
Abigail L. Phillips
University of Wisconsin—Milwaukee, USA

Mimi Recker & Victor Lee
Utah State University, USA

In this article, we describe a conceptual framework, called the Innovative Library Activities Framework, which helps clarify the influence of three dimensions of librarianship - sense of librarianship, resource community, and conception of library space - on the implementation of innovative library activities. The first dimension encompasses a librarian’s professional identity and his/her understanding of the profession. The second dimension addresses how a librarian seeks guidance and support from a resource community for development and implementation of library services and materials. The final dimension involves a librarian’s conception of the library space and place. Each dimension is closely examined, drawing evidence from data collected during observations of and interviews with participating school librarians. We conclude with implications for the profession and LIS education.

Introduction

Libraries in the United States are in flux. Increasingly recognized by the public as innovative community centers, librarians are expanding and remaking their traditional services (Martin, 2015). Libraries are merging established library models and services such as maintaining print collections with their expansion as multifunctional spaces for collaboration and learning. The roles and responsibilities of librarians have been pointedly impacted by these changes in ways that have yet to be deeply studied (Moorefield-Lang, 2015). This changing status is especially true for school librarians as they are increasingly called to implement new activities incorporating making and to develop makerspaces as a way to encourage connected learning around Science, Technology, Engineering, and Education (STEM) learning, exploration, and creativity among youth (Subramaniam, Ahn, Fleischmann, & Druin, 2012; Paul, 2015).

Making involves creating, modifying, and tinkering using tools, everyday items, and/or other materials (Martinez & Stager, 2013). The maker movement has made waves within formal and informal education (Halverson & Sheridan, 2014), which has implications for school librarians and the learning that occurs within their libraries. Smaller scale making may involve a school librarian introducing a Lego wall with an assortment of Legos, providing a space for free play and exploration. A makerspace may involve laser cutters, 3D printers, or low-cost materials (e.g., cardboard, origami paper, straws and wire), with the focus of the space to encourage collaboration, tinkering, and sharing (Martinez & Stager, 2013). Additionally, there are high and low entry points for participation when developing and supporting a makerspace. Within a school library, a makerspace could take the form of a designated room within the library, an open area within the library, or the library itself that allows for design and construction.

School librarians, as part of acquiring a professional degree, certification, or endorsement in a library and information studies (LIS) program, receive instruction on how to operate a school library and develop an effective school library program. This includes topics such as staffing, budgeting, collection development, instruction, teacher-librarian collaboration, technology support, evaluation, and library activities (American Association of School Librarians, 2013). In this article, we focus on the latter element of a school library’s services - the provision of school librarian-led and passive activities (i.e., easily accessible activities without direct guidance of a school librarian).
implemented in the school library. In particular, our research is guided by the following question: what influences school librarians when conceiving and developing these new kinds of activities for students?

While there is a wealth of scholarly work examining the overall impact of a library with a certified school librarian on student achievement (Lance & Kachel, 2018; Mardis, 2007), little has focused explicitly on the role and impact of librarians creating activities for special events, lessons, and school programs (Fowler & Perkinson, 1988; Roberson, Applin, & Schweinle, 2005). The literature that does describe development and implementation of school library activities is typically published in practitioner publications, featuring librarians’ personal anecdotes about successes and failures and how-to guides (e.g., American Association of School Librarians, 2016a; Church, 2017). These conversations provide school librarians with a sense of community, useful examples, and pointers to additional resources. However, while there is a critical discussion among school library-gearled publications, more robust amount of thoughtful, critical discussions of activity development. We argue that is through such discussions that the role of library activities can be better understood, developed, enacted, and evaluated as a core part of the school library program.

To address this gap, we present a framework, called the Innovative Library Activities Framework, which articulates three key dimensions of librarianship we believe strongly influence how new activities are conceptualized and implemented. Our framework grew from analyses of a yearlong period of naturalistic observations and interviews of three middle school librarians as they performed everyday library responsibilities, as well as designed and implemented original drop-in and passive activities for their libraries. From these analyses, we began to wonder how school librarians develop and implement new activities within their libraries. This framework clarifies how three dimensions of librarianship - the librarian’s 1) sense of librarianship, 2) resource community, and 3) conception of library space - all influence how school librarians develop innovative library activities.

