THE LIBRARY LEARNING COMMONS:
MEETING THE NEEDS OF THE 21ST CENTURY LEARNER

by

Charlene Burns

An Abstract
of a thesis submitted in partial fulfillment
of the requirements for the degree of
Educational Specialist in Human Services Learning Resources
in the Department of Educational Leadership and Human Development
University of Central Missouri

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ABSTRACT

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School library philosophy was rewritten to meet the informational needs of the 21st century learner. Many school libraries have yet to make the changes needed to meet the new requirements. The library learning commons model mirrors the new philosophy. The review of the literature describes the learning commons model and gives strategies for implementation. Additional research was conducted via an Internet survey completed by school librarians. Data analysis concluded that school libraries are implementing elements of the learning commons model, but few have completed the transition. Many schools need to add additional resources and strategies in order to more closely reflect the American Association of School Librarians ideals.
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CHAPTER 1
INTRODUCTION

Statement of the Problem

The turn of the 21st century brought many changes in the way we communicate and access information. The workforce moved away from primarily industrialized jobs to occupations requiring critical thinking, communication skills, problem-solving, teamwork, and the ability to process and manage a variety of digital media. In order to prepare students for these increasingly important skills in the Information Age, educational institutions are restructuring the way students think, learn, and communicate. School libraries are also evolving to serve the changing needs of the learning community by transforming library media materials, method, and management.

In 2007, the American Association of School Librarians (AASL) developed Standards for the 21st Century Learner to guide schools and librarians as they adopt new materials and learning strategies. The standards imply that the school librarians have a responsibility to create a learning environment that meets the needs of a diverse group of learners. The AASL describes the ideal learning environment in the publication, Empowering Learners. The ideal physical space is described as, “...an intellectual gymnasium with multiple, flexible spaces that accommodate a variety of learning tasks” and the virtual space as a place that “...connects learners to existing school library services and provides additional services tailored to learners’ needs” (34). The AASL explain new technologies as
“...endless opportunities for innovative teaching and learning” (10) and the collection as “diverse sources of information that match curricular needs, lend themselves to units of inquiry, and are of high interest to students” (39). In Empowering Learners the 21st century library culture is referred to as one “...where every individual has a voice to contribute, the school librarian, classroom teachers, and students now share the roles of teacher and learner” (10).

One school library model mirrors the AASL ideal, a library learning commons. In a learning commons, the librarian creates a school environment that encourages everyone to share in the learning and adapts the spaces and tools to the users. A library learning commons will look different at every school, but the basic framework will include the following principles: flexible physical and virtual learning environments; excellent technology; rich information resources; and a collaborative, participatory culture.

School libraries are threatened with extinction. Many have yet to adapt to the changing needs of the 21st Century learner and struggle to compete with immediate access to information available on handheld devices. School districts are choosing to cut funds for school libraries and are downsizing library staff, yet students need more support, not less, to navigate the flood of informational resources available on the Internet. School libraries that remain relevant and essential to the learning environment are those that evolve to meet the needs of students in the information age.
School libraries are functioning along a continuum between the twentieth and twenty-first century library philosophies. The learning commons model mirrors the Standards for the 21st-Century Learner by providing flexible physical and virtual learning environments, excellent technology with rich information resources, and a collaborative, participatory culture. Schools that implement the learning commons model will meet the school library ideals created by the American Association of School Librarians.

Purpose of the Study

The purpose of this study was to understand how the library learning commons model supports the Standards for the 21st-Century Learner, published by the American Association of School Librarians. The study also attempts to quantify how schools are supporting the Standards for the 21st Century Learner using all or parts of the learning commons model. Literature was reviewed in order to generalize how the model upholds the standards at various age levels and school settings. The literature proposes an assortment of strategies that can be implemented at little to no cost while also offering ideas for schools with larger budgets. The study of the literature revealed factors that must be in place to implement the changes needed to complete the transformation from traditional library to learning commons. The literature supports the view that schools that complete the shift will provide for the changing needs of its patrons while remaining a relevant and essential part of the learning community.
A school survey was developed to better understand how schools are transitioning from the school library model of the 20th century to better meet the needs of the 21st century learner. The survey implemented in this research study uncovers which strategies and resources are most commonly implemented and which strategies or resources are yet to be adopted. The survey also measures how librarian training and experience relate to the transition and how adequately the librarians feel they are meeting the needs of the students in their schools.

**Research Questions**

The American Association of School Librarians provides clear examples of the ideal learning environment for the 21st century learner in their publication, *Empowering Learners*. The library learning commons model supports the AASL ideals by providing strategies to implement the transition. Nine years after the AASL publication, many school libraries have yet to implement strategies to meet the changing needs of its patrons. This research seeks to discover if schools are using the learning commons model to meet the needs of the 21st century learner and which strategies and resources are most likely the last to be adopted.

1. In what ways are K-12 school libraries functioning like a learning commons?
2. How are school librarians creating flexible physical learning environments?
3. How are school librarians creating flexible virtual learning environments?
4. What types of technology devices and tools are used in school libraries?
5. How do school librarians promote a participatory culture?
6. How do school librarians collaborate with teachers?
Limitations of the Study

This review of literature was limited to the availability of books, articles, and peer-reviewed journals written by experts in the field of library learning commons. The experiences from librarians who transitioned from traditional libraries to library learning commons may not be typical and serve only as examples of a successful transition. No articles were found to contrast an unsuccessful transition. The study is also limited to the timeframe available to review the literature and to collect data from participating librarians.

The research component of this study involves the implementation of a survey. Taking the survey was promoted through personal contacts and contacts of contacts which resulted in “availability sampling” (Schutt 152). This limits how many librarians are notified of the survey. Participation was voluntary, and reasons for completing the survey might skew the results.

The results of the study serve as an analysis of the existing literature and how the strategies and resources pertaining to library learning commons are currently being implemented in K-12 school libraries in relation to the AASL Standards for the 21st-Century Learner. The results may or may not be generalized to all K-12 school libraries. The results provide a snapshot of where school libraries fall on the continuum between the 20th and 21st century library philosophies.
Definition of Terms

21st-Century Learner: Students who are educated during the 21st century using technologies, strategies, and resources that were not readily available during the 20th century (AASL, “Standards for the 21st Century Learner in Action” 5).

American Association of School Librarians (AASL): A division of the American Library Association, the AASL is a professional organization that focuses on school libraries and librarians.

American Library Association (ALA): Founded on October 6, 1876 during the Centennial Exposition in Philadelphia, the mission of ALA is “to provide leadership for the development, promotion and improvement of library and information services and the profession of librarianship in order to enhance learning and ensure access to information for all” (ALA).

Depth of Knowledge: The Depth-of-knowledge (DOK) model was created by Norman Webb from the Wisconsin Center for Education Research. It is a measure of the degree of depth or complexity of knowledge that standards and assessments require. Criterion is met when the standard or assessment is as demanding cognitively as the expectation set for the learner (Webb Align.org).

Digital media: A general term that refers to any content that can be found on the Internet or on a computing device. The term refers to video, audio, graphic, or text materials.
Flexible learning environment: A learning space where resources and furnishings can be moved and configured to best serve a particular task (Harland 15).

Flexible scheduling: A school library schedule where students visit at times when library resources and services are needed (Donham 142).

Industrial age: The era of human history when factories and industry drove economy.

Information age: The era of human history when rapidly shared information has become more important than physical commodities.

Information literacy: The skills needed to locate, evaluate, analyze, and communicate information responsibly (AASL, “Standards for the 21st Century Learner in Action” 119).

Information technology staff: The people who keep the technology hardware and software updated and running smoothly.

Inquiry learning: An instructional method that puts the students in charge of finding and analyzing information in order to draw conclusions about what they learned (Donham 272).

Library learning commons: A school library model that promotes a culture that invites everyone to participate in the exchange of ideas and learning experiences in the virtual and real world. It continuously changes to meet the needs of the users with flexible furnishings and technology tools (Donham 21).
Makerspace/Tinkerspace: A creative learning space that promotes innovation and imagination through play using a variety of tools and materials (Loertscher, Preddy, and Derry 48).

National Educational Association (NEA): An organization that works to advance educational practices in the United States.

