

Arlington Public Schools

Library Services Evaluation Report

Prepared by the Office of Planning and Evaluation
Response from the Library Services Office

February 2015

This page intentionally
left blank.

Table of Contents

Table of Contents	i
List of Tables	ii
List of Figures	iii
List of Appendices	iv
SECTION 1: BACKGROUND	1
Library Services Program Description - <i>Prepared by the Library Services Office</i>	1
Methodology	13
SECTION 2: FINDINGS.....	20
Evaluation Question #1:.....	20
How effectively was the Library Services program implemented?	20
Evaluation Question #2:.....	48
What Were the Outcomes for the Targeted Populations?.....	48
SECTION 3: RECOMMENDATIONS.....	57
Staff Response — <i>Prepared by the Library Services Office</i>	57

The executive summary is available at www.apsva.us/evaluationreports.

List of Tables

Table 1: Library Services Office Staff and Responsibilities.....	11
Table 2: Status of Recommendations Made in Previous Evaluation	13
Table 3: Library Services Evaluation Design.....	14
Table 4: Frequency of Library Programming by Type and Level.....	21
Table 5: Percentage of Librarians Reporting Frequent Collaboration with Teachers.....	22
Table 6: Areas of Frequent Collaboration between Librarians and ITCs	23
Table 7: Average Daily Minutes the Library is Open beyond School Hours by Grade Level.....	24
Table 8: Student Access to Library during Lunch Period	24
Table 9: Average Daily Student Visits to the Library by School Type.....	25
Table 10: Student and Staff Level of Agreement with Positive Statements about School Library.....	27
Table 11: Common Themes among Student Responses - What is the best thing about your school's library?	28
Table 12: Common Themes among Student responses - What would you change about your school's library?	28
Table 13: Percentage of Secondary Libraries Rated Effective/Highly Effective.....	29
Table 14: Percentage of Respondents Indicating that Students Know How to Perform Specific Tasks.....	32
Table 15: Suggested Age Ranges of Nonfiction Printed Publications by Collection Category.....	35
Table 16: Length of Time to Resolve "2847" Repair Requests	37
Table 17: Book Purchasing Process.....	38
Table 18: Percentage of Respondents Reporting Satisfaction with Division-Level Support	39
Table 19: Percentage of Library Observations Rated Effective or Highly Effective, Physical Space	41
Table 20: CLASS Domains and Dimensions	43
Table 21: Total TRAILS Scores by Grade and Ethnicity.....	50
Table 22: Total TRAILS Scores by Grade, Gender, Disadvantaged Status, LEP Status, and SWD Status.....	51
Table 23: Examples of Discipline Incidents	53
Table 24: Percentage of Students who Have Assets Related to Reading for Pleasure	54
Table 25: Percentage of APS 15-Year-Old Students in Each Reader Profile, 2013-14	56

List of Figures

Figure 1: How often do you visit the school library without your class? In other words, how often do you go to the school library by yourself?.....	26
Figure 2: Number of Schools within Specified Ranges for the Number of Items Circulated Per Student in Elementary Schools.....	31
Figure 3: Average Library Services CLASS Scores by Domain and Grade Level, Fall 2013	44
Figure 4: Average TRAILS Scores for APS, Virginia, and the Nation	50
Figure 5: Level of Agreement with “I/Students Know How to Use Information Ethically/Responsibly.” ..	52

List of Appendices

Appendix A: Definitions.....A1

Appendix B: Survey Data

 B1: Library Services Staff Survey ResultsB1

 B2: Library Services Student Survey Results.....B74

Appendix C: Access and Use

 C1: Library Services Availability.....C1

 C2: Library Visits.....C6

 C3: Usage Statistics for Online Resources.....C8

 C4: Circulation Statistics.....C14

 C5: Library Services Evaluation (Hanover Research).....C17

Appendix D: Operations and Resources

 D1: Collection Analysis.....D1

 D2: Service and Repair Requests.....D9

 D3: Book Purchasing Process.....D11

Appendix E: Library Instruction/Observation Data

 E1: Classroom Assessment Scoring System (CLASS).....E1

 E2: Alignment of CLASS with APS Best Instructional Practices.....E6

 E3: CLASS Domain and Dimension Scores.....E8

 E4: Library Services Observation Checklist.....E15

Appendix F: Student Outcomes

 F1: Tool for Real-Time Assessment of Information Literacy Skills.....F1

 F2: Inappropriate Use of Technology.....F6

 F3: Recreational Reading.....F9

Appendices are available at www.apsva.us/evaluationreports.

SECTION 1: BACKGROUND

The evaluation of the Library Services (LS) program began in 2012-13 with the creation of a program evaluation design. The period covered by this evaluation was marked with instability, as there have been three LS Supervisors in place since June 2013, and three different circulation systems in place since February 2011. The current LS Supervisor was appointed in August 2014 and the new circulation system began operating in September 2014.

Data collection for the evaluation occurred during the 2013-14 school year and the fall of 2014. This evaluation employed various methodologies to collect data with which to examine the success of the LS program over time. In particular, this report addresses the following three components outlined in Arlington Public Schools (APS) policy and procedures (45-3) for accountability and evaluation:

1. A description of the department, program, or service.
2. Evaluation questions that ask
 - a. How effectively was the Library Services program implemented?
 - b. What were the outcomes for the targeted populations?
3. Conclusions and Recommendations

This report is divided into the three sections listed above.

The executive summary and appendices that contain definitions, original data sets, and various reports used to inform this evaluation are located online at www.apsva.us/evaluationreports.

Library Services Program Description - Prepared by the Library Services Office

LS believes that the foundation of every school library is to provide high quality materials in both print and non-print formats, to foster and promote a love of reading for all students, to teach information and critical thinking skills needed to ensure that students are prepared for all future endeavors, and to set the example for accessing information in the 21st century.

Today's world is changing rapidly and the demand for information requires that we provide and support students and staff with critical skills that will enable them to be effective and productive users and creators of information. Equally crucial is the need to build a love of reading for personal growth and pleasure along the journey to become life-long learners.

While the format of information has changed, the need to develop critical thinking skills and the skills associated with reading for information and leisure will remain essential to enable all to become productive citizens. Access to information has dramatically increased over the past few years, requiring students to evaluate information using multiple literacy skills. This set of skills is referred to as transliteracy, or the “the ability to read, write and interact across a range of platforms, tools and media from signing and orality through handwriting, print, TV, radio and film, to digital social networks.”¹ Transliteracy skills are now incorporated into the Virginia Standards of Learning (SOL), and librarians

¹ Newman, Bobbi. “Defining Transliteracy For Librarians.” *Librarian by Day*. 3 March 2010. Web. <http://librarianbyday.net/2010/03/08/defining-transliteracy/>

work closely with classroom teachers to provide opportunities for students to master this lifelong skill set.

LS oversees the operation and the selection, purchase, and delivery of resources to 34 school-based library programs. LS also oversaw a Professional Library, which was eliminated in the 2014-2015 school year due to budget cuts. The libraries within APS circulated nearly 800,000 materials during the 2013-14 school year and during that same timeframe added over 35,000 new titles. Additionally, over 2,900 items a month were delivered to the schools from the LS Cataloging Office.

LS establishes policies and procedures for school libraries and fine-tunes the accuracy of the online catalog. It also ensures that APS procedures for the removal of outdated equipment and materials are effectively communicated to schools and coordinates the process with other APS offices.

LS works closely with the Public Library to provide services after school hours and during the summer reading programs, and works closely with staff, parents, and community to support family literacy and to encourage a love of reading.

LS is a collaborative partner with other offices within the Department of Instruction to ensure that the library programs are providing instruction that aligns with current best practices and the APS Strategic Plan and initiatives. The office was formerly housed within the Department of Instructional Media Technology (IMT). In 2006, IMT was restructured and LS and the Instructional Technology Coordinators (ITCs) moved to the Department of Instruction, while most remaining functions within IMT became part of the new Department of Information Services. Further restructuring in 2010 moved the Office of Instructional and Innovative Technology, along with the ITCs, under the Department of Information Services.

Despite these organizational and administrative changes, LS remains technologically dependent on Information Services for its day-to-day functioning at both the central office and school level. LS works in conjunction with several other departments in the division to provide digital literacy information as required by both federal and state legislation, and with the Office of School and Community Relations and Information Services to develop policy and best practices for the use of social media.

Goals and Objectives

The LS Office is part of the APS Department of Instruction (DOI) and works to assist APS in meeting its overall Strategic Plan goals:

The current Strategic Plan runs through 2016-17 and focuses on five important goal areas:

Goal 1: Ensure that Every Student is Challenged and Engaged

Goal 2: Eliminate Achievement Gaps

Goal 3: Recruit, Retain, and Develop High-Quality Staff

Goal 4: Provide Optimal Learning Environments

Goal 5: Meet the Needs of the Whole Child

To meet Goal 1: Ensure that Every Student is Challenged and Engaged, all libraries will maintain

- a well-balanced collection that reflects the needs of the student population based on student academic and demographic data;
- a sufficient number of items to meet the interest of student's pleasure reading and academic requirements;
- a balanced collection of both current and classic titles for children and young adults;
- an inviting physical environment;
- a welcoming climate; and
- materials that represent the diverse population of APS.

To meet Goal 2: Eliminate Achievement Gaps, all libraries will provide

- support for all students to be exposed to a common set of skills that are aligned with the SOL and the AASL Standards for 21st century learner;
- ongoing instruction that supports, extends, and enhances the classroom and curriculum;
- regular communication and collaboration with stakeholders; and
- leadership in identifying resources to meet student academic needs.

To meet Goal 3: Recruit, Retain and Develop High-Quality Staff, LS will continue to

- work with the Department of Human Resources to ensure that all new hires meet the definitions of NCLB's Highly Qualified;
- hold monthly librarian meetings which provide sustained professional development;² and
- assign new hires a mentor for the first year of service.

To meet Goal 4: Provide Optimal Learning Environments, LS will continue to

- work in conjunction with the Facilities Design and Construction team to design new library facilities in Arlington Public Schools; and
- participate in focus groups to develop a vision for proposed new school libraries.

To meet Goal 5: Meet the Needs of the Whole Child, LS will continue to

- provide students access to high quality literature and current popular titles in order to encourage the development of readers, and
- recognize that student habits are changing from a print-based format to a more electronic-based format for information and pleasure reading experiences. LS is moving towards providing access to resources that allow for mobile access, i.e. eBooks, eAudio, and databases.

Attributes of Success

Success is measured in different ways – from students accessing, evaluating, analyzing, and interpreting information to students gaining a love of reading and an ability to grow into life-long learners. Success is

² Monthly meetings were reinstated in 2014-15 school year (during the past two years the previous supervisors made the decision to not hold monthly meetings).

librarians and teachers collaborating and creating varied projects and setting meaningful goals. Success is meeting the needs of a diverse and ever-changing population and helping each child use technology independently and responsibly.

LS will mark success by the following benchmarks:

- All students and teachers will have access to current, reliable, and relevant print and digital resources that support the APS curriculum and the Virginia Standards of Learning, as well as their own interests and needs.
- All students will have access to a reliable online public access catalog (OPAC).
- All students will be able to select books and resources for recreational and academic reading that are appropriate to their reading levels, needs, and interests.
- All students by graduation will be information literate and able to locate, use, and evaluate information in various media formats.
- All students will understand the ethical and legal use of information and behave accordingly.
- All students by graduation will have a working knowledge of basic technologies for research such as web search engines, databases, wikis and blogs; and students will use these tools safely and responsibly.

The services and contributions of the school libraries are difficult to measure quantitatively due to the expansive nature of the work. Librarians are charged with three main areas of responsibility: program administration, instructional leadership, and technology support. While each area contains indicators of success, it is difficult to draw clear lines between the areas. Librarians are not held accountable for student achievement as measured by test scores in the same way as a classroom teacher, so there is no quantitative measure that determines the success of library programs. However, there is an abundance of anecdotal evidence, provided by librarians, that does provide a view into program success:

- Open communication between librarians and teachers evidenced by collaborative lessons.
- A steady increase in the number of library visitors during “non-instructional” hours: before school, during lunch and after school.
- Student participation in TAB (Teen Advisory Board), Caldecott programs, and other building-level initiatives.
- Students engaging in conversations, both in person and virtually, about their reading habits, book choices, and interests.
- Students congregating in the library to work, study, play, and relax because it is safe and welcoming.
- Students participating in the development of the collection and library policies.
- Teachers commenting on the breadth and quality of the resources.
- Students searching online resources (e.g., databases and encyclopedias) with ease.
- Students demonstrating ethical uses of technology and information.
- Librarians greeting regular visitors by name and connecting with them on levels that reflect their interests.
- Circulation statistics increase as display cases empty out.

- Smiling students and teachers with arms full of books, eager to return what they've read in anticipation of getting their hands on the next set.

Program Overview

In order to meet the academic, social and emotional needs of students, LS staff:

- purchase and promote a wide variety of high-interest print and non-print books, as well as audiobooks, videos, periodicals and databases, to support curriculum and free choice reading
- integrate lessons with the curriculum and collaborate with teachers for instruction
- create of a wide variety of library programs, including book clubs, parent literacy nights, and author visits
- provide open access (before school, after school, during lunch, and online) to students, as well as a gathering place and “safe haven” for many

Elementary Level

The library at an elementary school is a hub of everyday activity. An elementary school library program provides children with a safe and welcoming environment where they can express themselves creatively, become critical thinkers, and learn skills through self-discovery and student-led activities as well as in instruction.

All curricular areas are dependent upon the school library for support in purchasing books, expanding technology, and collaborating on lessons and cross-curricular integration. Scheduling at the elementary schools varies. Most elementary schools have a “fixed” schedule, which means students come to the library every week or every other week in the same time-slot. In the majority of schools where there are fixed schedules, library time is considered a “special” which means that the teacher is not present and the librarian has no common planning time with teachers. A small number of elementary schools are experimenting with “fixed/flex” schedules, which allows for regular library visits for classes, but also includes open time where teachers can schedule the library for in-depth learning and research projects.

Elementary school librarians serve in many roles—leader, teacher, instructional partner, information specialist, and program administrator. Often, the librarian is the one person in the school who interacts with all students on a weekly or bi-weekly basis, as well as with school administration, classroom teachers and the parent community on a regular or frequent basis. Their myriad responsibilities include the following:

- Introducing preschool through fifth grade students to library procedures and organization
- Modeling and teaching students how to use a variety of print and digital resources
- Scaffolding literature appreciation by teaching and modeling reading strategies
- Teaching research and information literacy skills (i.e., the ability to find, use and analyze various information resources)
- Using and sharing digital resources, tools and technology to teach, access information, and assess students

- Collaborating with classroom teachers and specialists to integrate library and information literacy skills with APS and Virginia Standards of Learning curriculum
- Teaching digital citizenship and Internet safety
- Promoting reading and literacy through the development of storytimes, booktalks, author visits, student blogging, and creative programming
- Providing a welcoming physical environment in each school
- Administering a dynamic, yet reflective, program that is integrated with the individual school's mission and goals
- Managing and developing a robust library collection, including conducting needs assessments, curriculum mapping, evaluating and selecting new resources, and weeding
- Communicating programming with the broad school community (administration, teachers, students and parents) through the library's website, newsletter, and other communications
- Partnering with the Arlington Public Library to ensure that students are able to access information both at school and at home

Secondary Level

Like the elementary programs, above, the role of a secondary librarian is diverse and includes integration into the school as a whole. The library at a secondary school provides service to all curricular areas. The secondary curriculum provides an opportunity for the library to support the wide diversity of learning within the given course of studies. It is essential that the secondary librarian be a part of the school leadership team to foster collaboration and understanding of how the library supports the curriculum. The library is charged with providing materials that address the vast differentiation of learning/teaching styles and the growing ethnic diversity within the APS community.

Scheduling at the secondary level is done on an as-needed basis by teachers but walk-in traffic is significantly higher than at the elementary level. The secondary library is used extensively before, during, and after school hours by students who are completing assignments, working on independent studies, or using the computer labs for both personal and academic research. In contrast to the elementary library, instruction occurs more often in small groups and in individual consultations with students and teachers rather than as whole class instruction. Librarians provide assistance to both students and teachers by creating robust webpages and other online resources to guide students through the research process. A growing trend is for secondary librarians to come into the classroom to provide face-to-face whole group instruction on topics such as online research, citations, and plagiarism prevention strategies.

