreted as the lack of significant difference shows a low acquisition rate across school libraries regardless of district type.
Fig. 34. Comparison of Alternative Reading Materials by District Types. An ANOVA test showed a statistically significant difference between urban and rural districts with regard to the number of alternative reading materials [newspapers, low level reading materials, magazines, graphic novels, easy reading adapted from age appropriate sources, and new digital genres such as fan fiction]. Another test showed urban school libraries have significantly fewer alternative reading materials than rural libraries. These materials are critical for developing reading comprehension through sustained and focused reading.

Fig. 36. Interlibrary Loan. Over two-thirds [67.9%] of school libraries do not participate in interlibrary loan.

Fig. 37. Comparison of Interlibrary Loan by District Types shows there were no significant differences in interlibrary loan among urban, rural, and suburban school libraries. Given the low participation rate in Interlibrary Loan, that participation is low regardless of district type.

Fig. 38. Interlibrary Loan Operations. When asked the means by which their interlibrary loan systems operated 69.1% of respondents chose “not applicable.”

Fig. 39. Interlibrary Loan Materials shows that when asked the approximate number of materials that their libraries obtained through interlibrary loan during 2014-2015 57.2% of respondents said they do not take advantage of interlibrary loan services.
Fig. 31. **Access to E-Books.** Respondents approximated the number of e-books available in their libraries through subscriptions. Fig. 31 shows that almost 39.7% of school libraries do not subscribe to e-books.

Fig. 32. **Comparison of School Libraries’ Access to E-Books** shows that an Anova test shows there are no significant differences among urban, rural, and suburban school libraries with regard to the number of e-book subscriptions. Given the slow adoption of e-books this finding is interpreted as a low rate of e-book adoption across district types.

Fig. 40. **DVDs in Library Collections.** 31.3% of school libraries have zero to 10 DVDs and 21.7% of libraries have 101 or more DVDs. Fig. 41 **Comparison of DVD Collections by District Types** shows no significant difference in the size of library DVD collections among urban, rural, and suburban school libraries.

Fig. 42. **Videocassettes in Library Collections** shows more than half of school libraries [51.6%] have zero to ten videocassettes and 16.1% have 100 or more.

Fig. 43. **Comparison of Videocassette Collections by District Types** shows there are no significant differences in the number of videocassettes among urban, rural, suburban school libraries.

Fig. 44. **CDs in Library Collections** shows that 57.6 % of school libraries have zero to ten CDs.

Fig. 48. **Digital Video Streaming** shows almost one-third of school libraries [30.5%] have digital video streaming 68.1% do not.

Fig. 49. **Comparison of Video Streaming by District Types** shows that statistically significant fewer rural school libraries have statistically less access to paid subscription video streaming service than suburban and urban libraries.

Fig. 45. **Audiocassettes in Library Collections** shows that almost three-quarters [73.5%] of school libraries have zero to ten audiocassettes while small numbers of libraries have larger collections.
Fig. 46. Comparison of Audiocassettes by District Types
shows that statistical analysis of audiocassette holdings among urban, rural, and suburban school libraries shows no significant differences.

Fig. 49. Video Streaming
Analyses across analog devices and digital video streaming strongly indicates that urban and suburban school libraries reporting small analog collections are weeding these outdated technologies out of their collections while rural libraries with larger analog collections are retaining these collections because they do not have the capacity to adopt video-streaming subscriptions.

Table 5: How Can Access to the Library Collection and Information Resources be Improved to Develop School Library Programs?