Participatory culture: The collective feeling that all members of a community are important. Everyone is encouraged to share ideas and resources for the good of the community (Donham 114).

Podcast: Similar to a radio broadcast, a podcast is a prerecorded audio program for informational or entertainment purposes. Unlike radio programs that are broadcast at a particular time, podcasts are usually downloaded to personal devices and enjoyed at a time that is convenient to the user.

Reading promotion: A library event that encourages reading through contests, challenges, or other fun activities.

Subscription database: A paid subscription service that links the user to digital articles from a variety of publications such as magazines, professional journals, and books, that are not available through an Internet search.

Virtual learning environment: A learning space that takes place on the Internet using a computer or personal learning devices such as a tablet or mobile phone.
Research Design

The research study began with collecting previously published information relating to the implementation and design of library learning commons in K-12 schools in North America. Additional information was collected pertaining to the history of school libraries and the evolution of school library philosophy. The existing data was compared to ascertain if the library learning commons supported the ideals of the current library philosophy.

Articles were retrieved from the following databases: Academic Search Complete; Education Research Complete; Gale Virtual Reference Library; and ProQuest Central. Additional articles were retrieved via the World Wide Web. Books were retrieved from the Mid-Continent Public Library, the Liberty School District Professional Library and the author's personal library. Search terms included: “learning commons”, “library learning commons”, “21st-century learning”, “school library history”, “school library philosophy”, “historical school library philosophy”, “school technology podcasts”, “school technology professional development”, and “school technology blogs”.

Additional research was conducted to determine if K-12 school libraries are using all or parts of the library learning commons model to meet the needs of patrons. Permission was obtained to promote this research study through the University of Central Missouri Internal Review Committee and the Greater Kansas City Association of School Librarians. School librarians volunteered to participate in
the study by completing an online survey. A complete description of the research study is found in chapter 3 of this thesis.

**Conclusion**

School libraries are threatened with extinction. Many have yet to revamp to accommodate to the changing needs of the 21st century learner and struggle to compete with immediate access to information available on handheld devices. School districts are choosing to cut funds for school libraries and are downsizing library staff. Yet students need more support, not less, to navigate the flood of informational resources available on the Internet. School libraries that remain relevant and essential to the learning environment are those that evolve to meet the needs of students in the information age.

School libraries are functioning along a continuum between the 20th and 21st century library philosophies. The learning commons model mirrors the *Standards for the 21st-Century Learner* by providing flexible physical and virtual learning environments; excellent technology with rich information resources; and a collaborative, participatory culture.

The following chapters begin with a brief history and description of the evolution of school library philosophy. Chapter two compares the American Association of School Librarian’s *Standards for the 21st Century Learner* with the library learning commons model. The library learning commons model is described and an explanation is offered on how the flexibility of the model meets the needs of the school patrons.
Chapter three describes the research hypothesis and research model for the thesis study. It explains the research plan and method of data collection, as well as how the subjects were selected to participate in the study. The purpose of this research is to better understand how school libraries are meeting or not meeting the needs of patrons using all or part of the library learning commons model.

Chapter four is an analysis of the data collected. Research questions are answered using the data collected from the survey. Chapter five discusses these results and the conclusions reached in this thesis.
CHAPTER 2
REVIEW OF THE LITERATURE

School libraries are threatened with extinction. Once warehouses of books and learning materials, the school libraries of the 21st-century struggle to remain relevant as they are forced to compete with immediate access to information from personal computers, cell phones, and tablets. Students need more support, not less, to navigate the avalanche of informational resources now available. School libraries that evolve to meet the needs of the students in the Information Age are those that remain adaptable to accommodate future innovations.

There is a school library model that promotes a culture that invites everyone to participate in the exchange of ideas and learning experiences in the virtual and real world. It continuously changes to meet the needs of the users with flexible furnishings and technology tools. It is called a learning commons.

School libraries are functioning along a continuum between the twentieth and twenty-first century library philosophies. The learning commons model mirrors the *Standards for the 21st-Century Learner* published by the American Association of School Librarians (AASL). It provides a flexible physical and virtual learning environments, excellent technology with rich information resources, and a collaborative participatory culture. Schools that implement the learning commons model will meet the school library ideals created by AASL.
School Library Philosophy

School library philosophy has changed continuously over its more than 100 year history. To better meet the needs of its patrons, school libraries strive to improve educational resources and practices for the learning community they service. The needs of the 21st century learner are different from the needs of the learners at the turn of the 20th century. New technologies have changed expectations for teaching, learning, and thinking. The American Association of School Librarians (AASL) responded to the changing needs by publishing Standards for the 21st-Century Learner in 2007. The new standards are supposed to guide librarians and administrators as they adopt new learning strategies and materials but the idealistic recommendations do not explain how to implement the transformation. The library learning commons philosophy mirrors and supports the 21st Century learning environment recommended by the AASL and the flexibility to accommodate for the needs of individual schools. The ideals of the learning commons model; flexible physical and virtual learning environments; excellent technology; rich information resources; and a collaborative, participatory culture, provide school libraries with the roadmap they need to begin striving to meet the needs of the 21st century learner.

20th-Century History

Shortly after the turn of the twentieth century, the first National Educational Association (NEA) Library Committee was formed. Lead by a NEA committee chairman and high school librarians from Detroit and Brooklyn, the committee’s
first task was to investigate what high school libraries were like across the United States. In 1915 they gathered data through a series of surveys and presented the findings to school administrators in an attempt to improve the existing conditions. The findings were formally presented at a national meeting where administrators and educators discussed problems relating to high school libraries. The necessity to provide administrators with official library standards was apparent and the library principles, *Certain Standards* (named after the NEA chairperson C.C. Certain), were created (Roscello 6).

Some of the one hundred-year-old standards are still valuable today; instill a love of learning and ensure equal access to information (AASL, “Empowering Learners” 7). The first set of standards also included promoting the library as the “heart of the school” so it would be seen as an essential part of the school organization. *Certain Standards* also touted the trained school librarian as a professional who was to work with and for teachers without being expected to do clerical work (Roscello 6). As interest grew to include libraries in all junior high and high schools across the country, the newly developed, definitive standards secured the ideals of the American Library Association (ALA) and as well as the NEA. The professional associations further collaborated to create elementary school library standards in 1925. Although not mandatory, the qualitative standards served as recommended guidelines that helped the states develop their own standards (U.S. Department of Education 11).
In the 1950s, the standards became quantitative, providing guidelines for the number of book, magazine, and newspaper subscriptions based on school enrollment statistics. By the 1960s the guidelines began to include audiovisual materials, increased requirements for books and periodicals, and increased library-staffing recommendations also depending on enrollment (U.S. Department of Education 11-12). The 1960 publication *Standards for School Library Programs* was heavily advertised by the American Association of School Librarians (AASL) to familiarize school staff with the importance of school library programs, leading to a stronger influence on the educational community. By 1969, audiovisual materials had become more important, and library standards were replaced with *Standards for School Media Programs*, although the guidelines remained mostly quantitative.

Qualitative goals for improving school libraries began to take priority over quantitative recommendations in the 1970s. The school library became a laboratory for research and reference skills taught under the guidance of the librarian (Wallace and Husid 25). This remained the norm throughout the 1980s, and 1990s as the focus geared toward providing high-service programs for schools that varied by grade level. By the end of the twentieth century school library media publications illustrated the characteristics of quality programs rather than focusing on quantitative recommendations (U.S. Department of Education 13).

Historically, school library philosophy focused on providing schools with professionally educated staff who could train teachers and students to use a variety of print, and later audiovisual, materials. Collection development and circulation
statistics quantitatively measured success or failure. Librarians ruled over their
domain and hoarded their collection in order to fulfill the recommended statistical
requirements. Unfortunately, many people still describe librarians as the
stereotypical harsh woman who sits on her throne behind the library desk and
shushes patrons. The turn of the twenty-first century demanded a transformation in
library media materials, method, and management. This pedagogical flip is driving
school libraries to shatter the stereotypes and adopt new strategies that serve the
changing needs of the learning community. Goodbye, library. Welcome to the
learning commons.