Secondary librarians also encourage students to continue their pleasure reading habits by expanding the types of formats and genres offered. eBooks, including eAudio, are becoming popular ways for students to read. The graphic novel, a combination of text and graphic illustrations, is the one of the most popular formats for teen reading. Librarians use social media to engage students in conversations about reading. Specifically, the responsibilities of the secondary librarian include the following:

- Assisting with Information Seeking: newly updated dynamic website; including Digital Literacy (defined as the ability to locate, evaluate, use, produce and communicate information to a variety of audiences and purposes)
- Advancing technology instruction, such as assisting school ITCs with the introduction of GoogleAPS (Google for Education)
- Overseeing skills instruction, including critical thinking, source evaluation, ethical use of information, bibliographies, and research
- Developing the collection according to the curricular needs of the students and staff
- Providing instruction to all curricular areas in all components of the research process
- Promoting the benefits of leisure reading and attributes of continued learning
- Promoting Reading Across the Curriculum & Free Choice reading
- Collaborating with community services, such as the public library, to support, supplement, and enhance the above goals of the school library.
- Offering volunteer opportunities (e.g., student volunteers who may assist in the processing new books, shelving, and creating displays)

Curriculum and Instruction

The school library provides support and resources to all curriculum areas of the school, and the librarian is uniquely qualified to provide direct instruction, collaboration, and assistance to all teachers and students.

Virginia school library programs do not have a required curriculum or a set of state standards. However, LS and building-level librarians in Arlington developed a guidance document that outlines specific skills students need to know to be successful as useful consumers and producers of information. The guide is aligned to the Virginia Standards of Learning (SOL) and the American Association of School Librarians "Standards for the 21st Century Learner." Librarians also use an assessment tool from Kent State University, TRAILS (Tools for Real Time Assessment of Information Literacy, www.trails-9.org) to monitor and assess students' knowledge of digital literacy skills.

Best and Current Practices

The following documents guide APS in providing guidance on the best and current practices in library services:

"Directory." AASL Essential Links. N.p., n.d. Web. 12 Feb. 2013. This wiki comprises a working bibliography of resources for school librarians, principals, parents, charter school organizers, library para-professionals, government officials, and college instructors. Books, journal articles, websites, and other media are included.

Empowering Learners: Guidelines for School Library Programs. Chicago: American Association of School Librarians, 2009. Print. Built on a strong history of program guidelines published by AASL, Empowering Learners helps school librarians establish effective library programs that meet the needs of the changing school library environment. Guided by the Standards for the 21st Century

Learner and Standards for the 21st Century Learner in Action, this publication is an essential resource for any school librarian.

Loertscher, David V., and David V. Loertscher. *The New Learning Commons: Where Learners Win!: Reinventing School Libraries and Computer Labs*. Salt Lake City, UT: Learning Commons, 2011. Print.

Loertscher, David V., and David V. Loertscher. *The New Learning Commons: Where Learners Win! : Reinventing School Libraries and Computer Labs*. Salt Lake City, UT: Learning Commons, 2011. Print. This book proposes a complete rethinking of the school library and computer lab in a 21st century school. It outlines the development of the concept and its implementation and draws upon many schools that have developed their programs and recreated their physical space and turned their library websites into virtual learning commons.

Michie, Joan S., and Bradford W. Chaney. "Second Evaluation of Improving Literacy Through Library Media Programs." Ed Gov. United States Department of Education, n.d. Web. 12 Feb. 2013. The Second Evaluation of the Improving Literacy Through School Libraries Program (2009) provides findings on how grant funds are targeted to schools, uses of the grant funds, staff collaboration and professional development, and the relationship between participation in the program and reading achievement scores. The report analyzes data from a survey of school libraries, district performance reports, case studies and test scores.

School Libraries Work! Washington DC: The U.S. National Commission on Libraries and Information Science.NCLIS, 2011. PDF. This research foundation paper, updated from the 2006 edition of *School Libraries Work!*, brings together position statements from a variety of organizations and findings from nearly two decades of empirical studies that cite the measurable impact school libraries and library media specialists have on student achievement.

Standards for the 21st Century Learner. Chicago: American Association of School Librarians, 2007. Print. *Standards for the 21st Century Learner* offers vision for teaching and learning to both guide and beckon our profession as education leaders. Skills, dispositions in action, responsibilities, and self-assessment strategies are designed as a tool to help school librarians shape the library program and curriculum, and to mold student learning more broadly.

Todd, Ross J., PhD, and Carol A. Gordon, PhD. *School Libraries, Now More Than Ever. A Position Paper*. Center for International Scholarship in School Libraries. Rutgers University School of Information Science, n.d. Web. 12 Feb. 2013. The Center for International Scholarship in School Libraries (CISSL) at Rutgers University holds the belief, substantiated by five decades of research, that school libraries help young people learn. School libraries are learning laboratories where information, technology, and inquiry come together in a dynamic that resonates with 21st century learners

Professional Development

Librarians meet monthly after school in groups to discuss instruction, technology, and program administration issues. Secondary librarians meet on the first Wednesday of every month, and elementary librarians meet on the third Wednesday. At least twice a year, both groups meet jointly. Monthly meetings were held sporadically in 2012-2013 and not at all in 2013-2014, due to the library supervisors in place during those years. The new supervisor, appointed in August 2014, has reinstated these meetings in the 2014-15 school year, and restructured them in the style of professional learning communities (PLCs).

Various professional development opportunities are held throughout the year. A back-to-school meeting is held every August, at which time the goals for LS are outlined.

Opportunities are provided for librarians to attend various conferences and seminars, including state and regional conferences sponsored by the professional organization, the Virginia Association of School Librarians (VAASL). Registration and lodging costs are provided by LS. A limited number of staff is also compensated for attendance at national conferences, such as the American Association of School Librarians, American Library Association, School Library Journal's Library Summit, The International Society for Technology in Education, and Computers in Libraries. Librarians may also request reimbursement to attend other conferences.

LS shares information with staff about other opportunities and information of interest through a weekly newsletter, and it has an ongoing presence within Blackboard.

Resources

APS provides a centralized budget for the purchase of books, online resources, additional technology, and professional development for librarians.

The book budget for each school is based on current planning factors. The amount is calculated on a per pupil allocation of \$21.00 per student, an allocation which has not changed since the early 1990s. During the 2013-14 school year APS provided over \$549,000 to school libraries for the purchase of library materials.

- The average elementary school received \$12,833.00
- The average middle school received \$20,253.00
- The average high school received \$40,028.00
- The average specialty center received \$5,409.00
- The Professional Library received \$17,715 for book purchases in 2013-2014, but the facility was eliminated in the 2014-2015 school year due to budget cuts.

LS also funds (over \$10,000) purchases for Caldecott Award book clubs and the TAB (Teen Advisory Board) program in cooperation with the Arlington Public Library.

LS maintains an integrated library management system, ACORN (Arlington County Online Resource Network), which serves as the catalog and circulation system, as well as a portal to online resources, such as databases and eContent (information that can be accessed digitally such as eBooks, eAudio, and

databases). ACORN provides real-time information on the availability of resources for students and staff. It is available via both Apple and Android mobile devices.

A balanced collection of online reference databases is available 24/7 via the [new catalog](#), the [LS webpage](#), the webpages of individual school libraries, and Blackboard. A large percentage of them provide translation into Spanish, as well as a number of other languages, and all online resources provide support and enrichment to the Virginia Standards of Learning and the APS curriculum.

The librarian in each school is responsible for ensuring that the library's collection is responsive to the needs of that school's unique population by developing a collection of materials and resources that represent the diversity of the student body. Materials are provided to allow classroom teachers and students access to both print and online resources from both school and home.

APS provides professional development opportunities once a month in grade-level groupings for all librarians and once a year for library support staff. In addition, all staff is enrolled in Blackboard, which provides access to information related to policies and procedures for the day-to-day operation of the library along with links to instructional materials created by staff.

Resources are overseen by LS staff, which includes a full-time supervisor, an information systems coordinator, a coordinator of cataloging, a purchasing specialist, and a half-time administrative assistant, as well as 2.5 catalogers and a half-time shipping clerk. In October 2014, the information systems coordinator position and staff member were transferred to the Career Center, as changes in the circulation system and the elimination of the Professional Library decreased the need for this position in the LS Office and, at the same time, the changing programmatic needs at the Career Center required additional technology-oriented clerical support. The primary responsibilities of the other positions are listed in **Table 1**.

Table 1: Library Services Office Staff and Responsibilities

Employee	Primary Responsibilities
LS Supervisor (1.0)	<ul style="list-style-type: none"> • provides leadership and support to Arlington Public School libraries • advocates for instructional programs and resources • works with Information Services on Internet Safety and filtering issues as well as integration of eContent resources provided by the LS office • meets regularly with every librarian to discuss goals and strategies for continuous improvement to their programs
Cataloging Coordinator (1.0)	<ul style="list-style-type: none"> • oversees processing, cataloging, and delivery of materials to schools • works with a staff composed of bibliographic specialists and a cataloger to ensure the accuracy of materials entered into the ACORN catalog • works with the purchasing specialist who places orders with vendors and maintains accurate financial records for library expenditures
Administrative Assistant (0.5)	<ul style="list-style-type: none"> • serves as a significant support to the Library Supervisor and LS staff • responsible for many of the regular operations of the LS office, especially the budget and finance requisitions, • addresses information requests and answers questions, including the day-to-day operation of the LS office. • (also serves as the administrative assistant in the Office of Professional Development)
Purchasing Specialist (1.0)	<ul style="list-style-type: none"> • submits orders for library materials • maintains knowledge of vendors and the Arlington Public Schools' financial and purchasing procedures
Bibliographic Specialists, including a shipping and receiving clerk (3.0)	<ul style="list-style-type: none"> • enter data into ACORN to maintain the integrity of bibliographic records • responsible for preparing materials for delivery to the schools

In addition to these central positions, the following school-based positions contribute to the implementation of the LS program.

School Librarians (22 Elementary librarians, 14 Secondary librarians, and a 0.5 librarian for a specialized program for a total of 36.5)

- work with classroom staff to plan for collaborative teaching of curriculum, including 21st century research skills as outlined by AASL
- build collections that match their diverse populations in terms of academic, social and emotional needs and interests
- design library programs that best serve their communities in terms of access, programming, activities and materials

- run activities and events to encourage a love of reading and life-long learning (may include special initiatives such as Reading is Fundamental/RIF, family literacy nights, book fairs, contests, clubs and more)
- market resources of the library, including emergent technologies which allow students to access resources outside of the physical library
- communicate with the larger community to promote awareness of reading and resources, sometimes soliciting grants to enhance offerings
- partner with outside groups, such as the Arlington Public Library, to provide special resources and programming, such as author events and reading festivals

Library Assistants (22 FTE Elementary Assistants–A Scale, and 9 FTE Secondary Library Secretaries – G Scale)

- welcome and assist students who enter the library
- reinforce and support library policies and procedures
- run circulation, checking materials in and out
- shelve all returned materials
- process Interlibrary loans
- maintain Inventory
- other duties as assigned, depending on school (may include delivering equipment, training and supervising volunteers, setting up displays, helping to coordinate book fairs/special events, following up with overdues, and more)

Status of Recommendations Made in Previous Evaluations

LS was last evaluated in 2001 as part of the Office of Instructional Media and Technology Evaluation Report. **Table 2** includes LS desired outcomes, corresponding recommendations, and the current status of that recommendation.

Table 2: Status of Recommendations Made in Previous Evaluation

Recommendation	Status
<p><u>Desired outcome</u>: All students and staff will have access to library resources from multiple sites, including home, for research and school projects.</p> <p><u>Recommendation</u>: Link all school library webpages to online library resource databases.</p>	<ul style="list-style-type: none"> • All school library webpages include links to the online library resources. • The main LS webpage also provides links to the resources • When students log in to Blackboard, access is also provided to the online resources that are grouped by grade level. • Students have 24/7 access to the library catalog and databases via multiple platforms and devices.
<p><u>Desired outcome</u>: Prepare Arlington students for their future beyond APS.</p> <p><u>Recommendation</u>: Integrate emerging technologies into student learning experiences.</p>	<ul style="list-style-type: none"> • All librarians were given an iPad to use with instruction in order to demonstrate mobile applications. • Many librarians are utilizing eContent, such as eBooks and online resources as a means of encouraging reading. • Plans are underway to expand the availability of eBooks in the library’s collection.
<p><u>Recommendation</u>: Promote universal and continual library and classroom collaboration integrating information literacy skills into instructional activities.</p>	<ul style="list-style-type: none"> • A document has been created aligning library information retrieval skills and VA SOLs for both core content and online research. Librarians maintain records of collaborative activities that occur
<p><u>Recommendation</u>: Develop training projects that focus on meeting individual student needs using technology and on developing units of study into which technology seamlessly is integrated.</p>	<ul style="list-style-type: none"> • Building level librarians continue to integrate technology into library lessons and teach students how to access a variety of online tools and technologies.

Methodology

Evaluation Design and Questions

The design for this evaluation was developed during the 2012-13 school year. A planning committee met regularly throughout the year to develop the evaluation questions that would guide data collection for this report. Committee members included staff from Planning and Evaluation, the LS Office, and schools. Additional staff were consulted as well. The LS evaluation design can be found in **Table 3**.

Data collection for the evaluation occurred during the 2013-14 school year and the fall of 2014.

Table 3: Library Services Evaluation Design

Program/Service Objective	Program/Service Question	Data Source(s)
<p>Evaluation Question 1: Implementation <i>How effectively was the Library Services program implemented?</i></p>		
<p>Best instructional practices for emotional support, classroom organization, instructional support and student engagement are evident across instruction in APS libraries.</p>	<p>1a To what degree are best instructional practices evident in K-12 library programs?</p>	<p>Existing Tools, Data Sources:</p> <ul style="list-style-type: none"> • Observations using the Classroom Assessment Scoring System (CLASS)
<p>Library instruction aligns with the guidelines set forth in the Virginia Standards of Learning (SOLs) and the American Association of School Librarians (AASL) Standards for 21st Century Learners.</p>	<p>2a To what extent is observed Library instruction aligned with the state standards and the AASL Standards? 2b To what extent do librarians collaborate with teachers and ITCs to instruct students on information literacy and research skills? 2a To what extent do librarians model and integrate technology, internet safety, and digital citizenship into instruction?</p>	<p>Developed Tools</p> <ul style="list-style-type: none"> • Library instructional observation checklist • Library non-instructional observation checklist • Staff survey
<p>All students and teachers have access to current, reliable, and relevant print and digital resources that support the APS curriculum and the Virginia SOLs, as well as their own interests and needs.</p>	<p>3a To what extent are collections updated to national standards, aligned to Virginia SOLs, and support the diverse population served? 3b Do teachers and students have access to and utilize print and digital resources provided by APS, both at school and remotely? 3c Do students, classroom teachers, and administrators report satisfaction with their library experience?</p>	<p>Existing Tools, Data Sources:</p> <ul style="list-style-type: none"> • Collection analysis data (Follet/Mackin) • Usage statistics for online resources • Circulation statistics <p>Developed Tools:</p> <ul style="list-style-type: none"> • Staff survey • Student survey

Program/Service Objective	Program/Service Question	Data Source(s)
Evaluation Question 1: Implementation <i>How effectively was the Library Services program implemented?</i>		
The school library provides opportunities for students to participate in programs that <ul style="list-style-type: none"> • support the school’s mission, • promote advocacy and a sense of ownership for the library program, and • promote a love of reading. 	4a How does library programming support building-level goals? <ul style="list-style-type: none"> • Instructional Programs/Activities Offered • Participation 	Existing Tools, Data Sources: <ul style="list-style-type: none"> • Description of programs/activities offered at libraries • Library program/activity participation data
APS manages LS hardware and software resources effectively.	5a Do technology resources adequately and efficiently meet the needs of APS libraries? <ul style="list-style-type: none"> • Circulation management system, (tools for data collection, reporting, and inventory) • Database collection • Purchasing • Repairs 5b Do librarians report satisfaction with division-level support, resources, etc.?	Existing Tools, Data Sources: <ul style="list-style-type: none"> • Service and repair requests Developed Tools: <ul style="list-style-type: none"> • Staff survey
APS manages LS facilities effectively.	6a Do APS facilities resources adequately and efficiently meet the needs of APS libraries? <ul style="list-style-type: none"> • flexibility and appropriateness of spaces 	Developed Tools: <ul style="list-style-type: none"> • Staff survey • Library non-instructional observation checklist
APS manages the LS budget and purchasing/cataloguing process effectively.	7a Does the APS budget and purchasing process adequately and efficiently meet the needs of APS libraries?	Existing Tools, Data Sources: <ul style="list-style-type: none"> • Description of book purchasing process Developed Tools: <ul style="list-style-type: none"> • Staff survey • A/V equipment purchasing data

Program/Service Objective	Program/Service Question	Data Source(s)
Evaluation Question 2: Outcomes <i>What were the outcomes for the targeted populations?</i>		
All students are information literate and able to locate, use, and evaluate information in various media formats.	8a To what extent are students information literate? <ul style="list-style-type: none"> • scholarly research • source evaluation • locating, using, and evaluating information 	Existing Tools, Data Sources: <ul style="list-style-type: none"> • TRAILS assessment for grades 3, 6, 9, and 12
All teachers and students practice ethical and legal use of technology and information and behave accordingly.	9a To what extent do teachers and students demonstrate digital citizenship, including ethical and legal use of technology and information?	Existing Tools, Data Sources: <ul style="list-style-type: none"> • Youth Risk Behavior Survey • APS discipline data • TRAILS Developed Tools: <ul style="list-style-type: none"> • Staff survey • Student survey
Students regularly visit the library during non-classroom hours: before school, during lunch, and after school.	10a Are school libraries available and staffed before, during, and after school hours? 10b What percentage of the school population uses the library outside of scheduled class times?	Existing Tools, Data Sources: <ul style="list-style-type: none"> • Library hours • Library visit data
Students develop an appreciation for recreational reading.	11a To what extent do students read for recreation on their own time?	Existing Tools, Data Sources: <ul style="list-style-type: none"> • Assets Survey • PISA Assessment

Study Measures

Primary data sources were used to inform this evaluation and are described in detail.

