With new technologies, the youth services landscape is changing. In 2012, two children’s librarians in Colorado designed and implemented a research study in which they used iPads to create digital storytimes for preschoolers. They carefully chose apps and designed hybrid experiences that included both traditional and digital pieces. They then asked participants to fill out a survey describing their reactions to the storytimes and were surprised and pleased to discover the parents and children preferred the digital storytimes.1

In Connecticut, Darien Library has six circulating early literacy iPad kits that include a preloaded iPad with apps that are selected for children ages two through five, guides and lists that provide general information, and app selection suggestions for parents as well as specific early literacy tips.2

These are two examples of the current landscape, but more information is needed to understand what is happening in libraries nationwide with respect to new media and programming for young children. How widespread is this evolution, and what are the kinds of resources being used in terms of funding sources and selection tools?

Literature Review

To understand the context and impetus of this survey, the current state of thought and research on this topic needs be explored. The use of technology in youth programming in libraries is an emergent area, and much of the research literature resides in the areas of early education, psychology, and neuroscience. According to the 2011 statement by the American Academy of Pediatrics (AAP), and reiterated in the statement’s 2013 update,3 pediatricians recommend no screen time for children under two years old; conversely, Dr. Dimitri Christakis (2014) with Seattle Children’s Research Institute acknowledges that not enough research has been done in this area, especially looking at tablet use, to fully understand whether to uphold the AAP screen time guideline. Moreover, he questions whether new media is in fact analogous to the television screens on which AAP policy statements have been previously based: “are interactive touch-screen technologies more likable to passively watching a screen or to playing with blocks?”4

Different technologies with different methods of use—in particular joint use, as outlined by a report from the Joan Ganz Cooney Center at Sesame Workshop5—may very well have different appropriate applicabilities, depending on context of use and the child jointly using the technology with another person. There is an opportunity for librarians to use their expertise in evaluating media to help families make their own informed media decisions.

According to a report by the Institute of Museum and Library Services (IMLS) titled “Growing Young Minds,” libraries provide
children with opportunities to learn, share, grow, be curious, and think critically about the world: “The experiences, resources, and interactions provided by libraries and museums build brains and fuel a love of learning.” Librarians focus on the content of the materials they provide, framing learning as part of play and discovery and making libraries rich informal learning environments. This focus extends to digital materials as well. A review of literacy research in out-of-school settings invites a deeper examination of our understanding of literacy proficiency by considering achievements and fluencies in informal learning settings. A recent publication by the American Library Association (ALA), Technology and Literacy: 21st Century Library Programming for Children and Teens, reinforces this idea with respect to libraries. The publication states that “the library is a place for informal learning positioned to accommodate and encourage children’s use of new technology.”

Today, young children are growing up immersed in technology. According to the 2013 report Zero to Eight: Children’s Media Use in America, 75 percent of children have access to mobile devices at home. While not digital natives per se—the term erroneously suggests that a person can be born with the innate ability to use digital technology—children are becoming proficient at using digital devices at a young age, such that their media world has expanded beyond traditional print to interactive screens that capture their attention and shape their development.

Digital technologies are the new tools—mediating a child’s experience of the world, their language, their physical interactions through cause and effect, and their social interactions. Technology has also become an integral part of many informal learning environments that children encounter more and more often in their lives.

Libraries in particular can provide early learning opportunities in safe spaces to all children from all walks of life, crossing socioeconomic strata and bridging developmental divides. Storytimes, one of the first programs families encounter at the library, can enable children to interact with and learn from adults and each other, reflect on and analyze the stories they read, and form connections between the material and their own experiences. All of which are opportunities for informed discussion about media use. Additionally, traditional formal curriculum does not leave room or time for exploration of digital tools, much less integration, leaving a void that the library can strive to remedy. Furthermore, while there is innovative work being done in educational circles about using technology with children, there is little direction and training for teachers on the devices themselves, leading to apprehension and uncertainty on the part of educators on how to incorporate the technology into existing traditions. Similarly, not much research has been shared outlining best practices and evidence-based methods.

As libraries incorporate technology into their infrastructure, they can become what IMLS has termed “digital hubs”—venues to guide and frame resource use for adults and children in a way that facilitates a balanced media diet. While children’s librarians have always carefully and systematically incorporated new forms of media into their collections and programming—for example, ALSC’s “Competencies for Librarians Serving Children in Public Libraries” includes an entire section about technology—there is now a stronger professional movement towards actively discussing the impact of media on young children with parents. This movement within the library world was developed by LittleLit.com (started by Cen Campbell) and based on the “media mentorship” term coined by Lisa Guernsey. In her 2014 Tedx Talk, “How the iPad Affects Young Children and What We Can Do About It,” Guernsey mentions children’s librarians first in a list of possible candidates for the role of media mentor and asks the question “What if we were to commit to ensuring that every family with young children had access to a media mentor?”