21st-Century Updated School Library Philosophy

The past two decades brought many changes in the way we communicate
and how we access information. The focus on manufacturing jobs of the Industrial
Age was left behind in the twentieth century. Jobs in the Information Age require
critical thinking, communication skills, problem solving, teamwork, and the ability
to process and manage a variety of digital media (AASL, “Empowering Learners” 7).
Library programs that evolve to foster these new skills contribute to the success of
adults in the twenty-first century (8). The American Association of School Librarians
embraced the change by developing Standards for the 21st-Century Learner in 2007.
At the core of the new standards is the belief that reading and inquiry drive all
learning. To be successful, students need to master the skills that lead to productive
learning. School librarians teach information literacy skills, technology usage,
critical thinking, and ethical decision-making; but the students decide how they will
exhibit these skills. Students are encouraged to responsibly seek diverse perspectives, evaluate information, use technology appropriately, apply information literacy skills, and use multiple formats for information access and production (6).

School librarians have the responsibility to create a learning environment that meets the needs of a diverse group of learners. The environment supports students and promotes successful learning by providing equitable access to information, resources, and learning opportunities. The culture promotes a social atmosphere where students feel encouraged to share and learn from each other. “Most importantly, every child in our schools must have access to a vibrant school library” (AASL, “Standards” 6).

Students, and even some teachers, in schools today were born digital. They grew up with technology and have embraced it socially and intellectually. They seek out and process information immediately from small hand-held devices like cell phones and tablets (Dewey 38). These mini computers also allow the user to instantly compose, create, and communicate their own ideas from any place to any place in the world (AASL, “Empowering Learners” 7). Almost everything young people find important can be accessed in the palm of their hands. Loertscher and Koechlin advise that the traditional library approaches will not appeal to these types of students. They note that the learning commons supports the curriculum and also supports students as they experiment, play, think, collaborate, make, and grow (E3). When the librarian creates a school environment that encourages everyone to share
in the learning and adapts the spaces and tools to the users, the space will meet the needs of the 21st century learner.

**The Learning Commons Model**

The learning commons will be unique at every school. The framework, however, will be supported by common ideals: flexible physical and virtual learning environments; excellent technology; rich information resources; and a collaborative, participatory culture. The learning commons philosophy mirrors and supports the 21st Century learning environment recommended by the American Association of School Librarians. The AASL describes the physical space as, “...an intellectual gymnasium with multiple, flexible spaces that accommodate a variety of learning tasks” and the virtual space as a place that “...connects learners to existing school library services and provides additional services tailored to learners' needs” (“Empowering Learners” 34). The AASL explain new technologies as “...endless opportunities for innovative teaching and learning” (10) and the collection as “diverse sources of information that match curricular needs, lend themselves to units of inquiry, and are of high interest to students” (39). In *Empowering Learners* the 21st century library culture is referred to as one “...where every individual has a voice to contribute, the school librarian, classroom teachers, and students now share the roles of teacher and learner” (10).

The learning commons can be described as the heart of the school (Martin, Westmoreland and Banyon 16). It is a learning laboratory that focuses on patron-centered programs that encourage new ways of thinking, learning, and producing.
No longer a warehouse of information and technology, the library learning commons philosophy permeates the school culture (Koechlin, Zwaan, and Loertscher 12). These ideas extend beyond the boundaries of the physical library learning commons and into the classrooms (Wallace and Husid 28), allowing the librarian and the resources to follow the need. It is not enough to put up a sign and order new furniture, the learning commons principles are planned with current and future needs in mind. Those ideals and principles are implemented to promote authentic inquiry, innovation, and collaboration for the community of learners (Kompar 21). The library learning commons is a vibrant learning environment that will never be thought of as just a facility that houses equipment (McKinsky 406). It is a place where students and teachers feel safe to explore, experiment, reflect, interact, contemplate, debate, inspire, innovate, and experience new ways of learning (Lewis and Loertscher 48).

**Flexible Physical Spaces**

The American Association of School Librarians (AASL) states the physical space needed to meet the needs of the 21st-century learner “...should be designed to accommodate a variety of learning styles...” (“Empowering Learners” 10). To accomplish this, the AASL recommends the following for school libraries:

“The physical space includes areas for group and independent work, an area for presentations, a multimedia production area, access to adequate number of workstations, wireless access for students and faculty who bring their own...
laptops, space for curricular planning and small meetings, ample student
research space, and comfortable places for reading" (34).

David Loertscher describes the ideal physical space as totally flexible to allow
individuals, small groups, or whole classes to visit when convenient ("Flip This
Library"). In a learning commons, furniture and technology can easily be moved to
match the current need (Lewis and Loertscher 48). Seating and tables are
lightweight or on wheels so they can be moved around to support social learning of
various sizes and configurations (Sinclair 505). Moveable whiteboards, flip-top
tables, and bookshelves on casters are additional furniture considerations
(Stephenson and Stone 48). There is a mix of comfortable, quiet, and roomy spaces
that inspire exploration and the exchange of ideas (Hyman 17). The cozy, soft
seating provides relaxing reading spaces, tall tables, and bar stools work well for
collaborative projects, restaurant-style booths support several laptops for group
inquiry projects, and folding chairs provide a venue for large gatherings (Diggs 37).
Classes easily shift from large group instruction to small group collaborative work
using swivel chairs (Helfrich 77). The activity dictates the design (Lewis and
Loertscher 48).

**Zones**

Although the furnishings are flexible within the learning commons, Ackroyd
suggests designating multiple seating zones (26). When plush lounge areas are set
up near creative displays, patrons experience a bookstore climate. Having a
comfortable place to read will make the newly published and old favorite books
seem more inviting than ever (Murray 18). Tables and chairs can be positioned between bookshelves to create an open instructional space that can accommodate one or more classes. Mounted projectors can be used for instruction or to present student created products. After school, these large group areas are the perfect meeting spaces for clubs or performances like poetry readings (Ackroyd 28). School librarians should not be afraid to approach local furniture stores about donations or to attend PTA meetings to gain parental support in fulfilling seating needs (“Valerie Diggs” 50).

Creating a variety of learning and teaching environments will appeal to students and teachers alike (Kompar 21). In addition to the large main room, most traditional libraries also have several adjoining storage rooms, workrooms, or offices. Those rooms can be repurposed for what the students need now and in the future. The small rooms can be opened up to allow for additional learning spaces (Holland, “21st-Century Libraries”). The storage room that once stored archived periodicals can be converted into additional instructional space for small groups. An office can become a collaborative work den or audiovisual media production studio. A larger room can be transformed into a Makerspace.

**Quiet learning spaces**

Meeting the needs of a diverse group of learners requires that noise and distractions be reduced for those who need it. Sometimes the social nature of the learning commons might impede students who need to read or concentrate on a task, so some areas are designated as quiet zones (Palin 20). Students can change
the designation of small rooms by flipping the “Recording Studio” sign to “Quiet Room” when the need changes to reading, writing, or study time. The collaborative noises in the learning commons can also be masked with white noise. Palin uses an inexpensive small speaker and MP3 player near the seating area in a small alcove. The system plays soft nature sounds or even classical music, which is enough to keep noisy distractions to a minimum (20). Heather Turner developed a zoning system by labeling each area with a sign that alerted users with the noise expectations for that space. Her library learning commons has three color-coded zones; red for silent zone, yellow for quiet conversation, and green for normal conversational level. The zones allow students to choose the area that is the best fit for their current need (Turner 28).

Creativity and innovation space

Another role of the learning commons is to foster creativity (Loertscher and Koechlin E9). One way to boost innovative thinking is to provide a space where students can play, explore, create, discover, tinker, and experiment with a variety of tools and materials. These areas are referred to as makerspaces. Students are encouraged to think independently while actively taking command of their own learning. The space can house a variety of materials from found objects to high-tech tools like 3-D printers, and everything in between. The main purpose of a makerspace is to let students take command of their learning and to encourage STEM (science, technology, engineering, and math) skills through creative investigation and problem solving. The culture of the library learning commons
encourages learners to take chances and explore even the wildest ideas. The makerspace gives students the tools to develop and share their unique creations (Loertscher, Preddy, and Derry 49).