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<td>(i) How school library programs can be further developed to ensure that the programs reflect changing technology and best serve the students with regard to access to print and digital information resources</td>
<td>Generating a formula for the size of the library collection that calibrates the size of the library collection to student population and grade level could ensure equitable access to print and digital materials. The focus for establishing equitable access to information sources is on digital access through an automated library catalog and a library website. These measures are particularly urgent for school libraries in rural districts. Alternative reading materials for struggling and reluctant readers are needed, particularly in urban districts. E-books can alleviate the inequitable sizes of collections and access to up-to-date materials. Slow adoptions makes important for all district types. Interlibrary Loan is a strategy for shared resources that can cut costs and promote equity. Slow adoption indicates the need for leadership and guidance through professional development for school librarians. An analysis of analog AV materials shows a strong trend that 31-73% of libraries have 0-10 of these items in their collections. They are replaced by digital access, particularly video streaming. Rural areas are in the most need for adequate bandwidth and technology infrastructure to support video streaming.</td>
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**Access to Information Technology**

Access to information technology is critical to developing the skills to access information, which is the raw material for knowledge construction in print and digital environments. Literacy support in multi-modal reading and media develops comprehension as well as students’ skills to select relevant information, evaluate information, and apply information to build and express new knowledge in a variety of formats.

Significantly fewer urban and rural schools report having adequate bandwidth than suburban schools, limiting the ability of the school library to support current demands of technology, simultaneous access to the Internet, instruction, and curriculum requirements. Significantly fewer urban school libraries have access to the internet than suburban school libraries. The qualitative data (fig. 104) corroborates outdated technology as a barrier to equitable access to information skills and digital content.

**Table 6: Capacity of Bandwidth to Support Instruction**

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<td>(x) The extent to which electronic and digital materials are available for students to access [Access includes internet and hardware access.]</td>
<td><strong>Fig. 50. Capacity of Bandwidth to Support Instruction:</strong> Almost two-thirds [64.5%] of school librarians report that bandwidth is adequate to support instruction in their libraries. One-third [33.6%] of librarians report they do not have adequate bandwidth to support instruction. As streaming video replaces analog audio-visual equipment it is imperative that schools are furnished with enough bandwidth to take full advantage of the investment schools are making in digital devices and software.</td>
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<td><strong>Fig. 51. Comparison of Bandwidth by District Types:</strong> Analysis shows significantly fewer urban school libraries have adequate bandwidth to support instruction compared with suburban school libraries.</td>
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<td><strong>Fig. 52. Access to the Internet.</strong> Almost 60% of respondents reported 81-100% student access to the internet.</td>
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Fig. 53. **Comparison of Internet Access by District Types.** Analysis shows significantly fewer urban school libraries have access to the internet than suburban school libraries.

Fig. 59. **Comparison of Access to the Information Technology by District Types.** Analysis shows significantly fewer urban school libraries with access to information technology compared with suburban school libraries. There are no significant differences between rural and suburban school libraries and rural and suburban school libraries.

Fig. 54. **Computers Connected to the Internet.** 82.7% of respondents reported 100% of computers in their libraries were connected to the Internet.

Fig. 53. **Comparison of Computers Connected to the Internet by District Type.** Only 24.2% of respondents reported that there were 41 or more computers in their libraries available for student use. 24.2% reported 21-30 computers connected to the Internet. These numbers indicate that while the internet is available in their libraries, internet access is inhibited by inadequate numbers of computers. The implication is that electronic resources are underused.

Fig. 56. **One Child, One Computer Policy.** Only 16.3% of respondents reported this policy is implemented; 10.4% are planning to implement the policy. However 72.4% reported they do not have or plan to have the policy.

Fig. 57. **Comparison of One Child, One Computer Policy by District Type.** Statistical analyses showed there is no significant difference among urban, rural, and suburban districts with regard to the One Child, One Computer Policy. There is a low rate of adoption statewide.

**Table 7: Access to Information Technology Materials [Software Tools]**

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Fig. 58. Internet Access to IT Tools. Types of IT software reported included research and information resources, research organizers, presentations software, production tools, and communication tools. 95.2% of respondents reported student access to software tools. These included: Word, PPT and Excel. 74.1% reported wireless access and email access. Only 15-20% reported access to content creation tools [e.g., Dreamweaver, social media, and an intranet]. 33% reported access to digital graphic organizers [note taking tool].