In this paper, we review the literature surrounding school librarian activity development to give context for our study of how school librarians construct and implement new activities for their young patrons. We then describe how the analysis of this corpus of data resulted in the distillation of the Innovative Library Activities framework. We conclude with implications for this framework on everyday school librarianship and how this framework can encourage a discussion regarding how LIS professional preparation programs can educate pre-service school librarians about library activity development and implementation.

**Literature Review**

**What are Making and Makerspaces?**

The AASL Standards (2017, p. 2) encourage school librarians to focus on "accessing and evaluating information, providing digital learning training and experiences, and developing a culture of reading." While STEM and maker learning experiences were not specifically included in this statement, they now play more of a role within K-12 education and, as a result, are impacting the work of school librarians (Bowler, 2014; Halverson & Sheridan, 2014). Increasingly, school library activities incorporate more passive activities (e.g., stations for video gaming, puzzles, K’Nex) that facilitate engagement with STEM and digital content through emerging resources including augmented reality, maker-gearled technology, and computer programming and coding.

The types of specific activities that are maker-gearled include out-of-school activities focused on virtual environments, afterschool videogame creation with the Scratch programming language, craft-based making, or digital storytelling by remixing digital resources (Ahn, Subramaniam, Fleischmann, Waugh, Walsh, & Druin, 2012; Preddy, 2012; Steinkuehler, Alagoz, King, & Martin,
Complementing out of school and after school activities, school libraries offer a setting where youth can engage with peers, supportive librarians, and multiple forms of media (Braun et al., 2014).

**Exploring Connected Learning in School Libraries**

A shared orientation among making activities is "connected learning", defined as learning that is socially embedded, interest-driven, and oriented toward educational, economic, or political opportunity." (Ito et al., 2013, p. 4). In school libraries, connected learning speaks to equity in learning and an effort to improve the lives of underserved youth (Braun et al., 2014). School libraries can function as connected learning centers where youth find support for self-motivated learning, physical and psychological safety, and community networks.

Connected learning is a distinction to note when considering school library activity development. Martin (2015) highlighted the scarcity of research on connected learning in practice within libraries, referring to studies of connected learning and libraries as "just beginning" (p. 8).

**School Library Activities Embodying Connected Learning.** Situated in a school setting, school library activities embody connected learning principles by providing students opportunities during unstructured periods (e.g., before and after school, lunch) for play, creativity, tinkering, and making (Loertcher & Koechlin, 2014). With the introduction of a makerspace, schools can present themselves as learning commons, represented through three concepts: "flexible physical and virtual learning environments," "rich information and best technology," and "participatory community" (Loertscher & Koechlin, 2014, p. E2). The concept of learning commons is apt for school libraries as they serve as spaces for youth to discover and engage with technologies, literacies, and new ideas when and how they want.

School library activities that incorporate STEM and/or maker-focused concepts can both support and expand learning that occurs in the classroom. School libraries promote connected learning through makerspaces, maker-geared activities, peer, mentor, and teacher support. Whether through teacher-librarian collaborations (Montiel-Overall, 2016), or an awareness of school activities and events, school librarians develop activities that foster and support interest-driven learning.

**Preparing School Librarians for STEM and Maker-Geared Learning.** Activities and connected learning as they relate to STEM or maker-geared learning are typically not emphasized in school librarians’ preparation (Deissler et al., 2015; Koh & Abbas, 2015). The ALA/AASL Standards for Initial Preparation of School Librarians mention school librarians demonstrating engaging students in "learning through the use of digital technology through tools and services" (Dare, 2010, p. 6). How such standards are translated into curriculum is, naturally, not specified. This is where an empirically based framework for what is involved when school librarians develop and initiate activities that they may not have been sufficiently prepared to lead may be useful.