**Audiovisual space**

The music and performing arts teachers could be invaluable when setting up an audiovisual project production space (Ackroyd 26). A desktop or laptop can be designated for the space and loaded with easy to use software like iMovie and GarageBand. An electronic keyboard or electric guitar can be added. Microphones, headsets, and video cameras are also stored in the room. The space can be used for student-led newscasts, instructional webcasts, and audio podcasts. Lighting and a green screen can be set up to be ready for a variety of video projects (Crompton 22). Students today have a desire to access and remix rich media sources that they can share (Dewey 39).

**Technology**

Technology has an important role in the school-learning environment. The school librarian should be an expert at evaluating hardware, software, and Web 2.0 tools that will best meet the needs of the school community (AASL, “Empowering Learners” 17). The technology tools used in the library learning commons allow students to find and use information proficiently while other tools are used to create innovative products and captivating presentations (Koechlin, Zwaan, and Loertscher 12). The school librarian should be a digital leader who willingly shares ideas, successes, and failures. The librarian matches learners with the best technology
tools, then teaches how to access and use them (Crompton 23). Students who are proficient in the use of technology are thought to have a better chance at competing for careers (Koechlin, Zwaan, and Loertscher 11).

Additional tools promote student communication and collaboration inside and beyond the classroom (Hyman 20). Online classrooms, blogs, and social networking connect teachers, students, and the community. Students can connect to experts through webcasts and Skyping sessions (Hyman 19). The larger spaces in the library learning commons work for remote author visits. Skyping with an author is less costly and can be easier to schedule than a live visit. Remote author visits still allow for audience participation through live question and answer sessions.

New technology tools are continuously adopted. The school librarian works with technology to plan ahead for increased power needs. “Put power everywhere, there is no such thing as too much power” (Stringer 295). Outfit tables with holes for chargers and electricity access to allow for charging various devices. Strategically place Ethernet, audio, and video ports (Hyman 20). Create charging stations where students can quickly plug-in with extra cords when they leave cords at home. Place the printing, scanning, and copier station near the door for easy retrieval (Stephenson and Stone 47).

The Virtual Learning Commons

Digital content is a necessity, not an option in the 21st century. Students use digital content to explore, research, and play with subjects they may not otherwise consider (Holland). The virtual learning commons is where digital materials, such as
eBooks, student and teacher user-generated content, and databases are curated and
accessed. Technology tools that help the user create citations, or select books are
accessible around the clock (Donham 224; Loertscher, “Flip this Library”). The
virtual library web presence is an extension of the physical space that contributes to
the accessibility and utilization of the library learning commons (AASL,
“Empowering Learners” 34; Turner 31).

The content provided in the learning commons site is regularly updated. The
virtual space links students to teacher and librarian created content that be
amended as the curriculum advances through the school year (Harland 18).
Teachers use a variety of multimedia content to support their curriculum. The
virtual learning commons can link to streaming video, podcasts, screencasts, digital
archives, and animated simulations that enhance the learning experience by
engaging the learner through a variety of modalities (Sinclair 504). The virtual space
is flexible and easily updatable by library staff (Harland 18).

The virtual learning commons is a space where patrons are encouraged to be
part of the participatory culture. Discussions and collaborative projects can
continue after the school day through social software such as wikis and blogs
(Sinclair 504). Teachers can follow progress to comment, coach, suggest, and make
recommendations to help guide students in their learning (Loertscher, “Flip this
Library”). These web spaces can become easily accessible digital museums where
student-created products can be showcased and celebrated. Students may also
contribute to the virtual learning commons by sharing student-created book
reviews and book trailers; commenting on social media like the library Twitter feed or Facebook page; or by helping to advertise reading promotions, book clubs, contests, and other library learning commons activities (Donham 225). Recognizing the expressions of students’ learning and ideas makes them feel valued and important to the community (Turner 31).

**Participatory Culture**

The root word for *commons* is the same as the root for *community*. Beth Holland describes the learning commons culture as one where the school community encourages teachers and students to communicate, collaborate, and share ideas. The library learning commons belongs to everyone. Students and staff can be invited to share their ideas to create or improve the spaces and experiences. An online form or suggestion box can be developed to facilitate the incorporation of patron ideas (“Valerie Diggs” 50). On a grander scale, a student advisory club allows students to plan and promote library events like Read Week activities, book clubs, contests, and celebrations. The advisory staff can set up displays, decorate the bulletin boards, design original posters and bookmarks, create book trailers, and contribute to the library learning commons blog (Hayes, “Library to Learning Commons”).

Heather Turner maintains an advisory club of ninety students that she calls iStaff. The students perform many of the previously stated tasks but also are integral in maintaining and servicing technology tools in the library learning commons. Students charge small devices like iPads, laptops, and cameras. The student staff is
also trained to use all the equipment and mentor peers who want to use it in the classroom (Turner 29). Peer mentors are spread throughout the school to assist students their own age who might not want to ask an adult for help (Sinclair 507). With the help of information technology staff, iStaff are trained to troubleshoot minor technology issues which helps keep fellow students in the classroom (Turner 30).

Student artwork or projects can promote the participatory culture and enhance study carrels, table tops, and bookshelves when displayed in the learning commons (Buchanan 64). Listening lunches give students an audience to share musical performances and dramatic interpretation such as poetry slams or even storytelling events (Diggs 38). The participatory culture of the library learning commons gives students a chance to shine when they might not otherwise take the stage.

A variety of people can be invited to visit the learning commons in order to share experiences with the students (Crompton 22). During the school day, this can be accomplished in conjunction with a curricular unit. After school, a local expert or artist may be willing to share expertise with an after school club or guide students in a makerspace design challenge. Many local organizations have outreach staff who work with schools. Local museums, zoos, archives, historical societies, science centers, and businesses can also provide individuals who can support the curriculum. The school librarian can curate the contact information from
organizations and individuals into a database to easily facilitate the scheduling of human resources (Donham 103).

**Learning Commons in Practice: Flexibility is Vital**

Furnishings, technology, and books are only tools that enhance learning. It is the passionate school librarian who makes dynamic and engaging spaces where successful learning takes place (Crompton 24). These librarians embed information literacy skills throughout the school curriculum so that students connect problem-solving and the inquiry process to all content areas (Hayes, “Library to Learning Commons”).

The school librarian sets the tone for the learning commons environment by providing opportunities that enhance the learning experience for both teachers and students. These ideals can best be achieved through flexible scheduling, where students and teachers are free to use the facilities throughout the day (AASL, “Empowering Learners” 33). Not only does it foster point-of-need research (Hyman 20), it also helps to meet the needs of a diverse population of students. A flexible schedule increases the librarian’s availability for co-teaching and thereby increases the teacher to student ratio (Hayes, “Library to Learning Commons”). Flexible scheduling also allows for collaborative planning between the librarian and classroom teachers (AASL, “Empowering Learners” 33).

Like the learning environments, the library staff must also be flexible when meeting the needs of the patrons by staying current with new tools and technologies (Harland 22). Successful school librarians subscribe to library, educational, and
technology feeds like Twitter, blogs, and websites. They listen to podcasts such as *Instructional Tech Talk* and *Teacher Cast* (Smith). They take advantage of technology trainings provided by the school district; local libraries; and the local, regional, and state school library associations. The proactive librarian evaluates which new tools will best meet the needs of the users.

Pamela Harland encourages school librarians also to be flexible with policies (21). She suggests that rules such as overdue fines, item limits, loan length, and renewal policies need to be re-evaluated. If there are no clear reasons for the limitations, she recommends that policies should be revised to reflect user need. Break the stereotype of the library policeman. Trust the user before setting strict limits. Focus on meeting the needs of the patrons instead of enforcing the rules (Developing a Learning Commons 48).

Another stereotype that needs to be deconstructed is the stern librarian with a “don’t come near me” façade. A school librarian must have an approachable temperament (Stephenson and Stone 47). The librarian makes the users feel welcome to interrupt her when she is focused on a computer monitor (Harlan 46). Being accessible and responsive to user need is the driving focus of the learning commons culture (Turner 31).

