Technology for Early Learners in Public Libraries

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Abstract

This article examines the challenges and strategies involved in providing appropriate early learning technology in the children's areas of public libraries. While some parents' express concerns about screen time, the author argues that libraries have a mandate to offer inclusive educational resources for all children, including those with disabilities, dual-language learners, and those from socioeconomically disadvantaged backgrounds. The article references the American Academy of Pediatrics (AAP) screen time guidelines and emphasizes the role of librarians as "media mentors". It provides practical suggestions for creating a safe and welcoming children's area. Two primary technological solutions—AWE Early Literacy Stations and Playaway Launchpad tablets—are highlighted as well-established and effective. The article also surveys other key digital resources, such as LOTE4Kids, TumbleBookLibrary, VOX Books, and child-friendly browsers like ABC mouse and Magic Desktop. Finally, it underscores the importance of considering content appropriateness, privacy, maintenance, and equipment recycling when implementing technology initiatives.

Keywords

Early Learning Technology, Public Libraries, Screen Time, Media Mentorship, Digital Inclusion, Children's Services

The issue of early learning technology that is appropriate for the children's area of the public library is ongoing. For many parents, the public library is a place to share their love of reading with their children—no screens or technology required. The public library is also a place to find resources, including technology, that introduce children to prereading skills and the joy of reading. These tech resources are often inclusive of children with disabilities, dual-language learners, and others[1].

Balancing Books and Screens

Many children use technology from a very young age, and this can be a concern for some library users. For example, when I was managing a library, a parent asked to speak with me about the computers in the children's area. We had a friendly discussion in which I listened to their concerns about screen time, and I expressed my thoughts. I explained the ways that our early learning stations and children's computers provided access to early learning resources for a significant portion of our community.

Fortunately, I was involved with the Association for Library Service to Children's (ALSC) Children and Technology Committee, and I was reading about the use of technology and the effects of screen time on young children. I had access to the books and papers that other librarians were using to inform themselves on this topic[2]. Before 2016, the American Pediatric Association (APA) recommended no screen time for children younger than 2 and just 2 hours a day for older kids. But in 2016, it relaxed those guidelines and now recommends no screens before 18 months, with the exception of video chatting with a real person, such as a family member. For children ages 2–5, the APA recommends limiting screen time to 1 hour per day, with parents watching alongside their children. Applying the APA recommendations to the role of public libraries, my colleagues in the ALSC committee suggested that librarians promote media mentorship and support parents by encouraging them to engage in media with their children.

This research didn't come up in my friendly conversation with the parents who questioned the children's area computers. Instead, I relied on two cornerstones of children's librarianship: listening to your community and including every child. Listening to the parents, I understood their need to have books taken center stage and not computer screens. After I affirmed their aspirations for their child, I explained the public library mandate to serve all patrons, including young children who need access to technology, either for learning differences or socioeconomic reasons. Variations of this conversation—with patrons, staffers, and colleagues—are ongoing. Everyone seems to be struggling with children's use of screens and technology[3].

Technology Access for All

Conversations about technology, screen time, and early learning are important for librarians to engage in. Children with disabilities may benefit from computer-based readalong software or books that have an audio option. Children from lower socioeconomic backgrounds may not have a computer at home and might benefit from learning basic typing, mousing, and other digital literacy skills. These conversations further inform our field about how the public library helps children succeed by providing access to appropriate children's technology.

Public library patrons, including children, will have different levels of comfort with, and exposure to, technology. Here are some suggestions that can help make the children's area safe and welcoming: Display books as the first thing people see when entering. An attractive book display may help alleviate concerns about computer screens being more compelling than books. Keep computers for children ages 2–5 close to child-friendly activities such as blocks and board books. Children at this age should be encouraged to be hands-on with objects and interact with their caregivers. Provide public computers for school-age children. Children play

collaboratively, so make sure that each computer station can accommodate at least two chairs. Display friendly signs that explain the purpose of the technology and guidelines for use, including any time limits.

In addition to having a welcoming and inclusive approach, there are other considerations regarding technology for young children. Decisions around early learning technology should consider to what degree technology holds interest for young children; excludes any advertising; provides age-appropriate learning games, including phonics; and requires little to no maintenance by library staffers.