Fig 59. Comparison of Access to IT Tools. Significantly fewer urban school libraries have access to IT software tools compared with suburban schools.

Respondents reported a need for more adaptive technology to meet the needs of special needs students and struggling readers.

Table 8: Library or Technology Director for School Libraries

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<td>x) The extent to which electronic and digital materials are available for students to access thorough a Library or Technology Director [Access includes software tools]</td>
<td>Fig. 63. Library or Technology Director. 43.7% of respondents reported that this position exists in their district. 39% reported it never existed; 15% reported it existed but was eliminated.</td>
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<td>Fig. 64. Comparison of Library or Technology Director Position by District Types. Significantly fewer urban and rural school libraries have a library or technology director than suburban school libraries. This indicates a lack of leadership for school libraries in these district types where technology resources and services are generally poorer.</td>
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Fig. 65: Technology Hardware Responsibility. 60.7% of respondents reported they sometimes have responsibility for IT hardware; 25.8% reported they never have this responsibility.

Fig. 66. Time Spent on Technology Support in the School Library. 26.8% reported one hour per week; 26.5% reported 1-3 hours per week; 8.8% reported 3 hours per week; 6.7% reported 3 or more hours per week.

Fig. 67. Time Spent on Technology Outside the Library. 42.2% reported no hours spent; 38.2% reported one hour spent weekly; 12.7% reported one to two hours; 6.3% reported three or more hours. More than half of school librarians are spending time on technology outside of their school libraries on a weekly basis, reducing the amount of instructional time they can offer.

Fig. 68. Response Time for Technology Support. 17.1% report support within two hours; 26.3% report support within one day; 13.4% report support response within two to three days; 12.1% report support within four days or more. Improvement in response time would result in an increase in instructional time for school librarians.

Access to Funding and Subsidized Resources

There are two dimensions of funding for school libraries. The first is the allocated budget, which is building or district based. The second is access to subsidized, electronic state-funded resources such as e-books, electronic journals and magazines, and e-reference materials such as electronic encyclopedias, which are critical as information moves from print to digital formats. This access is dependent upon technological infrastructure and networking, sufficient electronic equipment and devices, as well as professional librarians who provide instructional support to students and professional support to educators. The qualitative data (fig. 104) corroborates that lack of funding, or diminished funding, is a barrier to ongoing collection development and technology updates.

Table 9: Total Budget Allocation

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Fig. 69. **Total Budget Allocations** shows there is little consistence and a lot of inequity in budget allocations. The largest sector of school libraries reported a budget of $1,001 to $6,000. 10.6% of school libraries receive no funding while 13.8% receive over $10,000 per year. 57.5% of Massachusetts’ school libraries have a budget of less than $10,000. This means that after operating expenses such as material replacement and updating, book processing costs, and added materials, most school libraries struggle to provide and maintain basic information technology such as an automated circulation and cataloging system, IT software and hardware, electronic journals [databases] and e-books. With adequate funding information technology could become the means, rather than a barrier for providing equitable access to information and technology.

Fig. 70. **Comparison of Budgetary Allocation by District Types.** There was a statistically significant difference in school library budgets among urban, rural, and suburban districts. Urban school libraries have significantly lower budgets than rural and suburban school libraries.

Fig. 71. **Library Materials Purchased with Allocated Budget.** Data show that 84% of school librarians use their funding for trade and library books and 78.5% use funds to purchase supplies to process and circulation books. Almost 45% of librarians also use funding to purchase e-books and electronic materials. Similarly, funding for periodicals [56.6%] and newspapers [19.9%] as well as subscription databases, which contain electronic periodicals [40.7%] indicates that school librarians are maintaining their print and digital collections. Similarly, librarians purchase analog devices and software as well as their digital counterparts. In addition, It seems some of these expenditures, such as library furnishings and shelving, could be capital rather than operating expenditures. There does not seem to be a consistent, universal way of funding and budgeting school libraries across the Commonwealth. Some schools use building based budgeting; some depend on district allocations; and others have no provision for funding from city/town, district, or school funding agencies.