**Collaboration**

In addition to promoting literacy and reading for enjoyment, the school librarian teaches information literacy skills that allow students to access, evaluate, use, share, and even create information for a variety of purposes. She builds
reading, writing, speaking, and listening skills across the curriculum (Loertscher and Koechlin E9). By focusing on learning goals and objectives outside the library, the school librarian explores new ways to collaborate with teachers and technology professionals to provide students with the information and tools they need to be successful in physical and virtual environments (Sinclair 504).

Collaboration between teacher and librarian is embedded in the learning commons philosophy (Murray 19). When teachers and librarians combine proficiencies with content, they offer more opportunities for students to think critically and develop questions that will increase the depth of knowledge (Diggs 37). The school librarian guides the instructional design to develop goals and objectives that match academic standards with technology and information literacy skills, social skills, and cultural competencies (AASL, “Empowering Learners” 17).

Co-planning between the librarian and teachers takes time and also requires flexibility. Murray describes how it may require meetings before and after school, over lunch, and even through email and shared documents. The time spent planning together will ultimately save time in the long run (19). The advanced planning allows the librarian time to build pathfinders, wikis, or websites that differentiate student resources for interest, readiness, and learning style (Developing a Learning Commons 49). School librarians’ expertise in selecting, curating, and organizing information for a variety of needs makes them instrumental to teachers when planning a successful unit of instruction (“Moving from Vision to Reality” 54).
The flexibility of the learning commons model not only promotes co-teaching but also allows for cultural experiences that connect curricular content. Together, the librarian and teachers design instruction that builds on personal expertise using best practices and resources (Loertscher and Koechlin E9). One example would be to work with the social studies and art teacher to design a medieval art fair (Loertscher, “Flip this Library”). Students are introduced to medieval artwork during a social studies unit. The librarian consults with the social studies and the art teachers to create a pathfinder that guides students to explore artists and styles created during the era. Student preferences are differentiated through additional individual or partner inquiry. The students then develop an art project that recreates a style or highlights an artist in art class. The blended learning projects are displayed in the library learning commons and celebrated by the entire learning community.

Another collaborative relationship is between the library and the information technology (IT) staff. The school librarian and IT staff can share information, ideas, skills, tools, training, and resources that will ultimately improve the technology experience for students and teachers (Harland 38). When the librarian and IT staff partner for installation and training of new technology, the entire learning community benefits from their expertise. The partnership also assures timely upgrades and quick support, that keeps technology running smoothly (“Moving From Vision to Reality” 55).
Implementing the Change

Now, sixteen years into the twenty-first century, many school districts have only just begun to implement some of the changes needed to embrace the *Standards for the 21st Century Learner* set forth by the American Association of School Librarians (Kompar 20). To produce the needed changes, it is recommended that certain factors be in place; a strong leader must lead the charge and the learning community must agree on a shared vision in order for everyone to support the shift in thinking needed to complete the transformation (Koechlin, Zwaan, and Loertscher 9; Loertscher and Koechlin E4-5).

Leadership

A school librarian with a strong professional commitment champions the change in culture and philosophy. This resilient leader serves as an instructional partner who acts upon good ideas from the entire learning community (AASL, “Empowering Learners” 16). Valerie Diggs was a pioneer who transformed her high school library into a learning commons (“Valerie Diggs” 48). She began her journey with a change in school culture. When her requests for a library renovation were denied year after year, she decided to start making small changes focusing first on collaborating with teachers to support the students’ information literacy needs (Diggs 33). Later she enticed students to the library with coffee and pastries and found they stayed to socialize. Circulation increased when more people came to the space (34). She continued to find ways to make her learning community more collaborative and participatory with a few physical changes to the library space.
The learning commons culture that she created permeated throughout the school and finally convinced administration to transform the physical space.

Diggs exhibited many of the leadership qualities that identify the type of champion needed to lead the conversion from library to learning commons. Although successful leaders display a variety of dispositions, the following characteristics may provide some indication of success. In general, school librarians who takes risks; keep up with the latest trends in technology and teaching practices; attend a variety of professional development opportunities; collaborate well with administration, IT staff, and teachers; and continuously re-evaluate program goals and objectives, will most likely complete the transformation.

Vision

A shift in thinking is required to make real change. Therefore, the stakeholders agree on some common goals to build a collaborative learning community that will meet the needs of the 21st-century learner. A successful library program administrator collaboratively develops a program mission, strategic plans, and policies. The transformation from library to learning commons begins by involving the entire learning community in the process. They suggest to partner with representatives from each segment of the school population; include administration, information technology, teachers, staff, parents, and even students to ensure all stakeholders have a voice. Review the
Standards for the 21st-Century Learner (AASL), characteristics shared by successful learning commons, as well as the needs of the school patrons, when developing a vision for the new spaces and culture (Kompar 22). Spending time to build a shared vision gains the support needed to complete the transformation (Crompton 3: Helfrich 77).

Support and Buy-In

Reinventing the library will require the support and buy-in from all subgroups of the learning community. Two groups will benefit the most from the change: teachers and students. Teachers appreciate how the learning commons environment is just an extension of their classroom. The flexible spaces meet their needs for a variety of learning activities. They welcome the around the clock access to the virtual environment and also how the technology extends their classroom beyond the school. Teachers like to be able to schedule an entire class in the learning commons and the option to send individuals or small groups as needed. Teachers appreciate assistance from the helpful library staff, especially when experimenting with new technologies or learning strategies. They feel supported as part of a team of educators that are pushing the students toward success. The learning commons physical space is where educators can showcase and share student work, exhibitions, and productions. These can also be shared through the online virtual museum on the learning commons website. Teachers welcome the opportunity to voice their opinions and to make personal contributions to the learning commons culture (Koechlin, Zwaan, and Loertscher 13-14). As teachers see
successful collaboration, they will begin to seek out ways to utilize the space in new and innovative ways.

Students may not realize the impact the learning commons has on teaching and learning, but they certainly appreciate the many advantages it has over a traditional library space. Students enjoy the learning environment, the comfortable seating where they can socialize, read, work, or create something new. They find the online access very helpful when working from home. Students appreciate that there is always a caring adult or fellow student who is willing to help with technology or information literacy needs. They feel a sense of ownership when they personally contribute time or ideas that make the learning commons inviting. When students see adults modeling and mentoring their peers, students feel safe to explore special projects or experiment with new technology. They feel connected to the learning environment and the outside digital world using technology. They feel their work has value when there is a physical and virtual space to show off their artifacts or productions (Koechlin, Zwaan, and Loertscher 13).

**Outcomes**

The library learning commons is very different from the libraries of the twentieth century. The success of the new configuration is often difficult to measure. Computer programs such as Destiny Resource Manager create reports for circulation statistics. Database usage can be tracked, but no website hit counter will gauge how adeptly the school librarian finds free or paid online resources for patrons (Crompton 24). Librarians document what they do to meet the needs of the
teachers and students. They record professional training, collaborations with teachers and information technology, facility usage, and innovative programming ("Moving from Vision to Reality" 56).

No accurate quantitative data will measure the flexibility of the furniture, the patron comfort, or the accessibility of the school librarian. There is no quantitative measure of the satisfaction derived from belonging to a participatory culture. However, qualitative data from patrons' will supply the feedback for some reporting and self-assessment.

**Conclusion**

The library learning commons is a continuous work in progress. It changes to meet the needs of the user and provides whatever is needed when it is necessary. It is the responsibility of the school librarian to uphold the beliefs outlined in the *Standards for the 21st-Century Learner*. The facility and culture must continuously evolve by acquiring new technology as it is developed, by adopting new curriculum and teaching methods, and especially to meet the needs of new teachers and students who join the learning community.

The library learning commons has no clear end. It is only a continuous journey to provide users with skills, attitudes, self-assessment strategies, and dispositions to be successful. The goal of the learning commons is the production of lifelong learners.
CHAPTER 3
METHODOLOGY

Hypothesis

To determine if school libraries are meeting the needs of the 21st century learner using all or part of the learning commons model, quantitative survey research will be conducted to establish the following hypotheses:

There is evidence that school libraries using the learning commons model or elements of the learning commons model are meeting the needs of the 21st century learner.