In my experience, two early learning technologies have met the considerations, been well-received by the public, and held up over time: the AWE Early Literacy Station, an all-in-one computer, and the Playaway Launchpad tablet.

AWE Early Literacy Stations

The AWE Bilingual Spanish Literacy Stations are long-lasting, easy to manage, and popular with children. The English/Spanish bilingual station matches two of the most common languages spoken in my community. Each workstation is independent of the internet and free from advertising, and no personal data is stored. The stations include "a variety of sensory-based activities so that visual, auditory, physical, social, solitary, verbal, and logical learners can thrive. AWE Learning's well-curated product helps children develop foundational skills while accommodating their unique ways of learning", according to personal correspondence with an AWE Learning rep.

Children are often drawn to a few popular, or truly evergreen, programs that stand the test of time. Children who love art and creativity are going to enjoy Fingertapps Paint, an intuitive art program that allows dynamic collaborative work with its advanced multi-touch capability. Other children, often a bit older and seeking a mental challenge, will enjoy the physics-based puzzle game World of

Goo, where they carefully make towers that delicately balance or comically tip over, and by doing so, solve an increasingly difficult and engaging set of challenges through the logical constructions of animated Goo.

To highlight the benefits of these early learning stations, post signs to clarify that they develop early literacy skills and contain STREAM (science, technology, reading and writing, engineering, arts, and math) learning programs. Use children's keyboards with brightly colored keys and child-sized mice, and provide child-friendly headphones, chairs, and tables. Staffers should be trained to help children change their default language, exit a program, and adjust the sound level. AWE Learning provides indexes of the learning content, which can be laminated and made available for parents and caregivers[4].



AWE Early Literacy Station Platinum's bilingual English/Spanish

Figure 1. AWE Early Literacy Station Platinum's bilingual English/Spanish

Playaway Launchpads

Through library literacy services workshops, our librarians hear from parents who don't feel comfortable helping their children learn to read. These parents want library resources that they can use to better prepare their children to succeed in school. I decided to purchase Playaway's Launchpad tablets for our library in response to this feedback.



A child interacting with a Playaway Launchpad tablet

Figure 2. A child interacting with a Playaway

Launchpad tablet

Launchpad Pre-K and Reading Academy sets from Playaway are designed to help children move from "learning-to-read to reading-to-learn" (play away.com/our-products/launchpad/academy-reading). Most tablets have some phonics and at least one read along story. The Pre-K tablets have five paths: motor and cognition, math and science, language and literacy, social and emotional, and music and creativity. The Reading Academy tablets have five levels. Level 1 is labeled "pre-emerging" and is for ages 3-plus. Children can listen to stories,

simple songs, and nursery rhymes. At Level 4 ("developing") for ages 7-plus, children start to decode unknown words and begin reading text with accuracy. Level 5 is for children who are becoming confident readers. A detailed explanation of the levels can be found on the Playaway website.

The definition of each level is not always clear. However, it can be augmented by the content list. Libraries will want to plan to have power strips available so staff can recharge multiple tablets and to have screen-cleaning wipes available at the circulation desk. Children love tablets; they are sturdy to hold and intuitive to use. The Launchpad Pre-K and Reading Academy tablets provide your community with familiar technology that is designed to help children succeed in school[5].

Other Early Learning Resources

Beyond these two options, early learning tech products fall into three broad categories: web-based story collections, physical items with audiobook or read along features, and child-friendly browsers.

LOTE4Kids (<u>lote4kids.com</u>) is an online database of digital books that includes more than 90 languages. Libraries subscribe to the database and provide access to it on their website. The books in the database are selected from a diverse panel of educational publishers. The database includes many self-published books created by its own panel of authors and illustrators.

TumbleBookLibrary (<u>tumblebooks.com</u>) is an interactive database of animated children's books, including many popular favorites such as *Diary of a Fly* by Doreen Cronin with illustrations by Harry Bliss. This is a subscription-based service that libraries can share with school districts.