Program Implementation —Staff Survey

During the winter of 2013-14, a survey about library services was administered to multiple staff groups. Respondents reflected on various aspects of the program, including student and staff use of the school library, collaboration between librarians and other staff members, and satisfaction with school library services and resources. Survey results can be found in Appendix B1.

Program Implementation —Student Survey

During the spring of 2014, a survey about library services was administered to a sample of students in grades 3, 6, 9, and 12. Students reflected on various aspects of the program, including their use of the school library, their knowledge of library resources and relevant skills, and their satisfaction with their school library. Survey results can be found in Appendix B2.

Program Implementation—Library Hours

In the fall of 2014, the LS Office asked librarians to provide their school hours and library hours to determine the extent to which libraries are open before and after school. Librarians also provided information about students' access to the library during lunch. Specific information about library hours and accessibility during lunch can be found in Appendix C1.

Program Implementation—Library Visits

During the 2013-14 school year, school librarians were asked to report quarterly on the number of students that had visited the library each month outside of scheduled class time. A summary of this data can be found in Appendix C2.

Program Implementation— Usage Statistics for Online Resources

The LS Office provided usage statistics for all of its online resources during the 2012-13 and 2013-14 school years, along with a description of each online resource. This data can be found in Appendix C3.

Program Implementation— Circulation statistics

The LS Office provided circulation data for the 2013-14 school year. A summary of this information can be found in Appendix C4.

Program Implementation— Library Programs and Activities

The Office of Planning and Evaluation collected information from APS librarians on a quarterly basis during the 2013-14 school year about library programs and activities. The resulting submissions were aggregated by Hanover Research in August 2014. The full report from Hanover can be found in Appendix C5.

Program Implementation— Audio/Visual Equipment Purchasing

The Office of Planning and Evaluation collected information from APS librarians on a quarterly basis during the 2013-14 school year about audio/visual equipment purchases. Information collected included the time between an order being placed and the item arriving, funding sources, and types of items ordered. This information was summarized by Hanover Research in August 2014. The full report from Hanover can be found in Appendix C5.

Program Implementation— Collection analysis

Collection analysis data for the 2013-14 school year was provided by the LS Office, which received the analysis from the library services company Follett. The collection analysis includes information on the age of the collection and on the number of items per student based on the schools' student enrollment. A summary of this information can be found in Appendix D1.

Program Implementation— Service and Repair Requests

The Help Desk provided the Office of Planning and Evaluation with a list of all service and repair requests submitted by library staff during the 2013-14 school year. An analysis of this data can be found in Appendix D2.

Program Implementation— Book Purchasing process

The LS Office, with input from the Finance Office, provided an outline of the book purchasing process for APS libraries. This outline can be found in Appendix D3.

Program Implementation—Observations of Teacher-Student Interaction Using CLASS

In 2010–11, APS adopted the Classroom Assessment Scoring System (CLASS) protocol to observe teacher-student interactions for all program evaluations. CLASS was developed at the University of Virginia’s Curry School of Education and provides a common lens and language focused on classroom interactions that encourage student learning. The Office of Planning and Evaluation recruited administrators and retired teachers to become certified CLASS observers through in-depth training provided by the University of Virginia.

Because of the varying instructional roles of school librarians, observations of library instruction were conducted at the elementary and middle school levels only. In the fall of 2013, certified CLASS observers visited all libraries at the elementary and middle school level. CLASS observers were instructed to conduct observations while librarians provided direct instruction to visiting classes. One middle school library had two librarians; both were observed separately at that school.

CLASS domains and dimensions are described in detail in Appendix E1. The alignment between CLASS dimensions and APS best instructional practices can be found in Appendix E2. Details on LS CLASS scores by level can be found in Appendix E3.

Program Implementation— Library Services Observation Checklists

Two observation checklists were developed for this evaluation—one to assess instruction at the elementary and middle school levels and one to evaluate the overall library setting at the middle and high school levels. The instructional checklist was based on *Empowering Learners: Guidelines for School Library Programs*, a publication of the American Association of School Librarians (AASL)³, and was designed to capture whether best practices were being used during instruction provided by the librarian.

The non-instructional checklist was designed to capture whether best practices for school libraries were evident in the library setting. For this checklist, the observer walked around the library to observe physical elements such as shelving, as well as behaviors such as staff interactions with students.

The results of both checklists can be found in Appendix E4.

³ <http://www.ala.org/aasl/>

Student Outcomes— Tool for Real-time Assessment of Information Literacy Skills (TRAILS)

The Tool for Real-time Assessment of Information Literacy Skills (TRAILS) is an online assessment developed at Kent State University. The goal of the test is to identify strengths and weaknesses in students' information-seeking skills. The TRAILS test was administered to a sample of APS students in 3rd, 6th, 9th, and 12th grade during the spring of 2014. TRAILS results can be found in Appendix F1.

Student Outcomes— Discipline Incidents (Inappropriate Use of Technology)

The Office of Planning and Evaluation analyzed discipline data from the student information system to determine the type and extent of discipline incidents related to inappropriate use of technology. This information is summarized in Appendix F2.

Student Outcomes— Youth Risk Behavior Survey

The Office of Planning and Evaluation summarized student responses to the 2013 Youth Risk Behavior Survey (YRBS) related to cyberbullying. This summary can be found in Appendix F2.

Student Outcomes— Developmental Assets Survey

The Office of Planning and Evaluation summarized student responses to the 2009 and 2012 Developmental Assets Survey regarding reading for pleasure. This summary can be found in Appendix F3.

Student Outcomes— Programme for International Student Assessment

The Office of Planning and Evaluation summarized student responses regarding reading habits and strategies on the 2014 PISA assessment administered to 15-year-old students at APS comprehensive high schools. This summary can be found in Appendix F3.

SECTION 2: FINDINGS

This section presents the evaluation findings in the areas of program implementation and outcomes.

Evaluation Question #1:

How effectively was the Library Services program implemented?

To address this question, the evaluation focused on several areas: student and staff access to and use of school libraries, library operations and resources, and library instruction.

Access and Use

APS libraries aim to be an integral part of each school community by providing programming and resources relevant to the needs of students and staff. This section explores the various types of programming offered at APS libraries, the level of collaboration between librarians and other school staff, the availability of the library and use of library resources, user feedback about their library experiences, and findings from observations of library services best practices.

Library Programming

One goal of APS school libraries is to provide opportunities for students to participate in programs that support the school's mission, promote advocacy and a sense of ownership for the library program, and promote a love of reading. Library programming refers to events and actions above and beyond the daily instruction and activities of the librarian, designed to increase literacy and enjoyment of reading. This does not include those literacy/reading activities that are coordinated by other school staff (which the library staff are often involved in but are not directly a part of their core services). During the 2013-14 school year, the Office of Planning and Evaluation administered a quarterly survey to librarians in order to capture the various types of programs and activities offered at school libraries throughout the district. The resulting submissions were aggregated by Hanover Research in August 2014.

Librarians noted 291 student- and family-centered programs in 2013-14, accounting for more than 2,000 hours of contact time with students and families. Elementary school libraries appear to be more actively involved in providing extracurricular programming than either middle school or high school libraries. School librarians reported anywhere from one to 28 programs in the 2013-2014 school year, with the mean number of programs per school varying by level from 11 per elementary school, seven per middle school, and four per high school.⁴ This variation by level is most likely due to the developmental needs of younger students and the challenges involved in secondary library programming when juxtaposed with the large number of outside commitments of older students.

At the elementary level, family programs (n=46), literacy activities (n=35), recreational reading programs (n=32), and book clubs (n=29) were the most commonly reported activities. In particular, family programs included a range of literacy, cultural, and arts programming, generally held during the

⁴ For the purposes of this analysis, the Stratford Program was coded at the elementary level and H-B Woodlawn was coded at the high school level.

evenings. In addition, literacy activities at elementary schools included dedicated literacy celebrations, student presentations, and writing workshops.

At the middle school level, recreational reading (n=5), literacy activities (n=4), book clubs (n=4), and social activities (n=4) were the most commonly reported programs. Literacy activities at the middle school level included reading challenges, group reading events, and opportunities for students to share their writing in front of an audience of their peers. Social activities generally celebrated student participation in school reading clubs and public library summer reading programs.

At the high school level, books clubs (n=3), author visits (n=3), recreational reading (n=2), and technology and literacy programs (n=2) were the most commonly reported activities. These events aimed to promote student engagement with books through ongoing club meetings, discussions with authors, writing workshops, and a drawing for prizes that encourage reading.

Table 4 lists the number of programs falling into each category by level.

Table 4: Frequency of Library Programming by Type and Level

Library Program Type	Elementary (n=23)	Middle (n=5)	High (n=4)	Total (n=32)
Family programs	46	2	-	48
Literacy activities	35	4	-	39
Recreational reading programs	32	5	2	39
Book clubs	29	4	3	36
Author visits	19	3	3	25
Technology and literacy programs	18	3	2	23
Book fairs	16	3	-	19
Social activities	13	4	1	18
Public library collaborations (except visits to the public library)	13	-	1	14
Library aide/assistant programs, or librarian-for-a-day	6	3	-	9
Guest speakers (not authors)	7	1	-	8
Field trips	5	1	1	7
Adults discussing the library or planning activities	2	1	1	4
Other orientations or activities	1	-	1	2
Total	242	34	15	291

The full analysis of library programming by Hanover Research can be found in Appendix C5.

Collaboration

In a survey administered in the winter of 2013-14, librarians were asked about their level of collaboration with teachers and with Instructional Technology Coordinators (ITCs) at their school.

Teachers and ITCs were also asked about their level of coordination with the school librarian. Areas of collaboration explored in the survey were:

- Research
- Lessons to support curriculum
- Book talks
- Locating instructional resources
- Technology guidance
- Book selection for students
- Promoting student growth
- Internet awareness
- **ITCs only:** A/V budget (e.g. equipment purchases)

Librarians reported frequent collaboration with teachers – either *once a week* or *once a month* – at high rates for most areas of collaboration. One hundred percent of librarians reported frequent collaboration in the areas of **locating instructional resources** and **book selection for students**. Between 70-95% of librarians reported frequent collaboration in the areas of **research, lessons to support curriculum, technology guidance, and promoting student growth**. **Table 5** lists the percentage of librarians reporting frequent collaboration with teachers in all areas.

Table 5: Percentage of Librarians Reporting Frequent Collaboration with Teachers

Area of Collaboration	Elementary	Secondary
Research	77%	83%
Lessons to support curriculum	95%	75%
Book talks	64%	64%
Locating instructional resources	100%	100%
Technology guidance	96%	73%
Book selection for students	100%	100%
Promoting student growth	95%	75%
Internet awareness	41%	67%

Large groups of elementary teachers reported that they collaborate with librarians in the following areas frequently - either *once a week* or *once a month*: **book selection for students** (52%), **locating instructional resources** (43%), **promoting student growth** (38%), and **lessons to support curriculum** (33%). A majority of elementary teachers reported that they collaborate with librarians in the following areas just *once or twice a year* or *never*: **research** (58%), **book talks** (61%), **technology guidance** (59%), and **internet awareness** (72%).

Secondary teachers were generally less likely than elementary teachers to report frequent collaboration with their school’s librarian. A majority of secondary teachers reported that they collaborate with librarians *once or twice a year* or *never* in each area included in the survey, ranging from 55% of middle school teachers selecting these frequencies for **technology guidance**, and 85% of both middle school and high school teachers selecting these frequencies for **book talks**. The areas of collaboration for which secondary teachers were most likely to report frequent collaboration with librarians – either *once a*

week or once a month – were: **book selection for students** (27% middle school, 15% high school) and **locating instructional resources** (20% middle school, 21% high school).

Librarians and ITCs reported relatively high levels of frequent collaboration in the areas of **locating instructional resources, technology guidance, promoting student growth, internet awareness, and A/V budget**. A/V budget was the area for which most respondents cited some level of collaboration, with just 0-8% of respondents reporting that they never collaborate in this area. **Table 6** shows the percentage of respondents reporting that they collaborate *once a week or once a month* in each of these areas.

Table 6: Areas of Frequent Collaboration between Librarians and ITCs

Area of Collaboration	Elementary ITCs (n=18)	Elementary Librarians (n=22)	Secondary ITCs (n=8)	Secondary Librarians (n=12)
Locating instructional resources	53%	41%	37%	33%
Technology guidance	59%	78%	50%	84%
Promoting student growth	45%	50%	38%	33%
Internet awareness	36%	52%	24%	41%
A/V budget	39%	41%	50%	33%

More information about librarian collaboration with teachers and ITCs can be found in Appendix B1.

Library Availability and Use

Library Hours

One goal of the LS program is that students regularly visit the library during non-classroom hours: before school, during lunch, and after school. In the fall of 2014, librarians were asked to provide their school hours and library hours to determine the extent to which libraries are open before and after school. The Stratford library is not included in this data because Stratford has a part-time librarian.

All libraries in comprehensive schools are open beyond school hours, although there is variation in the timing and amount of this extra time. All secondary schools and 19 elementary schools are open before school five days a week. One elementary school is open before school four days a week, and two are not open before school. Secondary schools are open after school either three (two schools), four (one school), or five days a week (8 schools). Nineteen elementary schools are open after school five days a week, one is open after school two days a week, and two are not open after school.

Table 7 shows the average number of minutes school libraries are open to students and staff beyond school hours (before and after school) by grade level.

Table 7: Average Daily Minutes the Library is Open beyond School Hours by Grade Level

Level	N	Minimum	Maximum	Mean	Std. Deviation
Elementary	22	19	166	59.7	35.8
Middle School	5	67	96	83.0	12.5
High School	6	40	123	76.8	28.8
Total	33	19	166	66.4	32.9

Librarians also provided information about students’ access to the library during lunch. **Table 8** shows the type of access that students have to the library during their lunch period. The following categories are included:

- **Free access:** An unlimited number of students may visit the library
- **Limited access:** A limited number of students may visit the library
- **No access:** Students do not visit the library during their lunch period
- **Specific activities only:** Students may visit the library for a specified set of activities; e.g., to check out books, or to participate in book clubs

Access can be limited by staffing. For example, at the elementary level, library staff are often required to close the library so that they can do “duty.” Schedules also vary. Some elementary assistants, who are A-scale, are contracted for longer hours than the library secretaries at secondary, who are G-scale. Libraries at schools with two librarians are able to stagger the working hours so that the library has longer coverage beyond the school day, and middle school librarians, unlike their high school and elementary counterparts, are often given stipends to keep the library open after school.

The one high school listed below that has limited access during the lunch period is an alternative program where there is no librarian, only a library secretary, and there are irregular student schedules.

Table 8: Student Access to Library during Lunch Period

Level	N	Student Access during Lunch
Elementary	8	Free access
	3	Limited access
	2	No access
	5	Specific activities only
	5	No information provided
Middle School	4	Free access
	1	Limited access
High School	5	Free access
	1	Limited access

More information about library hours can be found in Appendix C1.