Fig. 82. **Other Sources of Funding** shows school libraries rely on supplementary sources of funding [fig. 82], particularly subsidized sources [57.4%] and donations [56.1%]. Almost half of libraries [46.6] supplement their funding through book fairs. Only 36.9% of respondents depend on grants. Bake sales [11.7%] and other fundraising events, and librarians' personal funds, and other budgets [11.7%] are reported by 11.7% of respondents.

Access to subsidized information resources is more critical than is generally acknowledged by school administrators and school librarians because these resources are potentially available to all schools at no
additional cost to school budgets. Access to electronic collections is important for several reasons. These databases aggregate information sources such as newspapers, journals and magazines, reference books such as general encyclopedias and specialized references in the humanities and sciences. They provide a larger, more diverse, and affordable collection than is possible in print media. E-collections also overcome obstacles of availability. For example, it is difficult for school librarians to subscribe to the *Boston Globe* since their accounting procedures are not compatible with Boston Public Schools. Since the information in these databases is not restricted to a physical library, but can be accessed electronically through the school library’s website on a 24-7 basis. Electronic collections are a key ingredient to maximizing universal access to information. The qualitative data (fig. 104) corroborates these findings and in addition to lack of or diminished funding, reveals that in some schools the library budget is set at the discretion of the principal, or there is no line item for the library in the annual budget. The tenuous nature of budgeting is a clear and persistent barrier to equitable access to library materials and instruction. School librarians expressed gratitude (fig. 106) for subsidized access to electronic databases through the services of the Massachusetts Library System, a non-profit library system subsidized by the Massachusetts Board of Library Commissioners. Is subsidized the right word?

### Table 10: Access to Electronic Resources

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<th>Legislative Charge</th>
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x) The extent to which electronic and digital materials are available for students to access through subsidized electronic resources.

**Fig. 72. Cost of Electronic Databases.** Respondents reported how much they spend on electronic collections for their libraries [fig. 71]. More than half of school librarians responded that the cost of electronic collections was not applicable to them. This is probably because they take advantage of subsidized resources. However, this finding raises the question, why aren’t all school libraries building their digital collections? It may be the case that Information Technology pays database fees, or that libraries are subscribed to state-funded subscriptions to electronic databases. On the other hand, some respondents may not have the electronic infrastructure to make adequate use of the databases.

**Fig. 80. Locally Funded Electronic Collections** shows that 45.7% of respondents purchase no electronic collections with their library budgets. 36.3% purchase one to four electronic collections.

**Fig. 81. Comparison of Locally Funded Electronic Collections by District Types** shows that there are no significant differences between urban and suburban school libraries and between rural and suburban libraries with regard to their purchasing of electronic collections with local funds. This indicates that across district types it is generally the case that almost half of school libraries do use locally-funded electronic collections [fig.80].

**Fig. 73. State-Funded Electronic Content Collections** shows which databases respondents who subscribe to electronic databases choose for their libraries. About 75.2% of respondents subscribe to Gale Cengage, 73.3% subscribe to Encyclopedia Britannica sources and almost half [49.7%] subscribe to the Boston Globe in the Pro Quest database.

**Fig. 74. Use of State-Funded Electronic Resources in Curriculum** reports a total of 32.2% responded “No” and “Not sure” that electronic resources were used in the school’s curriculum while 65.8% report that they do electronic resources are used to support curriculum. These responses reflect a missed opportunity to realize the potential of electronic resources for equitable access in schools.

**Fig. 75. Comparison of State-Funded Electronic Resources by District Types.** Statistical analysis shows significantly fewer rural libraries regularly use state-funded electronic resources in the curriculum than suburban libraries. It is not clear that rural school libraries have a low rate of access, or that they have access but not use the databases to support school curriculum and instruction.
Fig. 76. **Membership in Massachusetts Library System by District Types** shows responses 81% of respondents reported that their school libraries have membership in MLS, which gives them access to databases at no cost. If they have a strategic plan these libraries can also apply for federally funded grants through the Massachusetts Board of Library Commissioners. State-funded databases funded by the Massachusetts Board of Library Commissioners, and are most often used by urban and suburban school libraries.