**Study Context**

**School Librarian Participants**

Three middle school librarians agreed to take part in a study about supporting the learning practices of librarians as they integrated STEM-based Maker activities into their school libraries. Two of the middle school librarians (Beth and Carol) held school library media administration endorsement while the third (Anna) is currently completing this endorsement. Additionally, Anna and Carol previously worked as middle school classroom teachers. Although these school librarians work within a school district located in a rural and semi-rural region of the Intermountain West of the United States, each school served a unique youth population - the white, middle-class, semi-rural community (population ~7,400) of Autumn Falls Middle School to the lower middle class, rural
community (population ~2,500) whose youth attended Blue Spruce Middle School and Canyon Heights Middle School. Pseudonyms have been created for each school librarian and school.

**School Library Settings**

**Library A.** Autumn Falls Middle School was located in a semi-rural community within the school district, serving approximately 800 7th and 8th grade youth. Autumn Falls was one of the noisier and most heavily used school libraries in the study. The school library had an open floor plan divided up into the school library collection, instructional area, and lounging spaces, as shown in Figure 1.

![Autumn Falls Middle School](image)

**Figure 1. Autumn Falls Middle School**

Comfortable seating (e.g., couches, bean bag chairs), movable furniture, easily accessible technology, and colorful decorations support the library’s welcoming atmosphere. As a first-year librarian for the school, Anna spent the previous summer enhancing the library’s atmosphere using materials she collected from her home and ideas gathered from recent coursework for her school library endorsement.

The boundaries and rules Anna set in the school library early in the semester were clear but youth-centered. For example, Anna allowed noise and rowdiness in her school library. Students burst into the space before school, during lunch, and after school to play games (board, phone, and online), work in groups, ask for book recommendations, read, and socialize. Through Anna’s efforts, students have a separate environment, apart from structured classrooms, within the school for recreational, interest-driven, and social activities.

**Library B.** In the northern, more rural part of the school district, Blue Spruce Middle School is bordered by farms and small towns, enrolling 517 6th and 7th grade students. Managed by Beth, this library shared characteristics with Autumn Falls, including furniture and engaging displays that change with holidays and school events, as Figure 2 shows. The doors to the library are always open, encouraging students to drop by for visits before school, during lunch, and after lunch. The students are allowed freedom and flexibility from normal classroom behavior but at a more controlled level than found at Autumn Falls. For example, while personal cell phone use was permitted at Autumn Falls, Beth prohibited use of cell phones in her library, encouraging students instead to play board games, read, and complete homework.

**Library C.** Within a short distance of Blue Spruce is Canyon Heights Middle School, which serves 1103 8th and 9th grade students. In contrast to the previously described libraries, this school library, managed by Carol, is similar in structure and atmosphere to a more traditional classroom and school library (see Figure 2). She expected a quieter and more orderly space than Library A and Library B, restricting library access for a part of the school day (e.g. lunch period) due to disruption. Hard topped chairs and immovable tables, muted colors, and circular fixed computer stations dominate the space. While before school, during lunch periods, and after school, students rushed to the
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libraries at Autumn Falls and Blue Spruce, Canyon Heights was typically quiet with only a few students entering and leaving. Sporadic checkouts of books by students and visits by teachers occurred throughout the school day, but these were quick and perfunctory. In Library C, we did not observe students chatting with the school librarian, exploring the collection, or hanging out as much as in Library A.

The school library itself, as well as any activity hosted within this space, closely monitored by the school librarian. During observations at Canyon Heights, we noted that this control was indicated by sign-up sheets for craft activities, a curved safety mirror in front of the circulation desk to monitor student activity, and a presentation early in the fall for each class detailing rules for school library use. This presentation stressed the importance of appropriate student behavior in the school library and maintaining the silence and order. Carol consistently kept the doors closed, further isolating the school library from the rest of the school.

Data Sources

Our data collection included three qualitative forms: naturalistic observations, structured interviews, and physical artifacts. We began collecting data during the fall of 2016 with researchers observing at individual school libraries for periods of 45 minutes up to two hours per week. During these observation sessions, researchers took notes on the school librarian’s activities, interactions with students and teachers, and anything else of interest. In total, the researchers conducted 60 observations throughout the regular school days including before and after school, lunch breaks, instructional periods, activities, and professional development training at the school district office. Additionally, researchers photographed the school library during observations. Photographs supplemented the observations. We also collected physical artifacts such as handouts and flyers.