Student Visits to the Library

One of the goals of the APS LS program is that students regularly visit the library during non-classroom hours. During the 2013-14 school year, school librarians were asked to report the number of students who had visited the library each month outside of scheduled class time. This information was then converted into daily averages, taking into consideration the number of days school had been in session at each school during that month (variations occurred due to teacher work days, parent conference days, and Barcroft’s modified schedule). Some schools did not report their monthly visits for each month; in those cases, the daily average was calculated just for those months that were reported.

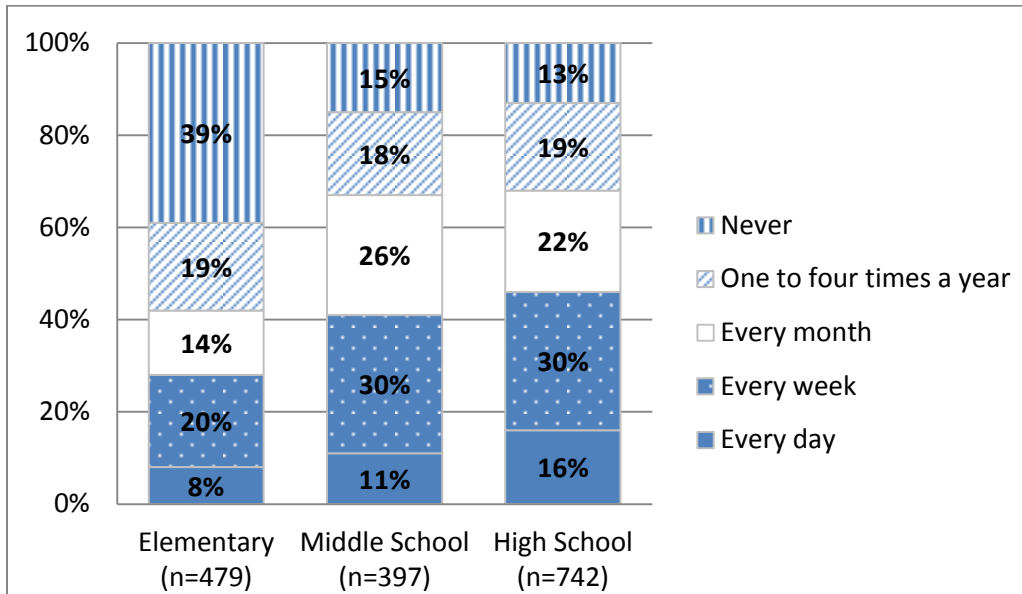
There was substantial variation in the number of average student visits among schools. **Table 9** displays the range of average daily student visits by school level and population size. At the elementary level, average daily visits in smaller schools ranged from 4 to 13; average student visits in mid-size schools ranged from 1 to 51; and average student visits in larger schools ranged from 11 to 34. At the middle school level, average daily visits in smaller schools ranged from 28 to 104, while average daily visits at the larger schools ranged from 151-190. Average daily visits at comprehensive high schools ranged from 157 to 318.

Table 9: Average Daily Student Visits to the Library by School Type

School Type	N	Student Population	Average Daily Student Visits
Small elementary schools	5	250-450	4-13
Mid-size elementary schools	12	451-650	1-51
Large elementary schools	5	651-750	11-34
Small middle schools	3	751-950	28-104
Large middle schools	2	951-1150	151-190
Comprehensive high schools	3	1,450-2,000	157-318

Information about student visits to the library was also collected as part of a survey administered to a sample of students in grades 3, 6, 9, and 12 during the spring of 2014. **Figure 1** shows the frequency with which students reported that they visit the school library on their own, without their class. The proportion of students reporting that they visit the library on their own increases with each grade level, with just 28% of third graders reporting that they visit the library *every day* or *every week*, 41% of sixth graders reporting they visit the library that frequently, and 46% of high school students (9th and 12th graders) reporting that frequency.

Figure 1: How often do you visit the school library without your class? In other words, how often do you go to the school library by yourself?



Secondary students who reported that they never visit the library on their own were asked why they don't use the library on their own. Among both middle school and high school students, the most popular answer was "I don't need to" (35% of middle school students and 44% of high school students). Twenty-two percent of middle school students, and 12% of high school students, selected "the hours don't work for me," and 12% of high school students selected "It doesn't have what I need/want."

Students were also asked their level of agreement with the statement, "The school library is open when I need to use it." Among elementary students, 94% selected either "yes" or "sometimes." Among secondary students, 77% of middle school students selected either "strongly agree" or "agree," while 84% of high school students selected these responses.

The full report on library visits can be found in Appendix C2. The student survey report can be found in Appendix B2.

Satisfaction with School Libraries

Survey results reveal high levels of satisfaction with the school library among staff and students. Students, teachers, and principals were asked to indicate their level of agreement with a series of statements about the school library regarding whether it is a pleasant place to visit, is easy to use, has the books students are looking for (students), has a current collection (staff), and whether the librarian is helpful. **Table 10** shows the percentage of students, teachers, and principals agreeing with each statement. Elementary students selected either "yes" or "sometimes," while all other respondents selected either "strongly agree" or "agree." The level of agreement was generally very high among all groups, with between 83-100% of respondent groups agreeing with each statement. The one exception was secondary students' level of agreement with the statement, "The school library has the books I am looking for," with 68% of both middle and high school students indicating agreement.

Table 10: Student and Staff Level of Agreement with Positive Statements about School Library

Statement	Elementary		Elementary Principals (n=19)	Middle School		High School		Secondary Principals (n=7)
	S (n=476)	T (n=502)		S (n=396)	T (n=184)	S (n=743)	T (n=224)	
The school library is a pleasant and comfortable place to visit.	98%	97%	100%	89%	94%	92%	87%	100%
Students: The school library is easy to use. Staff: The school library is accessible and easy to use for all students.	97%	95%	100%	86%	89%	88%	83%	100%
Students: The school library has the books I am looking for.	94%	n/a	n/a	68%	n/a	68%	n/a	n/a
Staff: The library collection is current and aligns with the curriculum I teach.	n/a	96%	90%	n/a	92%	n/a	84%	100%
The school librarian is helpful.	99%	95%	100%	90%	93%	83%	87%	100%

Respondents were also asked to share the best thing about their school library, as well as what they would change about their school library. These open-ended responses were then categorized into common themes. **Table 11** lists the most common themes occurring in student responses to the question, “What is the best thing about your school’s library?” Many students at all levels remarked on the selection of books and the helpfulness and friendliness of library staff. Large groups of secondary students remarked on the welcoming environment.

Table 11: Common Themes among Student Responses - What is the best thing about your school's library?

Theme	Elementary (n=569)*	Middle School (n=540)	High School (n=877)
Comfortable/Welcoming environment/space	11	72	193
Selection and availability of books/resources	321	169	153
Librarians/Staff are helpful/friendly	62	97	102
Computers/technology	11	42	158
Quiet place to read/study/do work	39	64	141
Easy to find books and/or use resources	37	39	20

*number of open-ended responses; students may have listed more than one answer

Table 12 lists the most common themes occurring in student responses to the question, **“What would you change about your school’s library?”** The most common response among all grade levels was “nothing.” Other common responses addressed the book selection, library collection, and/or resources; and the physical space of the library. Common responses among high school students addressed computers and technology, typically expressing a desire for more access to computers or frustration with technical problems.

Table 12: Common Themes among Student responses - What would you change about your school's library?

Theme	Elementary (n=438)*	Middle School (n=382)	High School (n=722)
Nothing	164	115	187
Books	126	n/a	n/a
Collection/Resources	n/a	111	98
Space	38	42	122
Computers/Technology	19	20	119
Accessibility/Hours	20	24	48

*number of open-ended responses; students may have listed more than one answer

Among staff, the most popular theme occurring in response to the question, **“What is the best thing about your school’s library?”** was library staff. More than half of elementary, middle, and high school teachers who responded to this question listed the librarian or library staff in their response. Other common themes were the welcoming environment and the library collection.

Staff responses to the question, **“What would you change about your school’s library?”** were similar across staff types. Large numbers of teachers at all levels reported that they would not change anything about the school library (49 elementary, 29 middle school, and 27 high school). Other popular responses among teachers included

- Increase/update the collection (50 elementary, 11 middle school, 15 high school)
- Add books/resources for lower and/or higher level readers (20 elementary, 8 middle school)
- Changes to physical space/layout (54 elementary, 10 middle school, 28 high school)
- More technology (16 elementary, 22 middle school, 9 high school)

- Accessibility (15 middle school, 8 high school)

Librarians’ responses to this question focused heavily on physical space and technology. These areas are further explored in the Operations and Resources section (see page 40 for information on Facilities and page 36 for information on Resources for School Libraries).

More information about satisfaction with school libraries can be found in Appendices B1 and B2.

Non-Instructional Observations

In the fall of 2013, non-instructional observations were conducted at all secondary school libraries. These observations were designed to capture whether best practices for school libraries were evident in the library setting. A retired secondary librarian was hired to conduct all the observations. During these observations, the observer walked around the library to observe physical elements such as shelving, as well as behaviors such as staff interactions with students. In some instances, the observer may also have asked the librarian questions. **Table 13** lists the non-instructional observation items that relate to student access to and use of the library, and the percentage of observations rated either “effective” or “highly effective” for each item. Two items were rated effective or highly effective in 100% of the observations: **“All students and student groups have access to the library,”** and **“Librarian provides adequate resources and services to support instructional goals.”** Other items were rated effective/highly effective in 80-90% of observations, with one just one item at 70%: **“Students have flexible and equitable access to resources that support their academic and diverse learning needs.”**

Table 13: Percentage of Secondary Libraries Rated Effective/Highly Effective

Library Observation Item (Number of Observations: 10)	Effective/ Highly Effective
All students and student groups have access to the library.	100%
Procedures for circulation and library scheduling have been posted, providing for adequate access to the library’s facilities and resources.	80%
Library Management policies are posted in various locations throughout the library for student adherence. Librarian ensures student adherence by restating the policy when necessary.	90%
The library is designed to meet the specific needs of the educational disciplines and diverse school population. The librarian connects content to other content areas, students’ experiences and interests, or current events by designing book displays, bulletin boards, and fliers.	90%
Students have flexible and equitable access to resources that support their academic and diverse learning needs. <ul style="list-style-type: none"> • Students work independently on instructional tasks in designated areas and at computer stations. • Student traffic flows smoothly entering and exiting the library. • Student visits include looking for materials on stacks. • Students ask librarian for assistance with locating information. 	70%

Library Observation Item (Number of Observations: 10)	Effective/ Highly Effective
Librarian provides adequate resources and services to support instructional goals. <ul style="list-style-type: none"> • Resources are retrieved and reserved for students and teachers. • Librarian offers assistance in locating information. • Librarian works directly with students to complete assignments. 	100%
Librarian uses effective communication skills (verbal, written, and nonverbal) to fully explain concepts in a direct and efficient manner while achieving understanding from students and others. Interactions between the librarian, students, classroom teachers, and others are polite and respectful, reflecting warmth and sensitivity to learning needs, and differences (ex. cultural).	90%

The full report on the non-instructional observations can be found in Appendix E4.

Use of Print and Digital Materials

To gauge the extent to which teachers and students have access to and utilize print and digital resources provided by APS, this evaluation includes an analysis of library circulation statistics and usage statistics for online resources provided through the school library. The data presents a broad picture of customer use of library resources, but deeper analysis is prevented by limitations in the data. Neither the circulation statistics nor the online usage statistics provide information about the number or type of users. This means that while it is possible to measure the number of items checked out of a library or the number of times an online resource was accessed, it is not possible to know how many individual users are checking items out of the library or accessing an online resource. In addition, information is not available about student users vs. staff users, and - in the case of online resources - where resources were accessed; e.g., at an elementary school, at a high school, or offsite.

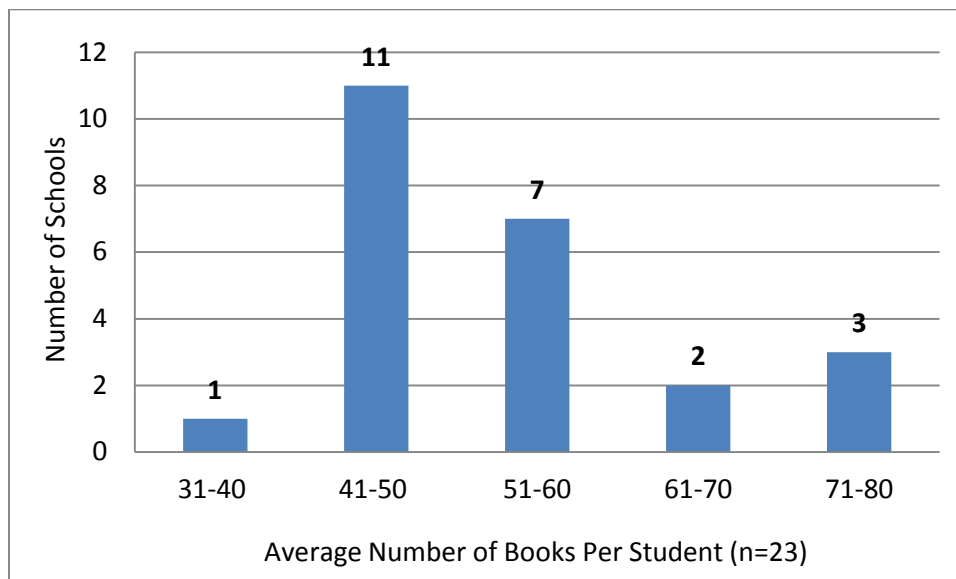
Updates to the circulation system are underway during the 2014-15 school year; these may allow for deeper analysis of circulation statistics. In September 2014, APS launched a new circulation system called Follett Destiny, as well as a new eContent platform, MackinVIA. As of the publication of this evaluation, MackinVIA is still in the process of being configured for LS by Information Services. Both of these new systems allow APS to count database access “hits” by school, but this access to databases is still in transition, and it may be several years before all schools move to the new model. The new systems may also allow schools to disaggregate the data by grade level. Circulation statistics by demographics (such as gender or race/ethnicity) will also be available; this functionality is in the process of being configured by Information Systems. (Note that the Commonwealth of Virginia has legislation in place governing the use of library circulation systems which prohibits districts from accessing the circulation statistics of individual users).

Circulation Statistics

Circulation statistics are collected from each school library to assess utilization within several different circulation categories. In 2013-14, an average of 53 items per student were circulated in elementary schools (including Pre-K students), 15 per student in middle schools, and six per student in high schools. Further analysis shows some variation among schools in the number of library items circulated per

student. At the elementary level, the average number of items circulated per student ranged from 37-80 at different schools. **Figure 2** shows the number of elementary schools within different ranges of items circulated. Eleven schools fall into the range of 41-50 items circulated per student while three schools had libraries that circulated between 71-80 items per student.

Figure 2: Number of Schools within Specified Ranges for the Number of Items Circulated Per Student in Elementary Schools



At the secondary level, most school libraries circulated between 1-10 books per student, four circulated between 11-20 books per student, and one circulated between 21-30 books per student.

The most popular circulation categories at the elementary level were Easy/Picture Book/Quick Book (average of 9,380 items circulated per school), fiction (9,210), and non-fiction (7,963). The most popular circulation categories at the middle school level were fiction (6,400), non-fiction (2,471), and graphic novel (1,311). At the high school level, the most popular circulation categories were fiction (1,861) and non-fiction (1,071).

More information about circulation statistics can be found in Appendix C4.

Use of Online Resources

In 2013-14, there were 20 online resources available through APS libraries. Students and staff at all levels are able to use these online resources to support learning and instruction. These resources include:

- Encyclopedias such as **Britannica** and **World Book**
- Journalism resources such as **CQ Researcher** and **ProQuest Professional**
- Digitized content covering specific topics such as **CultureGrams** (world cultures) and **Pebble Go—Earth and Space** (elementary scientific concepts)
- Resources that provide access to multiple databases such as **Gale Cengage** and **SIRS Knowledge Source**

- **Teen Health & Wellness**, which provides middle school and high school students with unbiased, standards-aligned, curricular and self-help support
- **TeachingBooks**, which provides instructional materials related to teaching books, including author videos, booklists, and lesson plans

Usage statistics indicate an increase in the number of times any online resource was accessed between 2012-13 (409,095) and 2013-14 (415,834), although circulation statistics for the databases in May and June of 2014 are not available due to the transition of circulation systems in the May-August 2014. The most frequently accessed resources in 2013-14 were Britannica (130,383), Gale Cengage (126,865), Pebble Go—Animals (71,890), and Pebble Go—Biographies (33,895).