Our survey identifies the technology and resources that librarians use in their roles as media mentors for families with young children, planning programming with technology and modeling intentional and appropriate media use with children. Libraries are indeed perfectly positioned to facilitate the use of technology as a tool to connect these two groups and to support parents and caregivers to make informed media choices for their families.

Modeling the joint use of materials is not a new concept for children’s librarians. Consider how Every Child Ready to Read @ your library 2nd Edition supports library staff to model for and encourage caregivers to talk, sing, read, write, and play with their children. Librarians are beginning to develop programs in line with the work of research and education organizations such as the Joan Ganz Cooney Center at Sesame Workshop, the National Association for Media Literacy Education, the National Association for the Education of Young Children, and the Fred Rogers Center for Early Learning and Children’s Media to support caregiver engagement in children’s media use.

Whether we call it “joint media engagement” or “the new co-viewing,” the idea is the same—shared media use is a kind of interaction that can facilitate learning and increase connections with others.
books with young children; books are, after all, a type of media. Caretakers and other adults can play a critical role in shaping and modeling how children can use technology in a positive and nurturing way. Librarians can use technology to bring the outside world into traditional story times in a meaningful way to provide powerful learning opportunities for young children.

Purpose of the Study

The need for this survey stemmed from pilot programs within the library community. Since 2011, Cen Campbell and the members of LittleeLit.com have been documenting the use of various types of new media (predominantly tablet-based) with young children in libraries. They have led numerous in-person and virtual discussions about developmentally appropriate practices for librarians considering the use of new media with young children and the role of the children's librarian in the context of new media.

Further discussions within the library community at events such as the LittleeLit.com-sponsored program, “Building A to Zoo for Apps: Time-tested librarian skills meet cutting edge technology for kids,” at the ALA Annual Conference in Chicago in 2013, enabled attendees to share their experiences, questions, and fears, further fueling a desire to learn more from the field in a more systematic way. Subsequent events, including programs at PLA and ALA conferences in 2014, helped to shape our survey questions. These events also underscored the need for a more comprehensive representation of public library new media collections and programs for families with young children. The LittleeLit.com community had begun working with early childhood educators active within the National Association for the Education of Young Children, including Karen Nemeth, Fran Simon, and Dale McManis, who had published their findings from a survey in September of 2013, “Technology in ECE Classrooms: Results of a New Survey and Implications for the Field.”

No such survey of the field, however, had been conducted for new media use in public libraries with children aged zero to five and their families. We determined that an initial snapshot of the landscape of technology use around the country in library programming for young children could provide powerful material for advocacy and development.

As a result, Cen Campbell, Joanna Ison, J. Elizabeth Mills, and Amy Koester designed the first-ever nationwide survey of public libraries to investigate emergent technology use in programming for children aged zero to five and their families. The survey was designed in collaboration with the Association for Library Service to Children (ALSC), LittleeLit.com, and the iSchool at the University of Washington. We had one overarching research question: What is the landscape in public libraries around the country with respect to new media use in programming for young children ages zero to five?

Methods

We aimed to cast as wide a net as possible while still using a convenient sample of available discussion lists and Google groups in order to recruit survey participants. Previous studies, such as the one in Colorado, have established anecdotal evidence of tech use in these informal learning spaces, as did the active ALSC discussion list and LittleeLit.com group posts. These forums allowed us to proceed from a baseline understanding of at least some level of technology adoption by libraries, however minimal.

Our hope was to extend our understanding of the following:

- to what extent technology is being used in libraries,
- if it is being used in programming for young children,
- what devices are being used,
- what kind of funding and selection strategies librarians are using in procuring technology,
- and plans for the future.

We designed questions based on what we wanted to know as well as what we thought we might already know based on anecdotal evidence. In crafting these questions, we defined a few key terms. We use the term new media to refer to digital, and at this point, often tablet-based, technology. Young children refers to persons falling within the age range of zero to five years old. We encouraged respondents to consult with their colleagues to try and capture as complete a picture as possible of the new media implementation across the library (i.e., a library would submit the survey once as a single entity, regardless of size or number of branches). We refined the questions through peer review and pilot testing with Washington and California libraries and administered the final national survey in early August 2014. The survey was available for participation for eighteen days.