We interviewed each librarian twice over the course of the school year. We audio recorded, transcribed, and coded the interviews. During the first interview, in October 2016, we introduced the librarian to a series of STEM geared Maker tools (including a Sphero, MaKey MaKey, and a 3D printing pen) and asked targeted questions about each tool’s usefulness in school library activities.

In the second interview, we utilized a technique called "information horizon mapping." This method offers, "a general, descriptive explanation of human information-seeking and use behavior, and data collection and analysis techniques to explore human information-seeking behavior in context." (Sonnenwald, 2005, p. 191). Using this method, the school librarians were asked to draw a map to illustrate the resources they would use to develop a Maker-geared activity. The subsequent drawings revealed how each librarian approaches seeking information from a range of sources including colleagues, blogs, and social media (e.g., Pinterest). Each school librarian underwent one information horizon map interview. The interviews ranged from 45 minutes to 90 minutes, depending upon the engagement of the librarian.

Data Analysis
We analysed this study’s three qualitative sources (naturalistic observations, interviews, and artifacts) using open and axial coding. Open and axial coding is a well-established form of qualitative analysis that is often used in grounded theory (Creswell & Creswell, 2017). During coding process for this framework, two members of the project team performed a first pass of open coding. After this initial session, the team came together as a group and evaluated these codes, digging deeper into the codes and assessing potential axial codes. A second open coding session followed with a focus on clarifying the codes and expanding into axial coding. The group met once more to finalize the open and axial codes and create a formal codebook.

The researchers examined a total of 60 observations, six interviews, and 104 artifacts collected over the year. Coding occurred through consensus, as part of an organized, multi-part group effort. We first approached the observation and interview data using thematic analysis focusing on librarian roles, responsibilities, and dispositions. The artifacts, a combination of photographs, newsletters, and handouts/worksheets created by the participating librarians, were similarly coded. Examples of the coding scheme include:

- Demonstrative
- Knowledgeable
- Authority over students
- School library rules
- Previous knowledge
- Other teachers/collaboration
- School library as space
- "Librarian" tasks (e.g. circulation, reference)
- Extra library tasks

**Innovative Library Activities Framework Dimensions**

In distilling the Innovative Library Activities Framework shown Figure 3, we identified three dimensions that influence how a school librarian conceives of and implements a new library activity: the school librarian’s 1) sense of librarianship, 2) resource community, and 3) conception of library space. However, these dimensions are not static. Depending on local circumstances, education, and a school librarian's personal disposition towards community, school library work, and school librarianship, one dimension may have a heavier influence than another in the creation of an activity.

![Figure 3. Innovative School Library Activities Framework](image-url)
In the following sections, we present a discussion of each dimension and supporting illustrative evidence from our data.

**Dimension: Sense of Librarianship**

The first dimension encompasses the school librarian’s professional identity and his/her understanding of the profession, including the types of roles and responsibilities of a school librarian, kinds of activities and experiences appropriate for students, and what role(s) students should play in the direction of the library. We observed distinct differences in each librarian’s sense of librarianship based upon our observations, interviews, and collected artifacts.

At Autumn Falls Middle School, Anna viewed her role to be one of encouraging student and teacher use, positioning the library as a welcoming place to work and play. She opens up the library space to students and teachers to access as needed, purposely scheduling periods for teachers and students to use the library as a meeting space. Her position as a librarian allowed her to be both a facilitator and colleague. In this role, she regularly collaborated with teachers. For example, during the maker tool interview, Anna described how she could work with another teacher:

> I wonder how I let [another teacher], that might be something, so I don’t have a lot of instruction time for this. You know I can kind of showcase things and they come into the library. [Teacher’s name] is running an afterschool club that is doing more robotics. It would be awesome if you guys taught them how to do this, and then they could come in and explore with it during lunch or before school.

Anna favored novel, creative, and somewhat immersive experiences for students. During our observations at Autumn Falls, Anna provided a variety of passive activities, informal, self-driven activities that require little to no instruction from the librarian. We observed her implementing passive activities, including leaving out materials for constructing shapes such as plastic straws and wire, paper circuits, cardboard catapult kits, and origami materials. She rotated the activities every few weeks as student interest wavered. For these activities, she laid out supplies on a table in the center of the library for the students to work on during free time through the school day. Students, particularly library aides, regularly collaborate with Anna in developing passive activities by providing suggestions, feedback, and insights into what is currently popular among students.