VOX Books (<u>libraryideas.com/vox-books</u>) are audiobooks in print, and they sit on the shelf like a picture book. Once opened, patrons find an audio player attached. VOX Books are a possible

alternative for books-on-CD, once a popular option for family road trips, among other uses. The continuing decline in books-on-CD circulation calls for a viable substitute that doesn't require a streaming subscription. According to its website, "VOX Books combine outstanding picture books, chapter books, and non-fiction titles with audio recordings that capture children's attention and make learning and literacy development fun."

Playaway's Wonder books (playaway.com/our-products/wonderbook/all) are print books with an audiobook player inside. The collection includes award-winning titles, such as the Frog and Toad series, as well as diverse and Spanish-language titles. Wonderbooks won a Universal Design for Learning credential, recognizing the company for thoughtful and meaningful work in supporting a wide range of early learners, including children with disabilities.

ABC mouse (abcmouse.com) is a child-friendly paid subscription that delivers a browser-based curriculum. It's an alternative to AWE Early Literacy Stations. Once installed on a computer, it provides a child-safe environment with more than 10,000 learning activities. ABC mouse has received much positive recognition from both teachers and parents, including an award for excellence in design from the *Children's Technology Review*.

Magic Desktop (magicdesktop.com/en-us/explore) is for children ages 2–12 and provides a safe and controlled digital experience. According to the website, "Magic Desktop runs as an alternative Windows shell or a 'kid's desktop,' creating a safe and child-friendly playground." Additionally, "The Security Shield prevents a child from accessing system settings and parental files." It "can be configured to launch on system startup; children will not have access to Windows at any time."

Browsers appeal to libraries for their ease of use and because they fit with technology that's already available at the library, namely, the children's area public computers. However, libraries need to review their privacy and filtering policies as well as the Child Internet Protection Act (CIPA). Libraries that accept funding for internet access through the E-Rate program must comply with CIPA. If not, and the library has strict guidelines regarding filtering and access, there may be some concerns with the level of restriction that these early learning browsers require. Although the filters are adjustable, they are designed to limit internet access. Libraries that do not filter content, in general, use these childfriendly browsers by dedicating some computer units for this purpose and clearly communicating this to the public[6]. By doing so, they avoid any internet access limitation on public computers while providing a safe option for young children (alair.ala.org/server/api/core/bitstreams/5aacace 6-80ce-4d1d-8126-830109827966/content).

Technical Requirements and Considerations

Set up and ongoing management should be part of the early learning technology plan before any technology is purchased. How often does this hardware, database subscription, or browser need to be updated? Does the product work with existing IT requirements and systems management? How does the product handle personally identifiable information? Does the library need to implement solutions that augment the privacy of the user by restarting and wiping data after every user?

As part of the ongoing management plan, consider whether the hardware can be recycled. Outdated tablets and all-in-one computers take up valuable space and staff time. AWE Learning has a trade-in program. It also allows libraries to donate stations to family childcares and individuals. The Playaway tablets can be recycled through Best Buy's electronics recycling program, although each donation is limited to three items per day, and Best Buy may charge a pick-up fee. While the need to update technology is evident, developing a concrete plan to recycle or reuse the outdated equipment

remains an often overlooked yet essential component of the process.

Ultimately, the decision regarding what children's technology to provide in your public library is about your experience and knowledge, as well as the conversations you have with your community. Library early learning technology should add value by helping all children to enter school ready to learn and by providing a variety of entry points to the adventure of reading.

Conclusion

In conclusion, the integration of technology in public library children's areas represents a necessary evolution in service, balancing community concerns about screen time with a commitment to equitable access and digital inclusion. The debate is not about technology versus books, but rather how to thoughtfully leverage digital tools to support early literacy and school readiness for all children. By embracing the role of media mentors, librarians can guide families in navigating digital resources effectively. Proven solutions like AWE Early Literacy Stations and Playaway Launchpads, complemented by a range of digital content, curated demonstrate technology can be both engaging and educational. Success ultimately depends strategic implementation—thoughtful space design, clear communication, robust privacy protections, and sustainable device management. When aligned with community needs and professional guidelines, early technology becomes a powerful learning component of the public library's mission to foster a lifelong love of reading and learning.

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