The student and staff surveys administered during winter/spring 2013-14 addressed whether students and staff use the school library’s webpage to access resources, and whether students possess specific research skills related to use of online databases. In response to the question, **“Do you use the school library’s webpage to access resources,”** 61%, 67% and 30% of elementary teachers, ITCs, and principals responded yes, respectively. At the secondary level, a smaller percentage of teachers (46-47% middle/high) and ITCs (50%) responded yes, and a larger percentage of principals (43%) responded yes. Secondary students also responded to this question, with 64% of middle school students responding yes and 55% of high school students responding yes.

Students at all levels were asked if they know how to search for information online and use ACORN, the APS school library catalog. In addition, secondary students were asked if they know how to use a database and evaluate whether information they find online is a good source. Teachers were also asked if their students knew how to perform these tasks. **Table 14** shows the percentage of respondents indicating that students know how to perform these research tasks. In comparing elementary and middle school teachers’ perceptions to students’ perceptions, it is important to remember that students were surveyed only in 3rd, 6th, 9th, and 12th grades, whereas teachers of all grade levels were surveyed.

Table 14: Percentage of Respondents Indicating that Students Know How to Perform Specific Tasks

Response Group	N	Search for information online	Use ACORN	Use a database	Evaluate information online*
Elementary Students (3rd Grade)	476	88%	79%	n/a	n/a
Elementary Teachers (all grades)	502	50%	46%	n/a	n/a
Elementary Librarians	21	86%	90%	n/a	n/a
Middle School Students (6th Grade)	396	95%	90%	74%	82%
Middle School Teachers (all grades)	184	77%	58%**	72%**	77%
High School Students (9th & 12th Grade)	739	96%	82%	74%	79%
High School Teachers (all grades)	222	83%	47%**	50%**	83%
Secondary Librarians	13	100%	100%	85%	92%

*Staff question: “Evaluate information online”

Student question: “Evaluate whether information you find online is a good source (for example, is it authentic and accurate?)”

**25-35% of teachers responded, “I don’t know” to these questions.

More information about online usage statistics can be found in Appendix C3. More information on survey responses can be found in Appendices B1 and B2.

Summary of Findings for Access and Use:

APS school libraries offer a variety of programming. Popular types of activities were family programs at the elementary level, recreational reading activities at the middle school level, and book clubs and author visits at the high school level. The mean number of programs per school varied by level from 11 per elementary school, seven per middle school, and four per high school.

All libraries in comprehensive schools are open beyond school hours. Elementary school libraries are open anywhere from 19-166 minutes beyond school hours, middle school libraries 67-96 minutes, and high school libraries 40-123 minutes. All secondary schools and many elementary libraries are open during lunch but there is variation in the type of access students have. There is a lot of variation in the average daily number of student visits, especially at the elementary level. The average number of student visits increases by level.

There are high levels of satisfaction with school libraries among students and staff. Most students would not change anything about their school's library. Survey respondents are very positive about library staff and the welcoming environment of the library.

Secondary library observation items relating to student access to and use of the library indicate high levels of effectiveness (between 80-100%) in all areas except flexible and equitable access to resources, which was rated effective/highly effective for 70% of libraries.

In 2013-14, an average of 53 items per student were circulated in elementary schools, 15 per student in middle schools, and six per student in high schools. There is variation among schools in the number of library items circulated per student. Online resource usage statistics indicate an increase in the number of times any online resource was accessed between 2012-13 (409,095) and 2013-14 (415,834), although data was not available for May-June 2014. Between 55% (high school) and 64% (middle school) of secondary students reported using the school library's webpage to access resources, and 74% of both middle school and high school students reported that they know how to use a database.

Operations and Resources

The Personalized Device Initiative, launched by APS in the 2014-2015 school year, will have significant impact on library operations. The data presented in this section was collected previous to this initiative, and outcomes may change as we move forward to a time when every student has their own device. A good example of this is access to eContent both for research and choice reading. It is expected that there will be a dramatic increase in the use of databases and eBooks once students are able to install personalized apps which they can interact with on a frequent basis. A similar growth pattern should be seen with the catalog resources, such as "recommended lists" as the students will have those materials literally at their fingertips.

Collection Analysis

Collection analysis data for the 2013-14 school year was provided by the library services company Follett. This analysis is based on the list of current holdings, and is therefore dependent on the accuracy of that list. Given the time elapsed since the last district-wide inventory in 1992, the collection analysis data should be interpreted with caution. The accuracy of this data will most likely increase after an ongoing inventory is completed during the 2014-15 school year.

The collection analysis addresses two aspects of library collections: number of books per student, and age of collection. According to the Follett analysis, in 2013-14, elementary schools had an average of 30 books per student, middle schools had an average of 20 books per student, and high schools had an average of 17 books per student.

The APS LS program does not have established guidelines for age of fiction and non-fiction collections, but a general expectation is that non-fiction collections will be newer than fiction collections. The average age of the elementary collection is 2000 for non-fiction books and 1999 for fiction/other. Middle school non-fiction collections have an average age of 1999 while the fiction/other collections have an average age of 2001. The high school collections are generally older, with an average age of 1997 for non-fiction and 1998 for fiction/other.

For many years, the various library supervisors have asked for an age range of 15 years for the collection as a whole. For purposes of this evaluation, an analysis was conducted to determine the age ranges of specific categories within each school's collection. This analysis was based on guidelines provided by one of APS's for-profit book vendors, Follett, which shared suggested age ranges for specified nonfiction collection categories within the Dewey decimal system based on a California model.⁵ It should be noted that these guidelines are far more specific than the directives given to APS librarians over the past five or six years. **Table 15** shows the suggested age ranges for nonfiction printed publications by collection category, as well as the percentage of school collections at each level that fall within the suggested age range.

The majority of elementary schools have collections that are older than the suggested age range in all but two categories: The Arts, for which 78% of schools fall into the suggested age range, and Geography and History, for which 91% of schools fall into the suggested age range. Most middle school collections fall within the recommended age range in the categories of Generalities (60%), Philosophy and Psychology (60%), The Arts (80%), and Geography and History (80%), but outside of the recommended age range for all remaining categories. The high school collections were the most likely to fall outside of the recommended age ranges, with just one category, Geography and History, falling within the suggested age range for most schools (67%).

⁵<http://www.cde.ca.gov/ci/cr/lb/documents/weedingbrochure.pdf#search=crew%20method&view=FitH&pagemo de=none>

Table 15: Suggested Age Ranges of Nonfiction Printed Publications by Collection Category

Dewey Decimal Range	Description	Suggested Age	Percentage of School Collections within the Suggested Age Range		
			Elementary (n=23)	Middle School (n=5)	High School (n=6)
000	Generalities	2-10 years	48%	60%	17%
100	Philosophy & Psychology	10 years	35%	60%	17%
200	Religion	2-10 years	13%	0%	17%
300	Social Sciences	5-10 years	0%	40%	17%
400	Language	10 years	13%	20%	17%
500	Natural Sciences & Mathematics	5-10 years	30%	20%	17%
600	Technology	5-10 years	26%	40%	0%
700	The Arts	5-15 years	78%	80%	17%
800	Literature & Rhetoric	Flexible	n/a	n/a	n/a
900	Geography & History	15 years	91%	80%	67%

More information about library collections can be found in Appendix D1.

Technology Resources

The winter 2013/14 staff survey and the spring 2014 student survey asked respondents to indicate their level of agreement with two statements related to access to technology in the school library:

- **Staff:** Students have good access to technology in the school library.
- **Students:** I have good access to technology in the school library.
- **Staff:** The library staff is able to assist students and staff with technology.
- **Students:** The library staff is able to help me with technology.

Agreement with these statements was high among all respondent groups. Between 79% (elementary teachers) and 100% (secondary librarians and principals) of staff respondents indicated that they either “strongly agree” or “agree” that **students have good access to technology in the school library**. Eighty-three percent of middle school students, and 90% of high school students, also agreed with this statement.

Between 75% (secondary ITCS) and 88% (elementary ITCs, middle school teachers) of staff respondents indicated that they strongly agree/agree that **library staff is able to assist students and staff with technology**. Seventy-eight percent of middle school students, and 74% of high school students, agreed that library staff is able to help them with technology.

Computers and/or technology emerged as a positive theme among middle school and high school students' open-ended responses to the question, "What is the best thing about your school's library?" Forty-two middle school students and 158 high school students mentioned computers and/or technology in response to this question. One middle school student said, "I really like that I can rent a computer." A high school student said, "The best thing about my school's library it has enough computers."

Despite these positive responses, a desire for more/better technology was one of the most common themes that occurred in the open-ended responses to the question, "What would you change about your school's library?" Requests for more technology and/or computers were mentioned by 16 elementary teachers, 5 elementary ITCs, 5 elementary librarians, 2 secondary librarians, 22 middle school teachers, 9 high school teachers, and 119 high school students. Technology also came up as a theme in open-ended responses to the question, "What additional support would you like to see from the division?" which was asked only of librarians and principals. Three elementary principals and two elementary librarians requested more technology or more support for technology.

Resources for School Libraries

Circulation Management System

Librarians were asked their level of agreement with the statement, "**The circulation management system adequately meets the needs of my school's library.**" Agreement with this statement was low, with just 27% of elementary librarians and 33% of secondary librarians selecting "strongly agree" or "agree." Among those who disagreed, "strongly disagree" was selected by 36% of elementary librarians and 33% of secondary librarians. In open-ended responses, six elementary librarians and two secondary librarians requested an improved circulation system.

Changes to the circulation management system have been implemented since the staff survey was administered. In September 2014, LS launched a new circulation system, "Follett Destiny." More than a circulation system and patron catalog, this software exemplifies a new trend in library services – a portal that patrons can use for multiple purposes. The Destiny system allows library staff to circulate books, but also to create a host of reports and lists, as well as configure their catalog interface and permissions, which used to be purely in the domain of the central LS Office. For patrons, the catalog not only shows them the library's physical content, but gives them access to eBooks, eAudio, and databases. Patrons can also create book ratings and reviews as well as make lists, which can be shared in a variety of ways. MackinVIA is an additional platform offered by LS, which, like Follett Destiny, can give patrons access to eContent.

The full staff survey report can be found in Appendix B1.

Service and Repair Requests

Arlington Public Schools uses the Zendesk web-based incident management software to track technology-related service and repair requests. This service is referred to as "2847" within APS because of the associated service request phone number. "2847" tickets submitted by school-based and central

library services staff in 2013-14 were analyzed to identify the various types of library-related requests that were submitted and the length of time taken to resolve the issues.

Table 16 shows the number of library-related repair requests submitted in 2013-14, as well as the percentage of requests in each category that were resolved within one hour, within two days, within one week, and within 30 days. Most requests were resolved within two days in the categories of **circulation** (57%), **network services** (63%), and **telecom** (67%). These categories also had the highest percentage of requests that were resolved within one hour (21%, 30%, and 17% respectively). Three categories included a percentage of requests that took more than 30 days to resolve: **audio/video** (21%), **computer** (3%), and **printer services** (4%).

Table 16: Length of Time to Resolve “2847” Repair Requests

Repair Category	Number of “2847” Tickets	Within one hour	Within two days	Within one week	Within 30 days
Audio/Video	136	4%	28%	57%	78%
Computer	80	8%	44%	75%	97%
Circulation	14	21%	57%	86%	100%
Equipment pick up	15	0%	26%	59%	100%
Network services	27	30%	63%	70%	100%
Printer services	73	10%	46%	68%	96%
Software	23	4%	47%	73%	100%
Telecom	6	17%	67%	84%	100%

The winter 2013/14 staff survey asked respondents to indicate their level of agreement with the statement, **“The process for equipment repairs adequately meets the needs of my school’s library.”** At the elementary level, agreement with this statement was low among librarians (15% selecting “strongly agree” or “agree”), higher among ITCs (39%), and highest among principals (60%). Secondary librarians were much more likely than their elementary counterparts to respond positively (59% “strongly agree” or “agree”), while secondary ITCs and principals responded similarly to their elementary counterparts (37% and 57%, respectively).

More information about service and repair requests can be found in Appendix D2. The staff survey report can be found in Appendix B1.

Budget and Purchasing

The process for purchasing books can take place at any point during the year, but once initiated by the librarian there are multiple steps that take place prior to the purchased books arriving at the school library. A detailed description of the book purchasing process was provided by the LS Office with input from the Finance Office. **Table 17** shows the multi-step process that takes places each time a librarian purchases books for his/her school library. Estimated times for each step are included but may vary depending on the time of year.

Table 17: Book Purchasing Process

Book Purchasing Step	Book Purchasing Step Details/Description	Estimated Time
Librarians prepare orders	<ul style="list-style-type: none"> Preparation of orders usually takes place in the spring Each book must be reviewed and checked. Most schools order several hundred books a year 	Spans several months
Orders sent to the purchasing specialist in LS Office	<ul style="list-style-type: none"> Most orders are placed in mid-June The purchasing specialist begins processing orders as soon as possible after July 1st. There are several simultaneous orders from 35 schools 	Ongoing throughout the school year
Purchasing specialist sends orders for approval	<ul style="list-style-type: none"> Orders are sent to the following staff for approval: <ol style="list-style-type: none"> Cataloging coordinator Library Supervisor Assistant Superintendent of Instruction 	2-3 days
Approved orders are sent to Finance	<ul style="list-style-type: none"> Finance processes the purchase orders (POs) and sends them back to the vendor. 	1-3 days
The vendor receives orders	<ul style="list-style-type: none"> Purchased orders are sent to Cataloging in the LS Office. 	2-4 weeks
Orders are received, boxes are opened, and inventory begins	<ul style="list-style-type: none"> The boxes are opened in order of receipt. The processing specialist inventories the contents and matches it to the PO. 	Approximately 4 weeks
Books are given to a cataloger	<ul style="list-style-type: none"> The cataloger checks the pre-processing provided by the vendor (barcodes, spine labels, etc.) and enters the Machine Readable Cataloging (MARC) record into our catalog. Catalogers often make adjustments to the MARC records based on the interests of APS or a particular school in how they want material categorized. 	
Books are shipped to schools	<ul style="list-style-type: none"> The books are re-boxed by the shipping clerk, who delivers them to school libraries. Orders placed in June usually arrive in the schools between October and November. 	

A detailed description of the purchasing process can be found in Appendix D3.

School libraries typically have more control over the purchasing process for audio/visual equipment. During the 2013-14 school year, the Office of Planning and Evaluation administered a quarterly survey to librarians in order to gauge the amount of time that it takes school libraries to receive A/V equipment that has been ordered and variations that occur based on funding sources. The resulting submissions were aggregated by Hanover Research in August 2014.

Hanover found that the average waiting period during the 2013-2014 school year for A/V equipment was slightly over three weeks and the median waiting period was two weeks. Waiting periods reported

by elementary schools averaged 2.3 weeks, while waiting periods for middle schools and high schools averaged 3.1 weeks and 9 weeks, respectively. However, the small number of orders from high schools (n=8) caused this group’s average wait time to be vulnerable to an outlier case, which greatly inflated this statistic.

Eighty-four percent of orders were processed through the librarians’ respective schools and these orders had an average waiting period of slightly over three weeks. In addition, orders purchased using school funds (which comprised 60 percent of orders) had an average waiting period of three weeks, whereas orders purchased using “Other” funding sources had an average waiting period of closer to four weeks and orders purchased using LS funding had an average waiting period of over five weeks. “Other” funding sources were generally associated with the A/V equipment or replacement budget.

The full Hanover report can be found in Appendix C5.

Librarians and principals were also asked their level of agreement with the statement, **“The budget and purchasing system adequately meets the needs of my school’s library.”** Most respondents agreed with this statement, with 67-68% of elementary and secondary librarians indicating that they “strongly agree” or “agree,” and 85% and 100% of elementary and secondary principals indicating agreement.

The full staff survey report can be found in Appendix B1.

Division-level Support for School Libraries

Librarians and principals were asked to indicate their level of satisfaction with division-level support for their school library: from the LS Office, and from other division-level offices and departments. **Table 18** shows the percentage of respondents who reported being satisfied with division-level support.

Satisfaction was higher among principals than librarians. Just 50% of elementary librarians and 54% of secondary librarians indicated satisfaction with support from the LS Office, while 72-73% of elementary and secondary principals indicated satisfaction. This low level of satisfaction may be related to the personnel and resource transitions – multiple supervisors and multiple circulation systems - that had occurred in the years prior to and during the time the survey was administered. A new supervisor was appointed in August 2014, about eight months after this survey was administered.

As for other division-level offices and departments, the satisfaction rate for principals was the same as for the LS Office, but librarians were more likely to express satisfaction in this area (60% elementary, 66% secondary).