At Blue Spruce Middle School, Beth stated that she largely provides activities as a form of entertainment for students. She constantly cycles through a variety of passive activities including board games, puzzles, card games, and computer coding using Scratch. A responsibility Beth took seriously was the need to stay "hip" and current regarding what is popular among her student patrons. The activities she develops are largely based upon student requests and observed interests. For example, because of a few student requests, Beth bought the Magic the Gathering card game and Dungeons and Dragons board game for the library.

Instead of planning more formal activities, Beth changed her passive activities once a month. She believed that teens were, in her words, "so fickle" and activity development must incorporate that tendency. Beth began offering computers to be used solely for students to access Code.org and Scratch, as both of those websites had become popular within the school. However, Beth did not allow students to play existing video games, instead requiring them to make games that they then play using Scratch. The use of phones, especially gaming on phones, was banned in her library.

In contrast, at Canyon Heights Middle School, Carol regarded the school library as space for which she was responsible, and student access to it as a privilege. She set boundaries and rules that were enforced among both teachers and students. Carol focused on crafting activities that required
advanced sign-up and directed instruction. These activities took place during homeroom (a 20-minute period before lunch) and drew students who are already in the school library because of their homeroom schedule. Games and other passive activities did not seem to be provided in Carol’s school library. However, she structured maker and craft activities for students, but only during the brief homeroom period. There were little allowances for student congregation during free periods such as before and after school.

During the maker tool interview, Carol remarked about one potential library activity, “Plus the other thing is space. Where am I gonna store them and where can I keep an eye on them?” This quote suggests that she focused on the library as an environment that she must watch over. The school library space was further isolated by closed entry doors and a large circulation desk that provided Carol with a near 360-degree view of the school library and its users.

The contrasting attitudes toward librarianship of Autumn Falls and Canyon Heights mark ends of a professional spectrum: on one end, the school librarian supports noisy, participatory, and youth focused activities with on the other end, school librarians are more orderly, traditional, and facility focused. While some activities, such computer use and some craft-oriented programs, were common to these settings, the degree of supervision and level of rules and restrictions that were imposed vary based on how the school librarian enacted their roles.

**Dimension: Resource Community**

The second dimension addresses how the school librarian seeks guidance and support from a resource community for the development and implementation of school library services and materials. This resource community may include school colleagues, students, school librarian peers, and degree or certification coursework, as well as online and physical resources. Our recognition of this dimension emerged primarily through the information horizon map interviews we conducted with each school librarian but were also informed by other data sources.

Anna’s information horizon map emphasized her strong connection to teachers as resources for activity development and implementation. This link occurred through both partnerships and as additional subject support, such as providing computer coding resources in the library. In interviews and observed during our visits, Anna sought out teachers for information about how the school library could support and enhance classroom activities and instruction. Similarly, Beth prioritized teachers as information resources; she stated, “[T]he teachers are a resource, people are a resource. I think they’re a pretty usual resource.” Beth noted an awareness of what other educators in the school were doing based on her personal relationships and information shared through hallway conversations. In contrast, in her information horizon map, Carol at Canyon Heights, relied on her pre-existing knowledge (e.g., crafts she enjoyed making at home) and inspirational examples she found through websites like Pinterest.

School librarians straddle the divide between teacher and librarian (Montiel-Overall, 2006). The activities organized by a school librarian reflect the school library as a shared and flexible space for collaboration between teachers and librarians (Stripling, 1996). A school librarian may develop activities alone or in conjunction with the curricular needs of an instructor. For example, Anna reached out to her school’s art teacher to collaborate on a Steampunk project. Over the course of three days, each art class visited the library for students to design, construct, and display a Steampunk inspired piece of clothing. By working with the art teacher, Anna emphasized the library as a valuable and learner-centered space. When interviewed about the Steampunk project, Anna commented, "My goal for each year is to collaborate with each teacher in the school. When I saw the Steampunk project last year, I knew this would be a potential collaboration with our art teacher." By appealing to the instructional needs of teachers, Anna demonstrated her value as an educational resource for the teachers and the library as a learning environment for students.
Teachers as a resource can also be a manner of communicating expectations of librarians. By reaching out to teachers, as Anna and Beth did, a school librarian can demonstrate how they can support curriculum, student learning, and technology integration in the classroom. For example, before the beginning of the school year, Anna emailed Autumn Fall teachers a list of instructional topics she could teach in the school library for their classes. Teachers readily took advantage of Anna’s instructional offerings.