Survey Findings

When the survey closed on August 18, 2014, we had 415 responses from across the country (see figure 1). What follows is a narrative that details our questions and responses. We would be happy to share the survey instrument itself with readers, if requested.
Our first pool of data described the legal service area populations of responding libraries (see figure 2), allowing us to see the breakdown of tech use by population size. Of libraries with legal service area populations of less than 5,000, 22 percent indicated tech use of some kind, while only 11 percent of libraries serving populations of 5,000–9,999 reported utilizing technology. Tech use increases again with service population, with 17 percent of libraries serving 10,000–24,999 and 18 percent of libraries serving 25,000–49,000 indicating tech use of some kind.

Of the total respondents, 71 percent reported using some kind of new media in their programming for young children. Of those libraries (see table 1), 40 percent are using devices in storytimes, and 31 percent are using devices in programs that are not storytimes. Furthermore, 26 percent of total respondents reported that devices are available for checkout within their libraries, and 20 percent reported devices could be checked out of the library itself; 41 percent said they offer tethered/mounted devices within the library for patron use.

In addition to simply providing device access, 22 percent of respondents are offering device mentoring in some form (e.g., appointment with librarian, office hours for devices, etc.), and of that number, 2 percent are offering mentoring for devices that are multilingual for nonnative English speakers.

Tablets were the most popular reported devices, with 45 percent of respondents incorporating tablet use into their libraries, whether in programs, for patron use, or a combination of the two. Of that 45 percent, the most popular tablet was the iPad—favored by 85 percent of those who reported tablet use.

After tablets, libraries primarily reported using proprietary institutional devices (such as AWE stations); 40 percent of respondents used these devices, with AWE stations making up 92 percent of the reported use. Of participating libraries, 19 percent used and provided combination e-readers, with an even split between Kindles and Nooks. While many of these devices have multilingual functionality, few libraries (6 percent) had designated multilingual devices.

While libraries serving smaller population sizes, especially those with service populations below five thousand, were more likely to report nonuse of new media devices (roughly 4 percent of respondents), the variety of devices they did report using did not vary greatly from those used by libraries with larger service populations. However, libraries with service populations below five thousand reported using tablets and combination e-readers equally, rather than tablets having a larger reported rate of use.

Devices reported in the survey were funded largely by libraries’ operational budgets, with 51 percent of respondents citing this budget as a resource. After operational budgets, new media devices were primarily funded by grants (38 percent) and donations (29 percent). However, 22 percent of respondents reported that staff used personal devices, either on their own or in conjunction with funding, and 15 percent did not report having any funding for devices.

Respondents reported looking for collection and selection information once they made the decision to acquire new media; 58 percent said they consulted some type of outside source when acquiring their new media, such as professional journals, recommendation from a colleague, personal experience, and others (see table 2).

Respondents were also able to indicate their general plans for next steps and future trajectory for their new media and programming for young children. Of the total respondents, 59 percent indicated they will be increasing availability and use for their new media in the future (see figure 3). Less than 1 percent indicated they would decrease or eliminate availability and use, 18 percent indicated that they did not know how their library planned to move forward with respect to availability of new media devices in library programs and services, and 25 percent either selected “other” with an individualized response or left the question blank.

Not all respondents answered affirmatively regarding device use in their libraries: 14 percent of total respondents indicated that no devices were currently present in their libraries, either
Results from the Young Children, New Media, and Libraries Survey

because of a lack of community need or because of budgetary constraints. One such respondent reported that “we would like to have these devices available but [are] short of funds.”

Respondents also qualitatively shared some pushback in terms of not allowing access to new media devices, with respondents providing the following rationale for not including new media devices in their libraries’ children’s services and areas:

- “We do not provide access to these devices to any of our patrons.”
- “Devices are not good for children under age 6…”
- “We have new media available for checkout for adults and teens, but do not have plans to do so for our younger ones.”

Other respondents who indicated that technology use for children was not present in their libraries provided the following qualitative responses looking for caution and guidance:

- “I do not plan to use screens or iPads in storytime, and would like more research before adding them to our library.”
- “There is no discussion or information or guiding principles or identified goals or identified benefits.”
- “Adapt slowly and add devices as they prove useful to our population.”

Discussion

We know from the research cited in the literature review that children are using technology in many aspects of their lives, including in informal learning environments such as libraries. We also know that libraries can connect families with information regarding technology use and as such serve as digital hubs for communities, with librarians serving as media mentors who can help families make informed decisions. The goal of this survey was to open a window into this practice, to understand on a larger scale what is happening in libraries with respect to incorporating new media into their programming for young children.