Table 18: Percentage of Respondents Reporting Satisfaction with Division-Level Support

Survey Statement	Elementary		Secondary	
	Librarians (n=20)	Principals (n=18)	Librarians (n=11)	Principals (n=7)
The Office of Library Services	50%	73%	54%	72%
Other division-level offices/departments (Dept of Instruction, Information Services, Finance, Facilities, etc.).	60%	73%	66%	72%

Librarians and principals were asked the open-ended question, **“What additional support would you like to see from the division?”** Four elementary principals indicated that they would like to see more outreach and information from the LS Supervisor. Five elementary librarians and four secondary librarians indicated that they would like to have more communication with the LS Office. Two elementary librarians requested stronger leadership.

The most popular response among elementary librarians (9) was that they would like to have opportunities to meet with other librarians throughout the division. Three secondary librarians also requested this. One librarian stated, “The librarians do not have a ‘team’ to work with at the school level, so getting together to share ideas, ask questions, support each other, and assess student learning is essential.” Another said, “I would like to have the ability to have countywide PLC [professional learning community] meetings with other librarians.”

Facilities

Teachers, librarians, and principals were asked to indicate their level of agreement with the statement, **“My school’s library space is organized in an appropriate and flexible way.”** Agreement with this statement was high across the board, with 100% of secondary librarians and principals selecting “strongly agree” or “agree,” and between 85% (high school teachers) and 96% (elementary teachers) of other respondents indicating agreement.

Despite these positive responses, space, layout, furniture, and shelving were topics most frequently cited by both elementary and secondary librarians in response to the open-ended question, “What would you change about your school’s library?” Eight elementary librarians and four secondary librarians mentioned space and layout as areas that they would change if they could:

- “Add more space through renovation, if possible.”
- “Too small to support use, interest and needs”
- “The open layout makes it difficult to have multiple activities in the library at one time.”

Six elementary librarians and four secondary librarians mentioned furniture and/or shelving:

- “I would prefer more flexible and movable shelving and seating so that the space could be configured differently for different purposes and groups and events.”
- “It needs someone to care about acquiring new furniture and getting rid of the hand-me-downs and discarded furniture and bookcases.”

In the fall of 2013, observations were conducted at all APS libraries. While many of the observation items focused on instruction, some addressed the physical space. **Table 19** shows the percentage of observation items addressing physical space that were rated “effective” or “highly effective.” Just 51% of elementary school libraries were rated effective/highly effective for the item, **“Space accommodates a range of teaching methods, and learning tasks and outcomes, and encourages technology use, leisure reading, and browsing,”** while 89% of secondary libraries were rated effective/highly effective in this area.

Table 19: Percentage of Library Observations Rated Effective or Highly Effective, Physical Space

Observation Checklist Item	Elementary (n=22)	Secondary (n=10)
Space accommodates a range of teaching methods, and learning tasks and outcomes, and encourages technology use, leisure reading, and browsing.	51%	89%
Shelving and storage meet the current needs of the collection and resources; growth and change opportunities are available.	71%	67%
Physical space is organized for:		
– smooth flow	77%	78%
– adequate space for different activities	64%	78%
– effective signage	68%	67%
– attractive displays	78%	56%

Librarians and principals were also asked their level of agreement with the statement, “**APS facilities resources adequately and efficiently meet the needs of my school’s library.**” Only 41% of elementary librarians selected “strongly agree” or “agree.” Sixty percent of elementary principals agreed, 66% of secondary librarians agreed, and 72% of secondary principals agreed.

The full staff survey report is available in Appendix B1. The full report on library observations can be found in Appendix E4.

Summary of Findings for Operations and Resources:

In 2013-14, elementary schools had an average of 30 books per student, middle schools had an average of 20 books per student, and high schools had an average of 17 books per student. Library collections are generally older at the high school level, and high school collections are the most likely to fall outside of the recommended age ranges, with just one category, Geography and History, falling within the suggested age range for most schools (67%).

High percentages of student and staff survey respondents agreed that students have good access to technology in the school library, and that library staff is able to assist students and staff with technology. Librarians were unlikely to agree that the circulation management system adequately meets the needs of their school’s library. Among service and repair requests related to school libraries, the categories most likely to be resolved quickly were circulation, network services, and telecom. The category most likely to be resolved after a long delay was audio/video, with 21% of requests taking more than 30 days to resolve.

The book purchasing process spans months and requires the involvement of both the school libraries and the central LS Office. The average waiting period during the 2013-2014 school year for A/V equipment was slightly over three weeks. Orders purchased using school funds had an average waiting period of three weeks, whereas orders purchased using other funding sources had an average waiting period of closer to four weeks and orders purchased using LS funding had an average waiting period of over five weeks.

Summary of Findings for Operations and Resources – Continued:

Just 50% of elementary librarians and 54% of secondary librarians indicated that they were satisfied with support from the LS Office. Many librarians requested better communication and more opportunities to meet with other librarians. Staff generally felt that their school’s library space is organized in an appropriate and flexible way, but many librarians expressed a desire for more space and more flexible furniture/shelving. Just 51% of elementary school libraries were rated effective/highly effective for the item, “Space accommodates a range of teaching methods, and learning tasks and outcomes, and encourages technology use, leisure reading, and browsing.”

Library Instruction

The instructional role of the school librarian varies by grade level. At the elementary level, classes are scheduled to visit the library, typically on a weekly or bi-weekly basis. Elementary librarians regularly provide instruction to class groups. At the secondary level, instruction focuses more on as-needed collaborative work with teachers on in-depth research, and more individualized assistance to students seeking materials to aid in assignments or for choice reading. Given these varying roles, observations of library instruction were conducted for this evaluation at the elementary and middle school levels only. Two observation tools were used to assess the quality of instruction in APS libraries: the Classroom Assessment Scoring System (CLASS), and an APS-developed instructional observation tool assessing best practices in library instruction.

CLASS

Arlington Public Schools uses the CLASS observation tool to assess the quality of interactions between teachers and students for all program evaluation areas. It was developed by the University of Virginia’s Curry School of Education and is organized into three broad domains: (1) Emotional Support, (2) Classroom Organization, and (3) Instructional Support. The upper elementary and secondary CLASS tools include an additional domain: (4) Student Engagement. Each domain contains specific observable dimensions that are age-appropriate. **Table 20** outlines the dimensions included in each domain of the CLASS tool. Each dimension is scored on a 7-point scale consisting of Low (1, 2), Mid (3, 4, 5), and High (6, 7) ranges.

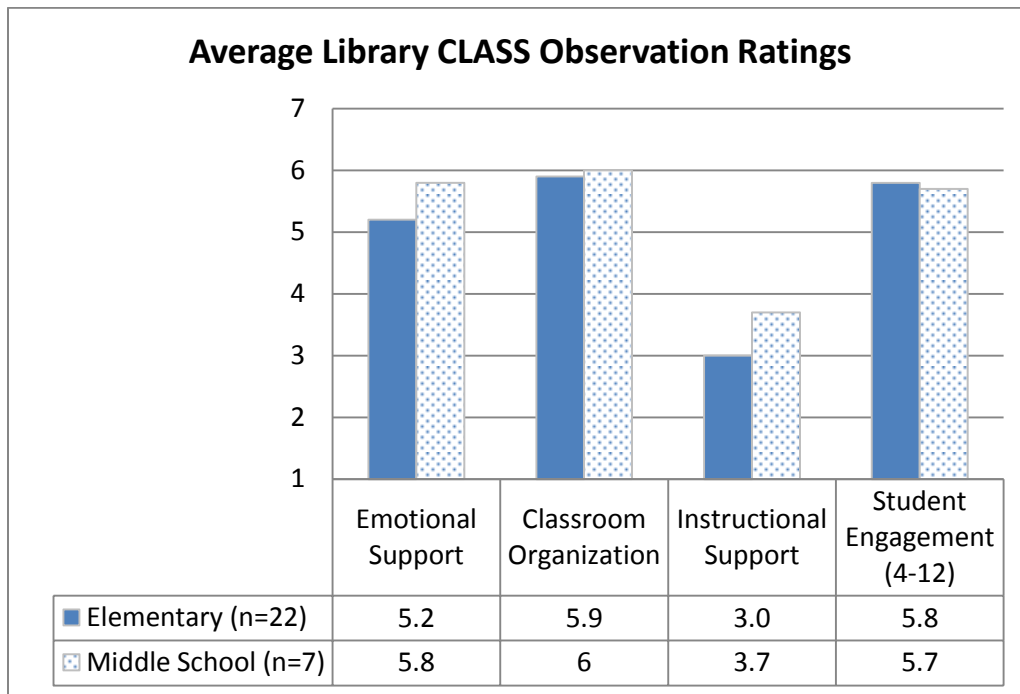
Table 20: CLASS Domains and Dimensions

Domain	Dimension	Grade Level	Measures
Emotional Support	<i>Positive Climate</i>	K – 12	Emotional connection among teachers and students, verbal and non-verbal
	<i>Negative Climate</i>	K – 12	Expressed negativity among teachers and students, verbal and non-verbal
	<i>Teacher Sensitivity</i>	K – 12	Teacher awareness and responsiveness to students’ academic and developmental needs
	<i>Regard for Student/Adolescent Perspectives</i>	K – 3	Degree to which lessons tap into students’ interests and promote responsibility
4 – 12		Degree to which lessons value students’ ideas and opinions and promote autonomy	
Classroom Organization	<i>Behavior Management</i>	K – 12	Teachers’ use of clear behavioral expectations and effectiveness at redirecting misbehavior
	<i>Productivity</i>	K – 12	How well the teacher manages time and routines so instructional time is maximized
	<i>Instructional Learning Formats</i>	K – 12	Teachers’ employment of lessons and materials to support different learning styles
Instructional Support	<i>Concept Development</i>	K – 3	Use of instructional discussions to promote higher level thinking skills
	<i>Content Understanding</i>	4 – 12	Depth of lesson and approaches used to support comprehension
	<i>Analysis and Problem Solving</i>	4 – 12	Degree of higher-level thinking skills, such as metacognition (i.e., thinking about thinking)
	<i>Quality of Feedback</i>	K – 12	Degree to which feedback expands learning and understanding
	<i>Language Modeling</i>	K – 3	Quality and amount of language-stimulation and facilitation techniques
	<i>Instructional Dialogue</i>	4 – 5	Use of purposeful dialogue distributed among students and with teacher
Student Engagement		4 – 12	Degree to which all students are focused and participating

CLASS domains and dimensions are described in detail in Appendix E1. The alignment between CLASS dimensions and APS best instructional practices can be found in Appendix E2.

In the fall of 2013, certified CLASS observers visited all libraries at the elementary and middle school level. CLASS observers were instructed to conduct observations while librarians provided direct instruction to visiting classes. One middle school library had two librarians; both were observed separately at that school. **Figure 3** shows the average CLASS scores for each domain by grade level.

Figure 3: Average Library Services CLASS Scores by Domain and Grade Level, Fall 2013



Average scores for Emotional Support, Classroom Organization, and Student Engagement fell into the high-mid or low-high range at both levels. Instructional Support stands out, with an average score of 3.0 at the elementary level and 3.7 at the middle school level. Within the domain of Instructional Support, the dimensions with the lowest average score were Analysis and Problem Solving (1.9 elementary, 2.6 middle) and Concept Development (2.7 elementary).

Staff survey responses may provide insight into the relatively low scores for Instructional Support at the elementary level. Most elementary teachers (69%) reported that they take a class to the library once a week, but only 33% of elementary teachers reported that they collaborate with librarians on lessons to support curriculum frequently – either *once a week* or *once a month*. This is most likely a reflection of the fixed scheduling that frequently occurs at the elementary level. Elementary classes are regularly scheduled to visit the library, rather than visiting the library as an instructional need arises.

Some elementary respondents to the staff survey mentioned instruction and scheduling in their open-ended responses to the question, “What would you change about your school’s library?” Fourteen elementary teachers expressed a desire for lessons that are more aligned with the curriculum:

- “I would like to see the visits/mini-lessons connect more with what is being learned in the classroom.”
- “More research skills in upper grades; less read alouds.”

Three elementary librarians and one elementary principal expressed a desire for flexible scheduling:

- “More flexible scheduling so when a class comes to the library the teacher and the librarian are both working with the students on a challenge-based activity that relates to curricular objectives.” (elementary principal)

- “I would love to have more flexible time to meet with classes, small groups, truly collaborate with and team teach with teachers on projects that require higher level thinking and emphasize process rather than product. We do not have time with a full, fixed schedule to be as creative and develop critical thinking experiences with students.” (elementary librarian)

Details on LS CLASS scores by level can be found in Appendix E3. Staff survey responses can be found in Appendix B1.

APS-Developed Instructional Observation Tool

The library instruction observation tool was developed by the Offices of Planning and Evaluation and Library Services, with input from the LS Evaluation Planning Committee. Observation items were based on *Empowering Learners: Guidelines for School Library Programs*, a publication of the American Association of School Librarians (AASL)⁶ The observation tool included 20 items addressing instruction, each of which could be assigned one of the following five ratings:

- **Not Observed** – The element was not observed at all.
- **Ineffective** – The librarian’s instruction and practices inadequately addresses the students’ learning needs.
- **Developing/Needs Improvement** – The librarian inconsistently uses instructional strategies and practices that meet individual learning needs.
- **Effective** – The librarian engages the students’ learning by using a variety of strategies and practices to meet individual learning needs.
- **Highly Effective** – In addition to meeting the standard, the librarian optimizes students’ opportunities to learn by engaging them in higher order thinking and/or enhanced performance skills.

In general, there were few instances in which observations were rated developing/needs improvement or ineffective. Of the 20 items addressing instruction, eight observation items at the elementary level, and 19 at the middle school level, were never rated developing/needs improvement or ineffective. Typically when these ratings were assigned, the incidence was low – 5% for seven elementary observation items, 9% for one item, and 14% for another item. The one item that received any ratings of developing/needs improvement at the middle school level received this rating 14% of the time.

At the elementary level, there were strong positive scores for reading comprehension, using oral assessments for understanding and revision of student work, and most importantly, making the library a welcoming space. The middle school libraries evidenced strong contemporary practice, by creating spaces that can accommodate a range of teaching methods and learning styles, while also pushing out beyond the classroom by making students aware of resources beyond the school district. The middle school librarians also excel at supporting choice reading, like their elementary counterparts. Both levels were noted as having high levels of access and adequate resources and services to support instructional goals.

⁶ <http://www.ala.org/aasl/>

Alignment

Two observation items addressed alignment of the observed library instruction to standards and to the school's academic program.

- 91% of elementary observations found that librarians demonstrated understanding, support, and implementation of district, local, and national standards in alignment with Standards for the 21st Century Learner. In contrast, this was not observed in 71% of middle school observations.
- 100% and 85% of elementary and middle school observations, respectively, found that librarians demonstrated knowledge of student literacy needs within the school's academic program.

Reading

Four items addressed the quality of reading instruction. Across grade levels, observers witnessed a high degree of effectiveness (ratings of "effective" and "highly effective") in the following areas:

- The librarian promotes reading for the sake of enjoyment. (64% elementary, 86% middle)
- The librarian demonstrates knowledge of literature and current trends in library practice. (59% elementary, 71% middle)
- The librarian demonstrates knowledge of the school's academic program. (73% elementary, 100% middle)

Seventy-three percent of elementary observations were rated effective/highly effective for "The librarian engages students in reading comprehension," while this was not observed in 71% of middle school observations.

Multiple Literacies

Seven observation items addressed the quality of instruction in multiple literacies. In this area, substantial differences emerged between elementary and middle school observations.

- Elementary observations noted a high level of effectiveness (72%) for the item, "The librarian guides students in applying multiple literacies to the learning process," whereas this was not observed in 83% of middle school observations.
- Middle school observations were rated effective/highly effective 58% of the time for the item, "The librarian embeds legal, ethical, and social responsibility concepts into the information-seeking process," whereas this was not observed in 91% of elementary observations.
- Middle school librarians were more likely to effectively model use of technology (57%), while elementary librarians were typically not observed doing this (59% not observed). Likewise, middle school librarians were more likely to be observed effectively assisting students and/or teachers in the use of technology (85%), while elementary librarians were typically not observed doing this at all (73% not observed).
- Observations noted a high rate of effectiveness at both levels (95% elementary, 100% middle) for the item, "The librarian demonstrates knowledge of resources **within the school and district**, and provides access to them." However, more middle school observations (72%) than elementary (59% not observed) were rated effective/highly effective for "The librarian

demonstrates knowledge of resources **beyond the school and district** and provides access to them.”