In comparison, Carol, at Canyon Heights Middle School, engaged with teachers in ways she characterized as avoiding "stepping on toes" of teachers. She purposely avoided offering Maker-related activities, such as K’Nex, that are already used in the school's science and computer classrooms. For Carol, it appeared that engaging with teachers was driven less as a step towards collaboration and more by a concern over avoiding conflict. The nature of her resource network also highlighted her concerns about clearly delimiting her instructional areas, whereas the other school librarians look for areas of overlap.

Another resource for librarians is their aides. All three librarians have student aides who assist in everyday library tasks such as shelving books, checking in/out materials, and helping fellow students. Two of the school librarians, Anna and Beth, actively involve students, particularly student aides, in decision making about book purchasing, marketing, and activities. Both recently instituted teen advisory boards (TABs) for their libraries to encourage teen ownership of the library. As the intended age group for school librarians, students can act as additional sources for feedback, recommendations, and collaboration. In a publication from AASL (2013, p. 10), the need for empowerment of students in the library is stressed. It recommends that school librarians seek out collaboration with students and teachers “to design and teach engaging learning experiences that meet individual needs”. Librarians interact with students through their everyday work, and this can be an important method to understand the emerging interests and trends of youth. In contrast to Anna and Beth, Carol assigns her student aides to more traditional page duties (e.g., shelving, cleaning, tidying the library), rarely seeking their feedback or input.

**Dimension: Conception of Library Space**

The final dimension involves the librarian’s conception and construction of the library space and place.

![Teen space at Blue Spruce (left) passive Lego activity at Autumn Falls (right)](image)

Although reporting on public libraries, Aabø and Audunson's (2012) findings can be seen in school libraries in which patrons move between "high and low intensive activities" (p. 138). Likewise, in school libraries students move between highly intensive activities (e.g., group and individual projects for class assignments) and low intensive activities (e.g., playing collaborative online games).
In this way, the library space must be flexible enough for a wide range of patron activities and needs. This flexibility manifests itself in different ways among the three school librarians.

During our observations, two librarians, Anna and Beth, instantiated these concepts by providing a welcoming and accommodating environment for students and teachers that includes sofas and bean bag chairs, access to technology, and educational and relaxation support, as illustrated in Figure 4.

Both design and the school librarian dispositions towards students and teachers impacted how users (students, teachers, and administrators) perceived and engaged with and the space. Anna hosted regular events for teachers and administrators, such as monthly potlucks and working groups, to further promote the library as a useful and integral space within the school community.

At Blue Spruce, Beth had a structured teaching schedule in the school library but also offered opportunities for students to engage in more unstructured activities. For example, students pulled out chess sets and board games, provided by Beth; created video games on desktop computers; and chatted with friends while browsing book shelves. Beth demonstrated her attention towards student needs during the maker tool interview by stating, “We always have kids in here who are wanting to do creative things and if you notice when they come in at the end of the day, it has to be quiet because they are coming in here to do homework and to silently read, and that’s (maker activity) something they could do quietly.”

When observing and interviewing the librarians in our study, we saw differences in the librarians’ conception of the library as space. The school library could be viewed as a gathering place for where youth ownership is encouraged, such as in the libraries of Anna and Beth. For other librarians, like Carol at Canyon Heights, the library could be seen as environment with clear boundaries and rules. Design and affordances reflect the school librarian’s perception of school library as space for youth development. According to Velasquez (2015, p. 23), "Cultivating a space in the library that teens can activate and own sends to teens a strong signal that they are valued and welcome in the library.” The way in which a school library space is planned and enhanced both constraints and affords how teens can participate in and experience the environment.