Fig. 77. **Comparison of Membership in Massachusetts Library System by District Types.** While there was not a significant difference between urban and suburban, possibly because respondents from urban districts responded “not sure” or “not applicable’, there was a significant difference in memberships in the MA Library system between rural and suburban school libraries.

Fig. 78. **Participation in the Commonwealth E-Book Collection** shows that 71% of respondents reported that they did not participate in the Commonwealth e-Book Collection [fig. 7]. The Commonwealth eBook Collections program was created to better serve, educate, and inform the patrons of Massachusetts Libraries who use this catalog to search for eBooks and more from partner vendors.

Fig. 79. **Comparison of Participation in the Commonwealth E-Book Collection by District Types** shows statistically more rural school libraries participate in the Commonwealth e-book collection than suburban libraries. Statistically fewer urban school libraries participate in the Commonwealth e-book collection than rural libraries.

Table 11: **Subsidized Electronic Sources**

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<th>Legislative Charge</th>
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<tr>
<td>x) The extent to which electronic and digital materials are available for students to access thorough</td>
<td>Fig. 80. <strong>Subsidized Electronic Sources</strong> shows that 45.7% of respondents purchase no electronic collections with their library budgets. 36.3% purchased one to four electronic collections. This is a missed opportunity to level the playing field for students since these collections could be accessed through the school library website.</td>
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Access to Library Instruction and Help

Access to library instruction and help ensures that a hybrid print and electronic library collection is well used to promote 21st century teaching and learning. Without adequate time-on-task and professional librarians who collaborate with teachers to deliver information and technology education, access is denied to the Commonwealth’s students and educators.

Indicators of Time Spent on Instruction

The majority of school librarians teach at the elementary school level on a fixed schedule, limiting opportunities for collaborative lesson planning and curriculum development, but expanding opportunities for school librarian contact with students on a weekly basis. The qualitative data (fig. 103 in the full report) revealed additional barriers to access to instruction such as student schedules without free time to access the school library resources during the day, exacerbated when the library was closed before/after school due to lack of funding although a number of respondents reported that they tried to provide before/after school coverage on their own time, without compensation. The lack of support staff (fig. 103) was revealed as a barrier to the school librarian being able to participate in collaborative planning. **Support staff who manage the clerical aspects of the school library program make it possible for the school librarian to plan collaborative lessons with classroom teachers and other instructional activities.**

Table 12. Summary of Indicators of Time Spent on Instruction

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<td><strong>Table 12. Findings for Time Spent on Instruction</strong></td>
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<td>Legislative Charge</td>
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(vii) How many hours each week school librarians provide direct library-related instruction to students.