Inquiry

Three observation items addressed the quality of instruction in inquiry. This area also revealed differences between elementary and middle school instruction.

- High levels of effectiveness were observed at the elementary level for the item, “The librarian engages learners in inquiry using resources and strategies appropriate to gender, ability, prior knowledge, and/or interest.” This was not observed in 71% of the middle school observations.
- 71% of middle school observations were rated effective/highly effective for the item, “The librarian engages students in learning information skills,” while this was not observed in 64% of elementary observations.
- The item, “The librarian provides opportunities to learn about the research process” was not observed in 76% of elementary observations and 57% of middle school observations.

Assessment for Learning

Observers were asked to rate the effectiveness of librarian assessments for understanding and revision of student work.

- The most common type of assessment observed was oral assessments (86% effective/highly effective at both elementary and middle schools).
- Performance-based assessments and graphic organizers were far less likely to be observed. Performance-based assessments were not observed in 50% of elementary observations and 100% of middle school observations, and graphic organizers were not observed in 96% of elementary observations and 86% of middle school observations.
- Other assessment tools were observed and rated effective/highly effective in 57% of middle school observations, and not observed in 86% of elementary observations.

The full report on the APS-developed instructional observation tool can be found in Appendix E4.

Summary of Findings for Library Instruction:

CLASS observations indicate high levels of emotional support, classroom organization, and student engagement in elementary and middle school library instruction. Scores for the CLASS domain of Instructional Support were lower, with an average score of 3.0 at the elementary level and 3.7 at the middle school level. Survey responses indicate fixed scheduling at the elementary level may contribute to lower instructional support.

The APS-developed instructional observation tool resulted in a low incidence of items rated “developing/needs improvement” or “ineffective.” 100% and 85% of elementary and middle school observations, respectively, found that librarians demonstrated knowledge of student literacy needs within the school’s academic program. Across the grade levels, observers witnessed a high degree of effectiveness in reading instruction. Middle school librarians were much more likely to be observed embedding legal, ethical, and social responsibility concepts into the information-seeking process; modeling the use of technology; and assisting students and/or teachers in the use of technology. Elementary school librarians were more likely to be observed engaging learners in inquiry using resources and strategies appropriate to gender, ability, prior knowledge, and/or interest. The most commonly observed type of assessment for learning at both grade levels was oral assessments.

Evaluation Question #2:

What Were the Outcomes for the Targeted Populations?

To address this question, this evaluation focused on information literacy, digital citizenship, and recreational reading.

Student Outcomes

While there is little quantitative data to measure the exact impact of librarians on instruction and learning, there have been several studies showing the correlational relationship between strong library programs and measurable improvement in student achievement. Most notable in these studies is *School Libraries Work*. Their most recent release found that “School library media centers can contribute to improved student achievement by providing instructional materials aligned to the curriculum; by collaborating with teachers, administrators, and parents; and by extending their hours of operation beyond the school day.”⁷

APS school libraries work with all applicable instructional programs at the school level to develop students’ information literacy skills, digital citizenship, and a love of reading. Student outcomes in these areas are a shared responsibility among librarians, teachers, and other school staff. As such, student outcome data presented below cannot be solely tied to the work of school librarians or the LS program, but it can offer insight into the status of these areas among APS students.

⁷ “Close Up: NCLB—Improving Literacy through School Libraries,” NCLB The Achiever, September 15, 2004, Vol. 3, No 13.

Unlike content area student outcome data such as SOL results, the data presented in this section do not have established benchmarks. Instead, these data are included to establish a baseline against which to measure future progress.

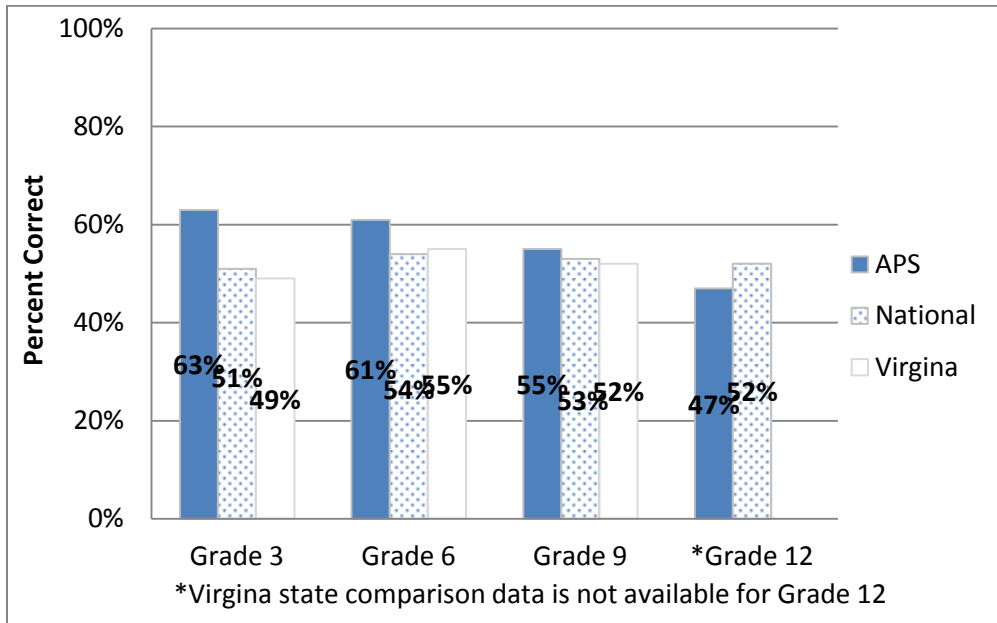
Information Literacy

The Tool for Real-time Assessment of Information Literacy Skills (TRAILS) is an online assessment developed at Kent State University. The goal of the test is to identify strengths and weaknesses in students' information-seeking skills. Test results are reported in five categories:

- **Develop Topic** – Recognize the hierarchical relationships of broader and narrow topics.
- **Identify Potential Sources** – Understand the types of containers in which information is housed and the types of information that can be found within each container. Select the most productive information sources and find tools to address a specific information need.
- **Develop, Use, and Revise Search Strategies** – Select search terms and develop a search strategy for a topic that is appropriate to a given tool.
- **Evaluate Sources and Information** – Recognize bias; differentiate between fact and opinion; determine accuracy, authority, coverage, currency, and relevancy of information and sources.
- **Recognize How to Use Information Responsibly, Ethically, and Legally** – Recognize how to paraphrase correctly. Understand the concept of intellectual property and intellectual freedom. Create bibliographies and parenthetical citations according to an appropriate style manual.

The TRAILS test was administered to a randomly selected sample of APS students in 3rd, 6th, 9th, and 12th grade during the spring of 2014. **Figure 4** shows how APS students performed overall on the TRAILS in comparison to their peers at the state and national levels. The average scores for APS students are higher than state and national averages in grades three through nine. In grade 12, this trend reverses, with the national average higher than the APS average. State averages are not available for grade 12. While average APS scores decrease by grade level – from 63% in 3rd grade to 47% in 12th grade - this is a trend at the state and national level as well. No strong patterns emerged among average scores by category. In interpreting these results, it is important to remember that, while all elementary students visit the library with their class on a regular basis, secondary students in the sample may not have received direct instruction from their school librarian.

Figure 4: Average TRAILS Scores for APS, Virginia, and the Nation



TRAILS results were further analyzed to determine differences in performance by demographic groups. **Table 21** shows overall TRAILS scores by grade and race/ethnicity. There is a gap in average scores by racial/ethnic groups at each grade level. This is widest among sixth graders, with gaps of 25 points, 22 points, and 14 points between white students and black, Hispanic, and Asian students, respectively.

Table 21: Total TRAILS Scores by Grade and Ethnicity

Group	Grade 3		Grade 6		Grade 9		Grade 12	
	# Tested	Average Total Score	# Tested	Average Total Score	# Tested	Average Total Score	# Tested	Average Total Score
Asian	50	68%	44	58%	32	55%	47	46%
Black	35	58%	54	47%	39	47%	42	36%
Hispanic	119	51%	112	50%	107	49%	84	41%
White	238	68%	169	72%	176	62%	169	53%

Table 22 shows overall TRAILS scores by grade and gender, economic status, LEP status, and disability status. There is a gap in average scores by economic status, LEP status, and disability status at each grade level. As with the race/ethnicity gap, these gaps are widest at the sixth grade level, with gaps of 23 points, 22 points, and 12 points, respectively, between economically disadvantaged/non-disadvantaged students, LEP/non-LEP students, and students with/without disabilities.

Table 22: Total TRAILS Scores by Grade, Gender, Disadvantaged Status, LEP Status, and SWD Status

Group	Grade 3		Grade 6		Grade 9		Grade 12	
	# Tested	Average Total Score	# Tested	Average Total Score	# Tested	Average Total Score	# Tested	Average Total Score
Females	222	66%	199	63%	190	59%	169	47%
Males	245	60%	205	59%	192	52%	191	46%
Non-disadvantaged	317	68%	260	69%	256	59%	264	50%
Disadvantaged	150	53%	144	46%	126	49%	96	39%
Non-LEP	325	68%	326	65%	328	57%	348	47%
LEP	142	52%	78	43%	54	45%	12	41%
Non-SWD	406	65%	334	63%	308	57%	318	48%
SWD	61	53%	70	51%	74	49%	42	37%

More information about TRAILS results can be found in Appendix F1.

Digital Citizenship

Educational theorist Terry Heck defines digital citizenship as “the quality of habits, actions and consumption patterns that impact the ecology of digital content and communities.” Put in simpler terms, he says digital citizenship is “the *self-monitored* habits that *sustain and improve* the digital communities *you enjoy or depend on*.”⁸ Digital citizenship, as envisioned by APS librarians, is how we interact with information provided via technological tools. APS librarians offer a wide range of lessons on digital citizenship, which include everything from choosing a safe screen name to evaluating the credibility of online resources. Librarians cover strategies when using search engines and often support teachers seeking to assist students to better understand the best way to research online. Librarians in APS teach the “think before you click” rule to encourage students to make wise choices when communicating electronically, and frequently remind students of the public nature of the internet, texting, and interacting with social media.

Because the definition of digital citizenship is so broad, and so critical in this day and age, the responsibility to teach it, like regular “citizenship,” is something addressed by many other offices as well – including Health and PE, CTAE, and ELA. At the elementary level, it is typical to see an entire school community working together to address issues of appropriate technology use and avoiding cyber-bullying.

To assess student outcomes related to digital citizenship, this evaluation includes an analysis of TRAILS results, student and staff survey responses, discipline data, and Youth Risk Behavior Survey (YRBS) responses.

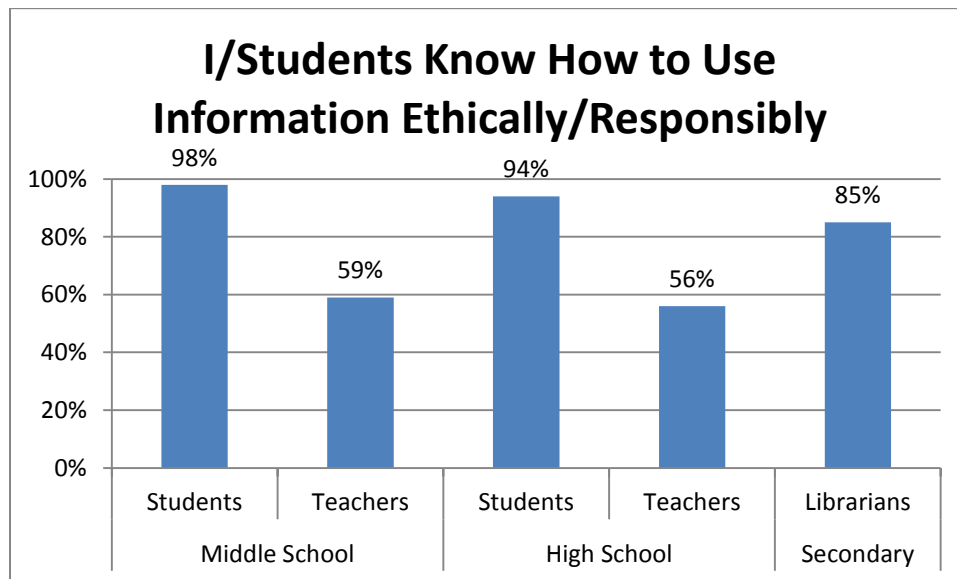
⁸ Heck, Terry. “The Definition of Digital Citizenship.” TeachThought.com. Web. Accessed 29 December 2014. <http://www.teachthought.com/technology/the-definition-of-digital-citizenship/>

Ethical Use of Information

As outlined above, one category of the TRAILS assessment addresses the ethical use of information. Mirroring the trend with overall scores, average scores in this area decreased for each successive higher grade level. Students in 3rd grade received an average score of 66% in this category, while students in 6th, 9th, and 12th grades received average scores of 56%, 52%, and 42%, respectively.

The secondary student and staff surveys asked respondents to indicate their level of agreement with the statement, **“I know how to use information resources honestly and responsibly”** (students) or **“My students know how to use information resources ethically and responsibly”** (teachers). **Figure 5** shows responses from students, teachers, and librarians in middle school and high school. There are differences in perception between students and staff about the extent to which students are able to use information resources ethically. At both the middle school and high school levels, students are far more likely to say that they possess this skill than teachers are to say their students do (98% of middle school students vs. 59% of middle school teachers; 94% of high school students vs. 56% of high school teachers). Eighty-five percent of secondary librarians indicated that students possess this skill. When comparing student and staff responses, it is important to note that student surveys were limited to 6th, 9th, and 12th graders, while the staff survey was open to librarians and teachers of all grade levels. In addition, in interpreting both TRAILS and survey results, it is important to remember that self-reported information about what students know may not necessarily be an accurate reflection of what students do.

Figure 5: Level of Agreement with “I/Students Know How to Use Information Ethically/Responsibly.”



More information about TRAILS results can be found in Appendix F1. The full student survey report is available in Appendix B2.

Inappropriate Use of Technology

The Office of Planning and Evaluation reviewed five years of student discipline data to determine the types of incidents that involved inappropriate use of electronic devices or the internet. **Table 23** lists four categories of incidents as well as examples for each category.

Table 23: Examples of Discipline Incidents

Category	Example
Cheating	<ul style="list-style-type: none"> • Plagiarizing from Internet • Using phone to cheat on test
Harassing, Threatening, or Bullying - Student Victims	<ul style="list-style-type: none"> • Taking and/or sharing inappropriate pictures of other students with cell phones • Threatening another student by text, Facebook, Twitter, or MySpace • Impersonating another student on Facebook
Harassing, Threatening, or Bullying - Staff Victims	<ul style="list-style-type: none"> • Insulting/making fun/spreading rumor about teacher online • Making threats about/towards teacher via social media or email
Inappropriate Use of Technology	<ul style="list-style-type: none"> • Accessing pornography online • Inappropriate internet activity - undefined • Inappropriate use of electronic device - undefined • Inappropriately accessing social networking sites • Using school device to take inappropriate picture

In general, the number of incidents was low and there is no distinct trend over the last five years. The total number of incidents ranged from nine in 2010-11 to 39 in 2012-13. In the most recent year (2013-14) the total number was 19. Incidents were far more common at the middle school and high school level than at the elementary level, where there were a total of two incidents over the last five years. However, given the nature of the incidents described, it is likely that they have been underreported.

Student responses to the 2013 Youth Risk Behavior Survey (YRBS)⁹ may provide a more reliable picture of the incidence of one type of inappropriate use of technology among APS students – cyberbullying. The YRBS is a national survey developed by the Centers for Disease Control (CDC) and administered in APS every three years by the Arlington Partnership for Children, Youth & Families (APCYF).

The YRBS is administered to a randomly selected, representative sample of students in grades 6, 8, 10, and 12. In the 2013 YRBS, 10% of 6th graders and 14% of 8th graders reported that they had been a victim of cyberbullying. Eleven percent each of 10th and 12th graders also reported that they had been a victim of cyberbullying.

The full report on inappropriate use of technology can be found in Appendix F2.

⁹ <http://www.cdc.gov/HealthyYouth/yrbs>

Recreational Reading

Information about the extent to which students read for pleasure has been drawn from two sources: the Developmental Assets Survey and the Programme for International Student Assessment (PISA).

Developmental Assets Survey

The Developmental Assets survey¹⁰ was developed by the Search Institute and is administered in Arlington Public Schools every three years by the Arlington Partnership for Children, Youth & Families (APCYF). The Search Institute has identified 40 key relationships, experiences, skills, and values that all children and teens need in order to grow into strong, caring, resilient adults. One of these assets is reading for pleasure.