**Discussion**

This paper describes a conceptual framework, called the Innovative Library Activities Framework, guided by an analysis of school librarians’ work practices when implementing new kinds of library programs for middle school students. Our empirically derived framework revealed three key dimensions where we observed variability among our librarians in how they approached implementation of new library programming. The first dimension, sense of librarianship, encompasses the school librarian’s professional identity and his/her perception of how activities can unfold in school libraries. The second, resource community, focuses on the kinds of material and people resources librarians may draw upon. Finally, the third dimension is the librarian’s conception of library space and what is permissible and mutable.

**Implications for School Librarians**

As a conceptual framework, the Innovative Library Activities Framework provides a lens for a school librarian to better understand his/her own perceptions of the profession, resource community, and conception of library space. As a practical tool, librarians can apply aspects of the framework to help inform the creation of activities but also towards personal awareness of how they perceive and approach their professional practices. The Framework leaves room for discussion, interpretation, and applications of new mindsets. The AASL Standards and Framework offer a level of depth regarding self-assessment and professional development.
The implications for the day-to-day work of school librarians are two-fold: first, demonstrating the possibility of using the framework to guide self-assessment of school librarian practices and perceptions, and second, calling attention to additional opportunities for growth and development as school librarians. Such a self-assessment and increased awareness by a librarian may lead to improvements in activity development and even broader library services.

**Implications for LIS Education**

The primary implication of this framework is to encourage a conversation regarding how LIS can educate pre-service school librarians about library activity development. One possible talking point in this discussion includes incorporating the framework into school library activity instruction alongside AASL’s (2017) *National School Library Standards*. By doing so, LIS educators have the potential to promote maker activities as an integral element of services for youth. As the current AASL *Standards* emphasize the school library is a unique environment for formal and informal learning among students. Another component of the *Standards* is encouraging current librarians to seek out continued professional development beyond the traditional MLIS school library coursework.

**Conclusion and Future Directions**

Although we focused on school librarianship and activities, initial indications from our research with local public librarians suggest that this framework may also be reflective of their activities approaches (Lee et al. 2018). A next step will be to examine the applicability and utility of the framework examining youth activities within public libraries. Our current research regarding library activities involves both school and public libraries, which lead us to wonder about the application of this framework to public librarianship. While the Innovative Library Activities Framework is grounded in the experiences of small-town and rural school libraries, the implications are not limited to these school libraries but apply for public libraries. School library education, certification and endorsement activities can also integrate the framework into course projects and lessons on librarianship in practice.

As indicated through the literature review and discussion, school library activities, whether librarian led or passive, have not been fully investigated in LIS education. This framework provides an opportunity for school and public librarians to assess how their practice, the impact of a community, and the library space plays a role in the success of library activities. Innovative activities are characterized through the three elements of this framework - sense of librarianship, resource community, and conception of library space.

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**Author Notes**

**Abigail Phillips** is an assistant professor in the School of Information Studies at the University of Wisconsin-Milwaukee. She expanded her dissertation work on empathy as a critical component of librarianship to examine how empathy impacts school and public library provision of services for underserved and marginalized patrons. Her past experiences as a public librarian has guided much of her scholarship, merging practice and research to produce scholarship that highlights neglected areas of librarianship including her current research concerning supporting neurodiverse youth patrons and those within the LIS community, accessibility and youth-gear making, and development of research based training on empathetic services for school and public librarians.

**Mimi Recker** is a professor of Instructional Technology and Learning Sciences at Utah State University. She has over 20 years of research experience on multiple federally-funded educational technology research projects. Her work has included designing an innovative web-based lesson
planning tool for teachers, still in use after 10 years, applying educational data mining to examine teaching patterns, and evaluating the impact of teacher professional development on technology integration.

**Victor Lee** is a learning scientist and technologist who is interested in supporting teaching and learning of STEM content and practices with new technologies in both formal and informal settings and across age groups. Professionally, he is associated with embodied learning and wearable technologies and Maker education. Current work involves designing supports for libraries to incorporate Maker programs for youth patrons, using new technologies to detect youth engagement in afterschool Maker programs, using fitness trackers as tools for students to learn data science, studying the Quantified Self movement and its implications for education, researching intuitive and embodied reasoning in Physics, and more recently, health education.