<table>
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<tr>
<th>Indicators of Time Spent on Instruction</th>
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<tr>
<td><strong>Staffing</strong></td>
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<td><strong>Fig. 83. Number of Schools in Which School Librarians Deliver Instruction</strong> shows less than 10% of schools provide instruction to two schools. One percent or less of school librarians deliver instruction to more than two schools. 88.3% of respondents report that they deliver instruction to one school.</td>
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<td><strong>Fig. 84. Number of Staff Managed by Multi-School Librarians</strong> shows school librarians assigned to more than one school manage from zero to more than six staff. 6.1% of respondents have no staff and a total of 4.6 respondents have one to four staff.</td>
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<td><strong>Fig. 97. Non-instructional Activities of School Librarians</strong> shows respondents who were assigned to more than one school indicated the total number of librarians and paraprofessionals they manage. School librarians assigned to more than one school manage from zero to more than six staff [fig. 83 in full report]. 6.1% of respondents have no staff and a total of 4.6 respondents have one to four staff. Additional staff includes paraprofessionals, volunteer students, and parents.</td>
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<td><strong>Fig. 98. Assignment of Non-Instructional Tasks</strong> shows that school librarians perform more than half [63.1%] of non-instructional tasks in the library. 20.2% reported that their aides perform these tasks and 13.6% rely on others, e.g., parent and student volunteers.</td>
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<td><strong>Fig. 99. Assigned Duties</strong> shows that only 33.4% of respondents report they never have additional assigned duties, such as bus, cafeteria, or study hall duties, outside of the library. Almost the same number reported they have these duties on a daily basis. 18.2% are assigned duties outside their assigned duties.</td>
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<td><strong>Fig. 100. Time Spent on Extra-Curricular Activities</strong> shows approximately how many hours per week they spent, if any, supervising student extra curricular activities [fig. 99]. Almost half [49.3%] do not spend any time on these activities while about one-third [35.7%] spend one to two hours per week.</td>
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<td><strong>Fig. 101. Time Spent on Faculty Committees</strong> shows over 31% of librarians do not spend time on faculty committees, while over 33% spend one to four or more hours per week on committee work. Over one-quarter of those committees are academic or curricular, such as Supervision and Evaluation Committee;</td>
</tr>
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Teaching and Learning Committee; Literacy Committee; Technology Committee; Senior Internship Advisory; Reader Leader; Instructional Leadership Committee; Elementary Steering Committees for Science, Social Studies; School Library Activities Committee; Health Committee; Reading Incentive Committee; Specialist Cluster Committee.

**Fig. 102. Students with Regular and Consistent Access to School Library Programs and Services shows** only 64.3% of respondents reported that 81 to 100% of students have regular and consistent access to school library programs [fig. 102]. Almost one-third claim that one to 80% of students have consistent access.

**Who is Being Taught?**

**Fig. 85. School Levels Least Taught by School Librarians.** Fig. 85 shows that almost half [44.2%] of respondents work on the elementary level, yet they teach classes on a fixed schedule almost every hour of the school day. Since a fixed schedule does not easily support collaborative, sustained information and inquiry learning, lessons are isolated from academic content. Middle [32.3%] and high school [36.7%] librarians have more collaborative opportunities when they operate on flexible schedules.

**Fig. 87. Classes Taught Weekly** shows 27.6% of respondents teach less than five classes weekly; 22.6% teach five to ten classes weekly; 12.1% teach 11 to 15 classes; and 12.7% teach 16 to 20 classes. The portion of respondents who teach 21 to 25 [13.6%] and more than 25 classes [10.2%] are most likely to be school librarians in elementary schools.

**Fig. 88: Grade Level[s] Taught** show that all grade levels for which they provide instruction. It is evident that young children, pre-kindergarten, kindergarten, and first grade do not receive reading readiness instruction from school librarians. Grades two through five receive more instruction time than other grades but, as noted in other parts of this report, their instruction is not integrated with academic content, nor do the librarians teach collaboratively with classroom teachers.

**Fig. 94. Title I Students** shows that 51.6 respondents have zero to ten Title I students; 19.9% have 21 to 40; 10.2% have 41 to 60; only 5% have 61 to 80; and 10% have 81 to 100. While these numbers vary greatly, there are schools that have enough Title I students to warrant specialized programming that would provide small group and individual instruction in information literacy,
readers’ advisory for the purpose of reading improvement, digital literacy, and inquiry learning support.

What is being taught?

Fig. 96. Library Instruction Ranked by Type shows how school librarians ranked types of instruction. A four-way tie ranked collaborative teaching, information skills, reading improvement for print literacy, and reading motivation for print literacy as the number 1. Other types of instruction were rated 2-7: Inquiry learning skills [2], critical thinking skills [3], digital citizenship [4], technology skills [5], reading improvement [6] and library skills [7].