The survey consisted of eleven questions (of which four were administrative) on broad topics related to new media, programming, and young children in libraries; consequently, our ability to draw correlations is limited to general conclusions. The scope of our responses—more than four hundred in under a month—is impressive given the unique nature of this survey. However, it is not a representative sample of all libraries across the country using new media in their programming for young children. As such, the following discussion will cover broad areas that may then lead to future research questions and next steps.

Survey data suggest that, among the participating libraries, usage of new media in library programming for young children is high, with a particular focus toward devices such as tablets. MP3 player use in library storytimes was also high, perhaps due to the accessible nature of the technology and the way that music and sound clips may be used unobtrusively in programming. Additionally, as a majority of respondents indicated that their use and offering of technology in youth services will increase in future, it is reasonable to conclude that this topic—new media in library services for young children—will continue to be an important topic for the profession.

There is strong evidence, therefore, that libraries are in a position to be digital hubs, apparent in our data by the quantity and

<table>
<thead>
<tr>
<th>Selection Tool</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Articles and journals</td>
<td>22</td>
</tr>
<tr>
<td>Colleague recommendation</td>
<td>21</td>
</tr>
<tr>
<td>Websites</td>
<td>18</td>
</tr>
<tr>
<td>Event/training</td>
<td>18</td>
</tr>
<tr>
<td>Social media</td>
<td>8</td>
</tr>
</tbody>
</table>

Table 1. Number of Participating Libraries Utilizing Devices in Particular Ways, by Library Service Population

<table>
<thead>
<tr>
<th>Device checkout within the library</th>
<th>Device checkout outside the library</th>
<th>Device mentoring</th>
<th>Multilingual devices</th>
<th>Tethered devices</th>
<th>Device use in storytime</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5k (n = 93)</td>
<td>20</td>
<td>13</td>
<td>14</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>5k–9,999 (n = 44)</td>
<td>12</td>
<td>8</td>
<td>15</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>10k–24,999 (n = 70)</td>
<td>19</td>
<td>15</td>
<td>13</td>
<td>0</td>
<td>33</td>
</tr>
<tr>
<td>25k–49,999 (n = 75)</td>
<td>21</td>
<td>18</td>
<td>13</td>
<td>2</td>
<td>44</td>
</tr>
<tr>
<td>50k–99,999 (n = 50)</td>
<td>14</td>
<td>13</td>
<td>13</td>
<td>1</td>
<td>21</td>
</tr>
<tr>
<td>100k–249,999 (n = 41)</td>
<td>11</td>
<td>8</td>
<td>10</td>
<td>2</td>
<td>19</td>
</tr>
<tr>
<td>250k–499,999 (n = 22)</td>
<td>3</td>
<td>0</td>
<td>7</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>500k–999,999 (n = 8)</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>&gt;1,000,000,000 (n = 6)</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: Respondents also had the option of selecting “other” and providing a personalized response, which has been left off this table.

Table 2. Percentage of Participating Libraries Reporting Use of Selection Tools to Choose Devices
Results from the Young Children, New Media, and Libraries Survey

Results from the Young Children, New Media, and Libraries Survey scope of new media device use and availability. However, there is less evidence of mentorship being provided currently by library staff within these emerging hubs, despite data that show widespread use of tablets and media players in storytimes with young children, as well as other device use outside of library storytimes. Our survey sets the stage for a larger discussion around the concept of media mentorship: how library staff can be positive models and guides in implementing research-based best practices to help families manage their media use.

One way that staff can provide positive mentorship is by offering devices to patrons in various ways. One-fifth of total respondents reported allowing devices to be checked out of the library—a solid step in providing access to technologies with which families and caregivers might otherwise be unable to interact. Positive media mentorship should also include equitable policies regarding circulating device usage, as well as widely available instruction on how to use and care for the devices that are circulating. However, circulating devices may not be a consideration for many of our respondents who reported that their devices were tethered or otherwise mounted or limited due to availability of funds.

While in the education literature we see a lack of training and resources, this survey found a nearly equal percentage of respondents relying on published materials and colleagues’ recommendations in making their device and usage decisions. Though neither of these qualifies as strictly professional development resources, they do indicate a need for guidance and support. In this area, too, the movement of media mentorship may fill an additional niche.

Next Steps

This survey of the field—the first of its kind in youth librarianship—has provided a unique look at the ever-changing landscape of new media use in libraries. It is natural then that more questions should arise as we examine the data. For instance, we saw a significant reliance on some kind of advice, whether that took the form of training or a selection tool or as a recommendation from a colleague. It would be interesting to tease out each of those options to see which has more influence in terms of validity and reliability when selecting materials for a program.