Research Method

An anonymous survey was offered to school librarians throughout the state of Missouri and beyond using “availability sampling” to recruit subjects as a means to collect data (Schutt 152). A request to promote the survey on the Greater Kansas City Association of School Librarians (GKCASL) website, newsletter, and association email was issued to the affiliate president via email. With permission of the GKCASL board, a personal message was sent to GKCASL members encouraging them to participate in the survey with a request to forward the survey link and email to colleagues in other districts. The survey link was also shared via Twitter. Each president of the remaining local affiliates of the Missouri Association of School Librarians (MASL) was contacted in the same manner. Many of those presidents shared the survey link with their members. Some of the members also shared the link via social media like Twitter and Facebook. One participant shared the survey
link with an American Association of School Librarian group for Educators of School Librarians.

**Setting**

The quantitative data was conducted via the Internet using Survey Monkey, a paid web-based survey tool.

**Subjects**

Participating subjects include librarians who serve in a K-12 school setting. Librarians were recruited using “availability sampling” through library associations, personal contacts, and Twitter (Schutt 152).

**Data**

The survey was developed using the elements of a learning commons described in the review of the literature. Initial questions will establish the experience, training and disposition of the librarian as well as school provided supports. The 31-question survey can be found in appendix 1. Questions about library design reflect characteristics usually found in a learning commons to determine if libraries are using all or parts of the learning commons model to meet the needs of the 21st century learner. Additional questions ascertain if librarians are following policies and philosophies usually found in traditional libraries or those found in the learning commons. The survey questions also attempt to detect if some factors are promoting or prohibiting the complete transition from traditional library to learning commons.
**Data Analysis**

Quantitative data gathered from Survey Monkey was entered into a spreadsheet. The data was analyzed to determine following:

1. In what ways are K-12 school libraries functioning like a learning commons?
2. How are school librarians creating flexible physical learning environments?
3. How are school librarians creating flexible virtual learning environments?
4. What types of technology devices and tools are used in school libraries?
5. How do school librarians promote a participatory culture?
6. How do school librarians collaborate with teachers?
CHAPTER 4
FINDINGS

In order to determine if school libraries are meeting the needs of the 21st century learner using all or part of the learning commons model, the following questions were analyzed using research data from a quantitative online survey using Survey Monkey. Four hundred seventy current school librarians participated in the survey. Some participants chose not to answer some of the questions but more than 300 responses were submitted for each question.

**Learning commons strategies and resources**

The learning commons model supports these ideals: flexible, physical, and virtual learning environments; excellent technology; rich information resources; and a collaborative participatory culture. Several survey questions were needed to in order to determine what schools are currently using. Questions 15-31 are specifically related to the learning commons model (see appendix 1).

**Flexible learning environments**

Flexible learning environments provide furnishings that appeal to a variety of learners and learning opportunities. The furniture can be moved and rearranged to meet the task at hand. Survey question number 16 asked librarians about the types of seating available in their school libraries (see appendix 1). Most libraries appear to have some of the seating and spaces commonly found in a learning commons. More than 64% [N =296] of the 436 librarians who answered question 16 report to have soft comfortable seating, an independent work area, a large group
work area, a large group meeting area, a place for multimedia presentation, and a research area. Less than 32% [N =138] reported having stackable or folding chairs for easy space reconfiguration. Less of the librarians surveyed report having any other alternative types of seating such as high top tables with chairs or stools [N=82], booth seating [N=12], flip-top tables [N=18] swivel chairs [N=62], or wiggly chairs [N=30] (see fig. 1).
Survey question 17 asked school librarians to rate the flexibility of their furnishings (see appendix 1). More than 78% [N=343] of the 437 librarians who answered the question reported that the furnishings are flexible or at least somewhat flexible to allow for reconfiguration depending on need (see fig. 2).

Question 19 focused on library zones (see appendix 1). The library zones that are most clearly designated by the 429 school librarians who responded, mirror the types of seating most commonly available. More than 82% [N =356] of libraries have a clearly designated instructional zone and almost 57% [N =244] have a soft/plush reading zone. Almost half [N =212] of the libraries have small group work space, but alternative zones like audiovisual production [N=116], quiet areas [N=54], performance space [N=40], and creativity spaces [N=68] are much less common (see fig. 3).

![Q17 Are the furnishings flexible and easily movable to meet the needs of different groups or configurations depending on the need?](image)

Fig. 2 Flexible Furnishings
Rich information resources

Survey question number 21 asked school librarians if they maintain a school library website or webpage (see appendix 1). Of the 434 librarians who responded, more than 80% \([N = 353]\), offer some sort of library website or webpage for their patrons and almost 74% \([N = 319]\) of the websites are maintained by the librarians (see fig.4).
Many of the school libraries surveyed fell short in offering some key virtual resources for their patrons. Survey question 22 focused on the types of virtual resources that are offered by school libraries (see appendix 1). Most school libraries, 74% \([N = 322]\) of the 421 librarians who responded, offer databases, and 62% \([N = 261]\) have a library news section of their website. Only 38% \([N = 160]\) of the libraries reporting offer some sort of “how-to” instructions. Many other virtual resources available are not widely used in school libraries. Few school librarians reported using screencasts \([N=78]\), podcasts \([N=12]\), digital archives \([N=70]\), animated simulations \([N=8]\), student collaborative space like blogs or wiki’s \([N=49]\), or online portfolios \([N=37]\) with their students (see fig. 5).
Excellent technology

The librarians who participated in survey question 23 [N= 432] reported that students have ready access to personal computing devices (see appendix 1). While less than 33% [N= 142] report their schools as providing 1 to 1 devices, more than 70% [N=304] have computer labs that teachers can schedule for classroom use.
Almost 63% [N=272] have computer or tablet carts to check out for classroom use, and 26% [N=121] of schools allow students to bring their own devices. Some schools may have access to multiple labs, carts, and devices as participants were asked to check all forms that apply. The survey indicates that most schools [N = 428] are regularly providing technology for instruction while only four survey participants reported providing no personal technology devices for instruction (see Fig. 6).
According to participants who answered survey question 24 [N= 398], the most commonly used technology to connect learners to the outside world are course management systems such as Google Classroom, Blackboard, Moodle, and others (see appendix 1). Eighty-four percent [N= 335] of schools report using online classrooms, but less than 45% [N= 179] report using blogs [N= 158], social networking [N= 179], or remote visits [N=143] in their schools (see fig. 7). It is unclear why these other forms of technology are not being used, as the participants were only asked if they were being used not why they didn’t use the technology.
Only 271 librarians answered survey question 25 relating to technology resources available for student check out (see appendix 1). Less than half of the librarians [N=119] who participated in the survey report having technology resources available for students to check out (see fig. 8). It is unclear why the technology is not available. Lack of accessibility to technology resources such as cameras, tripods, microphones, and other equipment make it difficult for students to produce transformational products that promote individual expression.

**Fig. 8 Technology Resources**
Participatory culture

Participatory culture encourages the school community to actively participate and collaborate in library and school activities. According to participants who answered survey question 26 [N=342], librarians are doing a great job encouraging patrons to share ideas to improve the library. Online forms [N= 105], suggestion boxes [N= 141], library committees, surveys [N=74], or “other” methods reported through qualitative responses [N= 108] are used in 92% [N= 318] of the libraries surveyed. Question 27 asked librarians to report how students are encouraged to share their individual expression (see appendix 1). The librarians [N= 361] reported the most popular form of individual expression is to display student projects in the library. More than 85% [N= 309] of the librarians display student work and artwork in the library, but less than 30% encourage performances, book trailers, student led clubs, or other performance type opportunities for student expression [N = 85, 111, 95, 43, respectively] (see fig. 9).
Although community involvement is promoted as part of the learning commons culture, it is not widely used by the survey participants. Survey question 28 asked participants [N=321] to share how they encourage community involvement (see appendix 1). At least 50% [N=161] of the libraries surveyed report that guest speakers visit in conjunction with curricular units and 55% [N=177] have volunteers visit their libraries to perform a variety of tasks. Very few libraries, less than 20%, encourage community involvement through local artists [N=34], storytellers [N=59], and experts [N=62]. Some survey participants who selected other [N=10], specified including local authors occasionally.