Fig. 89. Does Your Library Have a Website? Respondents indicated whether or not their school libraries have a library website that is a portal to 24/7 access to resources and help from the school librarian. Fig. 89 shows that 84.6% of respondents said their libraries had websites while 14.8% said they did not.

Fig. 91. Instructional Support on Library Websites shows respondents who provide and maintain school library websites indicated whether or not those sites contained instructional support and/or tutorials about information searching and use. Fig. 90 shows that 53.6% of respondents offer instructional support on their library websites and 30.5% do not, with 15.9% reporting “not applicable.”

Fig. 92. Types of Support on Library Websites shows almost half [41.7%] of school librarians with websites for their libraries provide research guides and pathfinders to support student information searching and researching. 35.5% provide tutorials on citation [31.1%], database searching [31.1%], and internet searching [18.2%]. 19.4% of school librarians provide instruction in digital citizenship on their websites.

Fig. 93. Comparison of School Libraries with Instruction on their Websites by District Types shows significantly fewer urban schools that have library websites offer instruction/tutorials on their sites compared with suburban schools.

Recommendations and Long-Range Plan. In order to achieve equitable access to strong library programs across the Commonwealth the Special School Library Commission approved the following recommendations, or goals. Please see the full report for the actions or objectives that constitute a long-range-plan described in a Logic Model that includes a description of how the recommendations can be attained through specific actions, who is responsible for the actions, a timeline that establishes when
the actions are completed within a three-year plan, and a rationale for why the actions are needed supported by relevant data from the school library study. Please see the full report for details of the plan. The recommendations are listed below.

**Recommendation 1.0. Improve Access to School Libraries and School Librarians**

**Recommendation 1A.** Every public school in the Commonwealth of Massachusetts has a school library and a certified school librarian.

**Recommendation 1B.** Establish the position and responsibilities of the School Library Curriculum Specialist at the Department of Elementary and Secondary Education.

**Recommendation 1C.** Support a culture of inquiry in schools that sustains inquiry and resource-based learning, collaborative teaching, and the integration of digital technology to improve access for all students.

**Recommendation 2.0. Improve Access to Information Resources in School Libraries**

**Recommendation 2A.** Increase access to print resources in school libraries.

**Recommendation 2B.** Increase access to electronic resources in school libraries.

**Recommendation 3.0. Improve Access to Information Technology**

**Recommendation 3A.** Improve access to internet and digital devices in school libraries.

**Recommendation 3B.** Increase access to Information Technology through staffing.

**Recommendation 4.0. Improve Access to Library Instruction and Help**

**Recommendation 4A.** Promote best instructional practices in the school library.

**Recommendation 5.0. Improve Access to Funding**

Guidelines for Budget Allocation and Expenditure to Support Recommendations 1.0, 2.0, 3.0, and 4.0.

The Commission looks forward to the adoption of these recommendations by the Legislature to ensure that every student in our public schools has access to an effective school library program.

Respectfully submitted,

Maureen Ambrosino, Westboro Public Library Director, Massachusetts Library Association

Kendall Boninti, School Librarian, Massachusetts School Library Association

Dan Callahan, Training and Professional Learning Specialist, Massachusetts Teachers Association

Laura Carah, Sturgis Charter School, Hyannis, Massachusetts

J.D. Cheslaw, Boston Business Round Table

George Comeau, Esq., Commissioner, Massachusetts Board of Library Commissioners

Laura Koenig, Children’s Services Team Leader, Boston Public Library, Massachusetts School Library Association

Jonathan Landman, Teaching and Learning, Department of Elementary and Secondary Education
Judith Marcella, Assessment Publication and Records Specialist, Department of Elementary and Secondary Education

Judi Paradis, School Librarian, Massachusetts School Library Association

Greg Pronevitz, Executive Director, Massachusetts Library System

Mary Rose Quinn, Head of Programs, Massachusetts Board of Library Commissioners

Carole Shutzer, School Librarian, American Federation of Teachers

Geoff Swett, Division VII Chair, Massachusetts Association of School Committees