The Developmental Assets Survey is administered to a randomly selected, representative sample of students in grades 6, 8, 10, and 12. Sixth graders take the *Me and My World* survey, and students in grades 8, 10, and 12 take the *A Profile of Your Youth* survey. Results are sent to the Search Institute, which analyzes responses to produce a report on the 40 developmental assets. Multiple survey questions may inform one asset.

Table 24 shows the percentage of APS students who reported having developmental assets related to reading for pleasure in each of the last two administrations of the survey (2009 and 2012). Between 62-63% of sixth graders were reported to have the asset, **“Child enjoys and engages in reading for fun most days of the week,”** while only 28% of students in grades 8, 10, and 12 were reported to have the asset, **“Young person reads for pleasure three or more hours per week.”** This implies a drop in recreational reading as students get older, although a direct comparison is not possible since the survey questions and resulting assets address different amounts of time dedicated to reading for pleasure.

Table 24: Percentage of Students who Have Assets Related to Reading for Pleasure

Survey	Asset	2009	2012
Grade 6	Child enjoys and engages in reading for fun most days of the week.	63%	62%
Grades 8, 10, and 12	Young person reads for pleasure three or more hours per week.	28%	28%

Programme for International Student Assessment (PISA)

The Programme for International Student Assessment (PISA) is an international assessment developed by the Organisation for Economic Co-Operation and Development (OECD). The goal of the PISA test is to evaluate education systems worldwide by measuring 15-year-old students’ applied knowledge and competencies in reading, mathematics, and science. The PISA also features a survey that includes questions about students’ engagement with and attitudes toward learning and the school learning environment.¹¹

¹⁰ <http://www.search-institute.org/research/developmental-assets>

¹¹ <http://www.oecd.org/pisa/aboutpisa/>

In 2013-14, randomly selected, representative samples of 15-year-old students at the three comprehensive APS high schools and H-B Woodlawn participated in the PISA assessment. Participating students answered a series of questions about how frequently they read and what reading strategies they use:

- Students were asked to indicate how often they read magazines, comic books, fiction (novels, narratives, and stories), non-fiction and newspapers because they want to. They could indicate that they read each type of material “never or almost never,” “a few times a year,” “about once a month,” “several times a month” and “several times a week.”
- Students were asked to specify to what extent they believe that 11 reading strategies are effective, including strategies such as “I quickly read through the text twice,” “After reading the text, I discuss it with other people” and “I underline important parts of the text.”¹²

Readers may be categorized as either wide, narrow, or highly restricted based on their responses about reading habits, with “wide” indicating that they read a wide variety of materials regularly, and “highly restricted” indicating that they spend little time reading any type of printed material for enjoyment. They are then further categorized as either deep or surface readers based on their responses about learning strategies. Surface readers have low levels of awareness about effective strategies to understand, summarize and remember information; whereas deep readers have high levels of awareness about effective learning strategies.

Combining these two sets of categories, the PISA places students into one of six reader profiles, from “deep and wide” readers who are highly aware of learning strategies and read a great deal for enjoyment, to “surface and highly restricted” readers, who have low levels of awareness of learning strategies and spend little time reading for enjoyment. **Table 25** shows the percentage of tested students at each participating APS high school who fall into each reader profile, based on their survey responses. The percentage for the United States is included as well. The percentage of APS students categorized as “deep and wide” ranges from 24-44%, in comparison to a national rate of 19%. The percentage of APS students categorized as “surface and highly restricted” ranges from 6-11%, in comparison to a national rate of 20%.

¹² Taken from results provided to APS from America Achieves/OECD Tests for Schools

Table 25: Percentage of APS 15-Year-Old Students in Each Reader Profile, 2013-14

Reading Habits	School	Understanding of Effective Learning Strategies	
		Surface	Deep
Wide	H-B Woodlawn	2%	44%
	Wakefield	11%	24%
	Washington-Lee	2%	31%
	Yorktown	1%	27%
	United States	7%	19%
Narrow	H-B Woodlawn	2%	13%
	Wakefield	0%	6%
	Washington-Lee	2%	13%
	Yorktown	6%	19%
	United States	6%	11%
Highly restricted	H-B Woodlawn	8%	32%
	Wakefield	11%	48%
	Washington-Lee	11%	42%
	Yorktown	6%	40%
	United States	20%	37%

The full report on recreational reading can be found in Appendix F3.

Summary of Findings for Outcomes:

Average TRAILS scores for APS students are higher than state and national averages in grades 3-9, and lower than the national average in grade 12. Average APS scores decrease by grade – from 63% in 3rd grade to 47% in 12th grade – mirroring the trend at the state and national levels. Gaps in performance between student groups are widest in 6th grade, with gaps of 25, 22, and 14 points between white students and black, Hispanic, and Asian students, respectively; and gaps of 23, 22, and 12 points between economically disadvantaged/non-disadvantaged students, LEP/non-LEP students, and students with/without disabilities, respectively.

At both the middle school and high school levels, students are more likely to say they know how to use information resources honestly and responsibly than teachers are to say their students do (98% of middle school students vs. 59% of middle school teachers; 94% of high school students vs. 56% of high school teachers). Between 10-11% of students in grades 6, 10, and 12 reported that they had been a victim of cyberbullying in the past year, while 14% of 8th graders reported that they had.

Between 62-63% of sixth graders were reported to have a developmental asset related to reading for pleasure, while 28% of students in grades 8, 10, and 12 were reported to have such an asset. A direct comparison between levels is not possible since the questions on the two surveys addressed different amounts of time dedicated to reading for pleasure. The percentage of APS 15-year-old students categorized as “deep and wide” readers ranges from 24-44%, in comparison to a national rate of 19%, while the percentage of APS students categorized as “surface and highly restricted” ranges from 6-11%, in comparison to a national rate of 20%.

SECTION 3: RECOMMENDATIONS

Recommendations Specific to the Library Services Office

1. After completion of the 2014-15 countywide inventory, conduct a new collections analysis to determine needs and develop a plan to decrease the age of the collection.
2. Provide opportunities for greater and more effective communication between the central office and school staff, and among school librarians.
3. Provide professional development and other resources to school library staff to foster best practices in library instruction.
4. Continue to monitor student outcome data regarding information literacy, digital citizenship, and recreational reading.

Recommendations beyond the Library Services Office

5. Work with schools to ensure that librarians provide high-quality instruction aligned to the curriculum.
6. Work with schools to ensure that students have access to the school library, including during lunch, before, and after school.
7. Work with the Department of Information Services to increase librarians' access to data and to foster the integration of eContent.

Recommendations with Policy and Budget Implications

8. As APS continues to address its increasing student population, work with Facilities to ensure that library space, shelving, and furniture align with best practices whenever possible.
9. Work with the Digital Learning Steering Committee to ensure that current policies and procedures appropriately address student needs in regard to digital citizenship and information literacy.
10. Shift cataloging process to schools to ensure timely access to materials by students, staff, and community.

Staff Response — *Prepared by the Library Services Office*

Collaboration, the most important element of library services, is also complex. It brings up a challenging issue – that of the role of school libraries in the modern age. When students have access to information at their fingertips, classroom teachers sometimes have to be reminded that a library isn't just a warehouse of information, it is also home to “people resources” – experts in research who can support the classroom mission of providing individualized and top-notch instruction. Collaboration is about the attitude and willingness of the librarian to reach out and make connections, but it is also about the attitude and willingness of the classroom teacher to welcome in a partner during their planning and instruction. Administrators can set the tone with this, as much of this “attitude and willingness” is impacted by school culture.

Another issue of great importance is the paradigm shift we are seeing in 21st century library services. Looking down the road five or ten years, it is probable that a school library will look very different than it

does today. How do we go about looking outside of the box and being open to doing things differently? Will teaching staff be open to different routines and practices in library programs? This technological revolution has much promise, and perhaps some peril. What does it look like when students can access the majority of the school library resources without ever crossing the threshold of the physical library? How must we adapt and change to serve a population that has an “anytime/anywhere” mentality in terms of information retrieval? How do we best teach these students to access and use information in a way that will serve them in a marketplace we can only begin to imagine? While the answers are not fully clear, it is believed that the strongest pedagogical growth comes from peers, working together as they do in PLCs. As LS moves forward, the number one goal will be for this community to build efficacy by working together, building off of each other’s Best Practices to grow a library program for the future.

Recommendations Specific to the Library Services Office

Recommendation #1: After completion of the 2014-15 countywide inventory, conduct a new collections analysis to determine needs and develop a plan to decrease the age of the collection.

Response: In order to have more accurate and useful statistics regarding the “Age of Collection,” librarians in APS will conduct a full inventory in 2014-2015 and use the more specific Dewey breakdowns from Texas and California as models to analyze collection needs. As part of this reconfiguration, Fiction will be analyzed separately from Nonfiction, and two vendors, Mackin and Follett, will be asked to provide reports, allowing for a more in-depth look at the collection holdings. It is possible, when circulation data is analyzed along with the holdings in the coming years, that a new paradigm for library collection development in APS may be designed, with less emphasis on traditional Reference and Nonfiction, and more emphasis on Reading for Choice.

Recommendation #2: Provide opportunities for greater and more effective communication between the central office and school staff, and among school librarians.

Response: In 2014-2015, the new library supervisor reinstated the weekly letter and monthly meetings, moving the latter to a PLC format based on Best Practices focusing heavily on Peer Instruction, also called Dialogic Teaching. The Supervisor hopes to build on this in the 2015-2016 school year by asking librarians to partner and observe each other, in the style of Instructional Rounds (should funding be available for substitute coverage).

Recommendation #3: Provide professional development and other resources to school library staff to foster best practices in library instruction.

Response: As part of best practices, the library supervisor will be working, in the next two years, to have librarians exemplify 21st century practices of note, including collaboration with other teaching staff, pushing out to classrooms and the use of student input in program design and decision-making by librarians.

Recommendation #4: Continue to monitor student outcome data regarding information literacy, digital citizenship, and recreational reading.

Response: LS will work with IS to embed the new circulation management system with data needed to analyze student use patterns for materials circulation and access to eContent. Librarians will confer with their school staff to determine the norms recommended by the use of technology in light of the Personalized Device Initiative. The LS supervisor will work with the Digital Learning Steering Committee to design and communicate district-level expectations and support.

Recommendations beyond the Library Services Office

Recommendation #5: Work with schools to ensure that librarians provide high-quality instruction aligned to the curriculum.

Response: In an age of personal devices and disappearing computer labs, classroom teachers (particularly at the secondary level) sometimes do not see the need bring a class to the library for research projects. School librarians are being encouraged and trained to push out to classrooms and assist with curriculum that may not be traditionally considered library subject matter. Administrators at the district level and school principals should encourage this effort, perhaps with a consistent query to their teachers in the coming year, asking how their staff can utilize librarians in their teaching.

Administrators should work with librarians and teaching staff to design more uniform instruction of Digital Literacy skills (as outlined in the TRAILS Assessments) to ensure that all grades, upper grades in particular, receive consistent instruction in research competencies. This could begin as early as 2015-2016, with willing schools acting as beta-testers to develop appropriate models.

Elementary administrative staff should consider a fixed/flex scheduling model for libraries in the 2015-2016 school year. This model has proven very successful in schools where it is present – giving all classes and students access to the library during class periods, but allowing time for librarians to plan and co-teach research and other needed curriculum with instructional staff that is consistent and in-depth for students. Using the librarian as an instructional partner in this way helps build efficacy of the pedagogy throughout the school, benefitting student growth and learning.

Throughout this report, there is an emphasis on reading for pleasure or choice reading, which decreases as students get older. Increased testing and packed curriculum at the secondary level makes it difficult for classroom teachers to include choice reading into their units. Curriculum supervisors should work with their staffs in creative ways to increase the options for choice reading as part of instruction, highlighting those staff members who develop ways to integrate it into their lessons.

Recommendation #6: Work with schools to ensure that students have access to the school library, including during lunch, before, and after school.

Response: Access is a wide-ranging topic, which includes hours, passes, testing schedules, staffing and physical spaces. A good number of recommendations have been made in this document regarding access, with many of them pointing to a need to break down as many barriers as possible, making it seamless for students to use library resources throughout and beyond the school day.

LS will ask librarians evidencing best practices in regard to library access to share their practices and policies with the group as a whole. The LS Supervisor, in turn, will share this information with principals. The end goal is that students have access to the library as needed for research and reading during lunch, free periods, and before and after school.

All library assistants (elementary schools) and library secretaries (secondary schools) do the same duties, but they are on different schedules, and have different coverage, as they are on different pay scales. We recommend that the library secretaries at the secondary level be moved to A-Scale and that all library assistants and secretaries begin work the same day as the librarians (currently, the G-Scale assistants begin four days before the librarians). This could be reviewed by a consultant in 2015 with possible recommendations in FY2017.

Middle school librarians are currently given a stipend to keep the library open beyond school hours. High school librarians, who are staffed with two librarians, can shift hours to keep the library open beyond school hours. It is recommended that stipends and/or extended contracts be given to elementary librarians to staff the library beyond school hours. It is suggested that each elementary offer at least one hour of open library time beyond the school day and that all secondary schools offer at least 1.5 hours of open library time beyond the school day, with hours both before and after school available, but set by each school in line with the needs of their community. This could be studied in 2015 with possible recommendations for FY17.

New and innovative approaches are needed in regard to the scheduling of testing, so that library services to students are not negatively impacted by long periods of closure (up to six weeks in some schools). As we move into an era when all APS students have personal devices and testing becomes available across all platforms, there should be a way to test in classrooms or in smaller groupings, rather than close off major common areas, such as libraries.

Recommendation #7: Work with the Department of Information Services to increase librarians' access to data and foster the integration of eContent.

Response: A representative from Information Services should be permanently tasked to meet with the LS Supervisor as a liaison on a regular, frequent basis as soon as possible. This would help speed the integration of eContent, such as databases and eBooks, as well as provide necessary data, such as the ability to analyze circulation by subgroups (gender, ethnicity) which is not currently possible due to the limits of information being downloaded into our system. eContent is critical in balancing the playing field for English language learners and students with special needs, as the tools available allow students to adapt content to their individual needs. This partnership could also yield new and original ideas on library technology currently in use and how that technology should be upgraded and changed in the coming years.

Recommendations with Policy and Budget Implications

Recommendation #8: As APS continues to address its increasing student population, work with Facilities to ensure that library space, shelving, and furniture align with best practices whenever possible.

Response: Libraries need walls. Using the library as an instructional space when it doubles as a hallway simply does not work. Additionally, computer labs, if present in the library, should be walled off (perhaps with glass walls) so that the library can be used by multiple groups, for multiple activities, at the same time. This being said, new library construction should fall in line with the current model of “maker-spaces” being flexible and reconfigurable. For instance, all furniture should be mobile, including shelving, and all technology, such as computers, should be wireless. This model is currently being employed at Discovery Elementary and in McKinley's reconstruction. With three new buildings set to open in 2019, LS should work closely with design teams.

Increasingly, our secondary schools are growing in size to the point of having two librarians. As this happens, libraries must be reconfigured or expanded to allow for two teachers, simultaneously, to be teaching different lessons in the same space. This is possible at Williamsburg, for instance, challenging at Swanson, and impossible at Jefferson. This can be phased in as the populations grow, although space size and configuration should be analyzed for any school topping 900 students.

Recommendation #9: Work with the Digital Learning Steering Committee to ensure that current policies and procedures appropriately address student needs in regard to digital citizenship and information literacy.

Response: The Department of Instruction, Information Services, Student Services, and school representatives have created a partnership to enhance and transform student learning in regard to technology integration. LS will work with this group to ensure that current policies and procedures appropriately address student needs in regard to digital citizenship and information literacy.

Recommendation #10: Shift cataloging process to schools to ensure timely access to materials by students, staff, and community.

Response: LS recommends reconfiguring jobs, and job duties, to address two issues: The increased need of support to librarians in relation to the technical demands of their current jobs, and the 4-6 month timeline for materials processing. It should be noted that these recommendations would likely be budget neutral or represent minor savings. LS suggests that most cataloging be pushed out to the schools, as is the case in neighboring jurisdictions.

The new circulation system put in place in September of 2014 allows school-based personnel far more control than in the past, allowing them to cater the access of their system to their unique populations, but ongoing training and support will be needed for the librarians to fully utilize these tools, hence the request for a half-time assistant in charge of working with the librarians to increase their efficacy with the Follett Destiny portal as well as other technologies, such as screen-casting used to educate and promote library resources.