The librarians [N=426] were asked to rate how often they participate in collaborative practices with classroom teachers in survey question 29 (see appendix
1). The most common collaborative practice, a little more than 92% [N=393], was to pull books for classroom use. The second most popular practice, almost 84% [N=350], was teaching library skills as part of a unit of instruction. Sixty-eight percent of librarians [N =426] reported they teach library lessons in isolation sometimes or frequently but only 42% [N=168] co-plan units of instruction with teachers sometimes or frequently. Less popular collaborative practices are creating pathfinders, wikis or websites in conjunction with a unit of instruction [N=193], co-planning with two of more teachers of different content [N=139] and co-teaching in the classroom [N=168] (see table 1).

Table 1

<table>
<thead>
<tr>
<th>Common Collaborative Practices</th>
<th>Frequently</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pull books for classroom use</td>
<td>256</td>
<td>137</td>
<td>30</td>
<td>3</td>
<td>426</td>
</tr>
<tr>
<td>Create pathfinders, wikis or websites in conjunction with a unit of instruction</td>
<td>69</td>
<td>124</td>
<td>101</td>
<td>114</td>
<td>408</td>
</tr>
<tr>
<td>Co-Plan unit of instruction with teacher</td>
<td>93</td>
<td>180</td>
<td>115</td>
<td>32</td>
<td>420</td>
</tr>
<tr>
<td>Co-plan unit of instruction with two or more teachers of different content</td>
<td>37</td>
<td>102</td>
<td>185</td>
<td>91</td>
<td>415</td>
</tr>
<tr>
<td>Library taught instruction as part of a unit of instruction</td>
<td>172</td>
<td>173</td>
<td>57</td>
<td>12</td>
<td>419</td>
</tr>
<tr>
<td>Co-teach in the classroom as part of a unit of instruction</td>
<td>51</td>
<td>117</td>
<td>131</td>
<td>118</td>
<td>418</td>
</tr>
<tr>
<td>Library lessons taught in isolation</td>
<td>173</td>
<td>113</td>
<td>80</td>
<td>56</td>
<td>421</td>
</tr>
</tbody>
</table>
Meeting the AASL ideals with the learning commons model

The survey used in this study cannot determine how many schools are meeting the ideals of the AASL but the final survey question asks participants [N=424] to rate how well they feel they are meeting the ideal; “The learning commons model is supported by common ideals: flexible physical and virtual learning environments; excellent technology; rich information resources; and a collaborative, participatory culture. Would you rate your library more like a learning commons or a traditional library? Use the scale to show where your library would fall between the two models”. The results show that the majority of survey participants, 84% [N=357], feel they exhibit some elements of the ideal learning environment (see table 2) but only 4% [N=18] feel they are meeting the ideal (see table 2). The survey indicates that school libraries are implementing some of the elements of a learning commons as they work toward creating an ideal learning environment.

Table 2

Ideal Learning Environment

<table>
<thead>
<tr>
<th></th>
<th>Very far from ideal</th>
<th>Far from ideal</th>
<th>Some elements of ideal</th>
<th>Nearing ideal</th>
<th>Meeting ideal</th>
<th>Total</th>
<th>Weighted Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>My library learning environment</td>
<td>3.91% 17</td>
<td>15.17% 98</td>
<td>54.25% 238</td>
<td>22.39% 97</td>
<td>4.37% 19</td>
<td>435</td>
<td>3.08</td>
</tr>
</tbody>
</table>
CHAPTER 5
CONCLUSION AND IMPLICATIONS

The American Association of School Librarians (AASL) developed *Standards for the 21st Century Learner* in 2007. The standards bestow school librarians with the responsibility of adopting new materials and learning strategies while creating a learning environment that meets the needs of a diverse group of learners. The library learning commons model mirrors the AASL ideals by creating a school environment that encourages everyone to share in the learning and adapts the spaces and tools to the users.

To determine if school libraries are meeting the needs of the 21st century learner using all or part of the learning commons model, survey research was conducted to establish the following hypotheses:

There is evidence that school libraries using the learning commons model or elements of the learning commons model are meeting the needs of the 21st century learner.

The data collected in the survey suggests that school libraries are using elements of the learning commons model in an effort to meet the needs of their patrons. In order to better understand the survey results, the research questions in this study related to the learning commons framework are compared to the AASL ideals. This research answers the following six questions: in what ways are K-12 school libraries functioning like a learning commons? How are school librarians creating flexible physical learning environments? How are school librarians creating
flexible virtual learning environments? What types of technology devices and tools are used in school libraries? How do school librarians promote a participatory culture? How do school librarians collaborate with teachers?

**School Libraries Function as Learning Commons**

The AASL describes the ideal learning environment in the publication, *Empowering Learners*. The ideal physical space is described as, “...an intellectual gymnasium with multiple, flexible spaces that accommodate a variety of learning tasks” (34). The majority of librarians surveyed for this research reported using all or some of the basic learning commons framework in their libraries, but very few reported that their libraries function like a learning commons.

Librarians are implementing much of the learning commons model in an effort to meet the needs of the 21st century learner, but the changeover is incomplete. The majority of survey participants feel they exhibit some elements of the ideal learning commons, but very few feel they are meeting the ideal. Many school libraries are in a transitional state as they struggle to fully realize the AASL ideals for the 21st century learner. More tools, strategies, and ideas could be integrated into K-12 school libraries.

**School Librarians Create Flexible Physical Environments**

The quantitative data support that the majority of school libraries are using moveable or flexible furnishings. This creates a flexible learning environment to adapt to a variety of tasks. Additional selections of furnishings and specific zones
within the library accommodate a variety of uses but are more readily available as the students get older.

Qualitative data suggest that many librarians desire additional furnishings and physical transformations to make the learning environment more flexible. The survey did not measure factors such as funding or administrative and stakeholder support that may be hampering the transformation to more flexible learning environment.

School Librarians Create Flexible Virtual Environments

The learning commons model also fosters a flexible virtual learning environment that offers rich information resources. AASL describes the ideal virtual space as a place that “…connects learners to existing school library services and provides additional services tailored to learners’ needs” ("Empowering Learners" 34). The virtual space has “diverse sources of information that match curricular needs, lend themselves to units of inquiry, and are of high interest to students” ("Empowering Learners" 39).

The survey revealed that most school libraries provide a library website or webpage, and those are most often maintained by the librarian. The virtual space typically connects learners to online databases, library news, and the online library catalog. Many are also using some kind of online course management system such as Google Classroom, Blackboard, or Moodle. Few librarians reported using virtual resources such as podcasts, screencasts, streaming video, how-to instructions, digital portfolios, blogs, and other social media in their virtual libraries.
Learners in the 21st century use technology tools. Excellent technology is a requirement of the learning commons model. This model is supported by the AASL ideal that the virtual spaces provide “...endless opportunities for innovative teaching and learning” ("Empowering Learners” 10).

**Technology Devices and Tools Used in School Libraries**

Most of the survey participants reported that students in their schools had regular access to personal computing devices such as computers, laptops, and tablets. While only one third of the schools reported that every student has a device, more than two-thirds of the schools have computer labs and computers or tablets on carts for classroom use. The age of the students being served has a direct affect on some technology devices that are offered for student check-out.

Less than half of all the libraries reported having video cameras, digital cameras, tripods, and microphones for check out. Only one quarter of those with this technology were elementary schools. Seventy-five percent of the middle and high school librarians who participated in the survey report having the technology available for student check-out. Technology and supply budgets were not measured in the survey. Lack of funding may or may not affect what is available for student use.

**School Librarians Promote a Participatory Culture**

A collaborative, participatory culture is an essential part of the learning commons model. The American Association of School Librarians describes the ideal culture as one “...where every individual has a voice to contribute, the school
librarian, classroom teachers, and students now share the roles of teacher and learner” (“Empowering Learners” 10). Most of the librarians surveyed provide many methods and opportunities for patrons to share ideas, products, and recommendations for how to improve the library.

The most popular way to celebrate individual expression is to display student projects in the library. Less than one-third of the libraries offer opportunities for patrons to share performances, book trailers and videos, or to host student led clubs in the library. More that half of the libraries hosted guest speakers to support the curriculum and volunteers to help with library tasks. A few libraries encourage other forms of community involvement like organizing local artists, storytellers, and experts.