Additionally, it would be interesting to learn more about the outlying libraries that indicated they would decrease or eliminate availability and use of technology in future; what circumstances lead to those plans? What obstacles might have to be overcome to continue to offer access to new media devices in these libraries? What obstacles might have to be overcome so that libraries that reported nonuse can offer new media devices if desired?

In particular, we want to gain a deeper understanding of the types of media mentorship being offered and how they relate to the ways in which children and families interact with new media. As we are seeing only a small rate of mentoring as reported in the survey, we would want to conduct more in-depth questioning to understand the potential mitigating factors: for example, budget crises, a lack of guidelines, the emergent nature of new media in programming, etc. It would also be fruitful to examine existing media mentoring programs to see what is being done, success of such programs, and how these programs might evolve to meet the changing needs of their communities.

Furthermore, without necessarily requiring a follow-up survey, we can look at our data state by state to see what types of responses were given in what areas of the country; we can look at which states indicated what size legal service area population and then break down the responses accordingly. This analysis might give us a more regional understanding of new media adoption and incorporation into programming, with implications for better identifying local needs for training and other resources.

Based on the survey findings, we have identified several overarching questions for further analysis and follow-up surveys:

■ With such a high trend in portable technology use in storytimes, what steps can libraries who wish to provide a similar early learning experience take to (a) find funding, (b) determine which devices would be best for their storyline attendees, and (c) provide media mentorship surrounding those devices?

■ How are various media devices being used in storytimes and other programming for young children?

■ In what ways are children interacting with these devices? Are children and families interacting together with these devices?
Results from the Young Children, New Media, and Libraries Survey

- How are librarians mentoring and modeling best practices for joint media engagement with parents/caregivers and children?
- How might these interactions be fueling early learning/literacy outcomes in children as well as early digital literacy practices?
- For libraries that indicated future growth in acquiring and providing new media devices, which have plans to implement an increase in access to devices? What are those plans?

**Conclusion**

Librarians are encountering a new way in which parents and children are interacting with media, and they want to be able to help guide that space in the same way that they have modeled practices for the development of early literacy skills, and for even longer, good reading practices for print books. This survey is a step toward finding out how the profession is meeting parents/caregivers and kids where they are most needed.

Cen Campbell and Amy Koester, in a book chapter titled “New Media in Youth Librarianship,” focus on the idea that “it’s not about the media, it’s about the children and their families.” Guernsey’s work focuses on appropriate technology use for children, saying it’s all about the three C’s: “context, content, and child.” Appropriate content needs to be made available for children in these new media library programs, chosen by reliable and authoritative sources that take child development theory and research into consideration. As we continue to study this shifting landscape, it is important to keep this in mind that no matter the technology, no matter the constraints and pressures put on librarians to ready young children for school, it is most important to focus on the community, on the family, and on the child and how librarians can become the best media mentors for them.

**References**


13. Institute of Museum and Library Services, *Growing Young Minds*.


17. Association for Library Service to Children and Public Library Association, Every Child Ready to Read @ Your Library 2nd edition, Chicago, IL, 2010.

6. Scan the July issue of *Everyday Advocacy Matters*. You’ll find lots of quick ways to get your advocacy on in this quarterly newsletter filled with ready-to-go tips, tools, and techniques.

7. Subscribe to District Dispatch. Get the latest action alerts from the ALA Washington Office as well as the 4-1-1 on contacting your US legislators.

8. Jot down stories. Summer is the perfect time to start a database of impact stories that complement your elevator speeches about what you do and why it’s important.

9. Tell a friend. Have a colleague who could use this list, too? Take a time-out for a quick phone call, e-mail, or conversation that encourages another Everyday Advocate.


Have other great ideas for making advocacy a breeze this summer? Let us know so we can share them with other ALSC members!

**RESULTS FROM THE YOUNG CHILDREN, continued from page 32**


22. Lucey and Della Penna, “Once Upon an App.”

23. Researcher Emily Romeijn-Stout also contributed to the data analysis.

24. The total of 415 respondents includes five duplicate submissions; that is, five libraries submitted two copies of the survey, each with different responses (presumably by two different staff members). This may contribute to an error percentage of .01.


ALSC has released a new white paper, “Media Mentorship in Libraries Serving Youth,” written for the association by Cen Campbell, Claudia Haines, Amy Koester, and Dorothy Stoltz, and adopted by the ALSC Board of Directors in March 2015. The paper explores the role of children’s librarians as mentors of digital media and calls on youth service librarians to support families in their intentional, appropriate, and positive use of media.

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Download your copy at www.ala.org/alsc/mediamentorship.