**School Librarians Collaborate with Teachers**

Librarians who participated in the survey collaborate with teachers, most often only to pull books for classroom use or to teach library related lessons. Librarians sometimes partner with teachers to co-plan units of instruction. They occasionally curate electronic information in the form pathfinders, wikis, or websites to support curricular units.

It is much more likely for a middle or high school librarian to collaborate with a classroom teacher than those in elementary schools. This could be the result of library scheduling. Less than 10% of elementary librarians reported to be on a flexible schedule, while more than 51% of middle school and almost 77% of high school librarians are on a flexible schedule.
Implications

Survey results confirm that school libraries are functioning along a continuum between the 20th and 21st century library philosophies. This is true in terms of furnishings in the library and its virtual presence. Most of the respondents' schools supply technology, but collaborative practices lag behind the resources when it comes to using them to create new learning opportunities and activities in the school library. The respondents' libraries have moved beyond the 20th century model toward the learning commons that supports the ideals of the American Association of School Librarians. Conducting this survey again in the future will allow researchers to track the trajectory of this change.
WORKS CITED


APPENDIX 1

SURVEY

Your participation in this study is completely voluntary. This study is to provide insight into the changing roles of libraries in K-12 educational settings. The researcher hopes to obtain information about best practices in regards to AASL Standards for the 21st Century Learner. There are 31 questions related to K-12 libraries and librarians. All answers are completely anonymous. Answer only the questions you choose to answer. There is no penalty if you choose not to participate.

Librarian

1. How long have you been working as a librarian?
   - 1-2 years
   - 3-5 years
   - 6-9 years
   - 10-14 years
   - 15+ years

2. How were you certified?
   - Praxis
   - Advanced degree
   - Praxis and coursework
   - I am not a certified librarian

3. Do you belong to a state, local or national library association?
   - Yes
   - No
   - In the past

4. How active are you within the association?
   - Pay dues but rarely attend meetings
   - Occasionally attend meetings
   - Attend most meetings
   - Past or present officer
   - Serve on a committee or team
5. Which of these resources do you use regularly to stay up to date with technology tools and trends?

- Twitter
- Blogs
- Podcasts
- School provided PD
- Webcasts
- Continuing education classes
- Library association training
- Other, explain

6. How often do you consult these types of resources for technology tools and trends?

- 2 or more times a week
- 2 or more times a month
- 4 or more times a year
- Other, Explain

7. Describe your disposition.

I often-sometimes-rarely-never

- Take risks
- Set trends
- Seek out professional development
- Partner with teachers
- Partner with librarians
- Partner with administration
- Partner with students
- Partner with parents and community members
- set goals
- lead the way
- have a vision and continue to strive meet it
- Fly under the radar
- Work by myself
- Am flexible
- Like change
- Like rules and structure
- Communicate well within the school community
- Communicate well beyond the school

8. Fixed or flexible schedule

- Fixed
• Flexible

9. Do you have clerical support? Check all that apply.
   • Full-time para
   • Part-time para
   • Regular Volunteer(s)
   • Occasional volunteers
   • Student aid(s)
   • No help. Just me.

10. Which level(s) do you serve? Check all that apply.
    • Elementary
    • Middle School
    • High school

**Policies**

11. Do you impose overdue fines?
    • No fines for over due books or materials
    • If you impose fines, explain your overdue fine policy.

12. Do you limit how many books or other materials the students may check out?
    • No limit
    • If you limit check-outs, explain your limit policy.

13. Do you limit how often a book may be renewed?
    • Unlimited renewals within a school year.
    • Unlimited unless on hold for another patron
    • If you limit how often a book may be renewed, explain your renewal policy.

14. How long may patrons check out a book?
    • 1 Week
    • 2 Weeks
    • 3 Weeks
    • If your check out length is different or if different ages have different check out lengths, explain your check out length policy.

**Flexible Learning Environment**

The American Association of School Librarians describes the physical space needed to meet the needs of the 21st-Century Learner as, “...an intellectual gymnasium with multiple, flexible spaces that accommodate a variety of learning tasks”.

15. How well do you feel your library mirrors the AASL ideal?
Far from ideal 1 2 3 4 5 Meeting the ideal

16. What types of furnishings do you provide in your library? Check all that apply.
   • Soft Comfortable seating
   • Independent work area
   • Group work area
   • Large meeting area
   • Multimedia presentation area
   • Research space
   • High-top tables with chairs/stools
   • Booth seating
   • Flip-top tables
   • Stackable or folding chairs
   • Swivel chairs
   • Wiggly chairs
   • Other Explain

17. Are the furnishings flexible and easily movable to meet the needs of different groups or configurations depending on the need?
   • Yes
   • No
   • Somewhat

18. What would you change about your current seating to better meet the needs of your patrons?
   • Nothing. It is perfect.
   • Explain what needs to be changed or added.

Zones

19. Which seating zones are clearly designated in your library?
   • Soft/plush reading area
   • Instructional space
   • Small group space
   • Individual work area
   • Audiovisual media production
   • Quiet Zone
   • Performance space
   • Creativity Space-Makerspace-Tinkerspace
   • Other-Explain

20. What would you change about learning zones in your library?
   • Nothing
Virtual Learning Environment/Library Website

21. Do you maintain a library website or webpage?
   • Yes
   • I give changes to another person who updates the website/page.
   • No

22. Which virtual resources and spaces are available for patrons on your library website? Check all that apply.
   • Streaming video
   • Podcasts
   • Screencasts
   • Databases
   • Digital archives
   • How to... instructions (written, audio, or video)
   • Animated simulations
   • Student collaborative space (blogs, wiki’s, etc. where students participate in discussion)
   • Digital portfolio or museum (to showcase student products)
   • Library news (Library related activities)

Technology

23. What personal technology devices are used for instruction in your school? Check all that apply.
   • 1 to 1 devices provided by the school district.
   • Computer labs are reserved by teachers
   • Device (laptop or tablet) carts are checked out by teachers to use in the classroom
   • Device (laptop or tablet) carts are housed in every classroom
   • Bring your own device

24. What types of technology are used at your school to connect learners with each other and the outside world? Select all that apply.
   • Online classrooms (Google Classroom, Moodle, Blackboard, etc.)
   • Teacher, student, school created blogs
   • Social Networking (Twitter, Facebook, etc.)
   • Remote visits (Skype, Google Hangout, Facetime, etc.)
   • Other, Explain
25. Which technology resources are available for student check out through the school library? Select all that apply.
- Video camera
- Digital camera
- Go Pro camera
- Tripod
- External Microphone
- eReader or tablets (Kindle, iPad, Nook, etc)
- Laptop
- Projector
- Other-Explain

Participatory Culture

26. How are your patrons encouraged to share ideas to create or improve spaces and experiences in the library?
- Online form
- Suggestion Box
- Student library advisory club/committee
- Other- explain

27. How are students encouraged to share their individual expression in the library?
- Projects and artwork are displayed in the library
- Performances (Poetry slams, storytelling, musical performances, dramatic interpretations, etc.)
- Student created book trailers
- Student led clubs
- Other -Explain

Community Involvement

28. How do you encourage community involvement in your library?
- Guest speakers in conjunction with curriculum
- Local artists
- Local Storytellers
- Local experts
- Volunteers
- Other Explain
**Collaboration with Teachers**

29. Rate how often you participate in the following collaborative practices with teachers in your school. Frequently, sometimes, rarely, never each

- Pull books for classroom use
- Create pathfinders, wiki’s or websites in conjunction with a unit of instruction
- Co-Plan unit of instruction with teacher
- Co-plan unit of instruction with two or more teachers of different content
- Library taught instruction as part of a unit of instruction
- Co-teach in the classroom as part of a unit of instruction
- Library lessons taught in isolation

**Collaboration with Information Technology**

30. How often do you collaborate with members of the information technology staff concerning the following?

- technology training
- tools
- Policies
- Resources
- Upgrades
- Other

31. The learning commons model is supported by common ideals: flexible physical and virtual learning environments; excellent technology; rich information resources; and a collaborative, participatory culture. Would you rate your library more like a learning commons or a traditional library? Use the scale to show where your library would fall between the two models.

Learning Commons 1 2 3 4 5 6 7 8 9 10 Traditional Library