Digital Media and Young Children

Betsy Diamant-Cohen and Annette Y. Goldsmith

Annette Y. Goldsmith *fills in this issue for Tess Prendergast while Tess concentrates on her doctoral studies. Goldsmith is a lecturer at the University of Washington Information School, where she teaches courses on storytelling, materials for youth, and libraries as learning labs in a digital age.* ***Betsy Diamant-Cohen*** *is Executive Director of Mother Goose on the Loose, Baltimore, Maryland.*

The research on screen time, digital media, and young children is of great interest to families and the librarians who work with them, as evidenced by comments in the Preschool Services Discussion online and by the large number of participants at the Preschool Services Discussion Group meeting at the ALA Midwinter Meeting in Boston. As a follow-up, this column will highlight a few studies regarding children and media and will also present a selection of media mentorship resources, including some collected by the Preschool Services Discussion Group (with thanks to Sue McCleaf Nespeca and Linda L. Ernst).

Little eLit, a go-to site for research and resources on media mentorship created by Cen Campbell that developed into a grassroots, crowdsourced professional learning community of children's librarians, is now a collaborative, web-based think tank with a large archive. Active members of Little eLit (who are also ALSC members) produced a research-based book, *Young Children, New Media, and Libraries: A Guide for Incorporating New Media into Library Collections, Services, and Programs for Families and Children Ages 0–5*, which was published chapter-by-chapter online from October 2014 to May 2015. This book is available for free download at http://littleelit.com/book/.

In chapter 2, "Children and Technology: What Can Research Tell Us?" Tess Prendergast gives a comprehensive survey of research studies and position statements regarding media use with children. Other chapters discuss developmentally appropriate practice, the role of new media in inclusive early literacy programs and services, evaluation of new media, using new media in storytimes, managing new media for youth services, and training and development for new media initiatives.[1]

Researchers Kathy Hirsh-Pasek and Roberta Michnick Golinkoff have conducted research relating to children's language and literacy. Here is a taste of their research:

When Technology Can Help Conversations

A study with Sarah Roseberry Lytle, with Hirsh-Pasek and Golinkoff, investigated "word-learning by children who were directly engaging with others on television and video-chat platforms like Skype. The study found that while children under 3 years old learn virtually nothing from hearing words on a television screen, their response to interactions on video chat were indistinguishable from in-person communication."[2]

When Technology Can Hinder Conversations

In a research study so new that it has been submitted to a journal but has not yet been published, Jessica Michele Reed, Hirsh-Pasek, and Golinkoff examine what happens when parents try to teach their children two words with and without cell phone interruptions. The researchers concluded,

"Children learn words in the uninterrupted condition but not in the interrupted condition. When we break the back-and-forth interaction, children do not realize the benefits of the duet. Of course, this is not to say that parents can't take calls, but just to note that language learning doesn't happen when conversations are interrupted." A short description of this study might make a helpful developmental tip to parents!

More about Interruptions!

A 2013 study investigated and compared children's literacy outcomes (language learning and story comprehension) when sharing ebooks and traditional books together. Two studies with 165 parents with a child from ages three to five revealed that parent-child dialogic reading was less and children's reading comprehension was lower when an electronic book was used for reading together. Findings suggested that electronic stories often were interrupted by games with "bells and whistles" that disrupted the conversation. This interference with the back-and-forth discussion necessary for dialogic reading was suggested as the reason for the lower rates of reading comprehension. Lower comprehension rates were also found when comparing the reading of normal children's books to those with manipulatives.[3] ઠ

References

1. Amy Koester et al., *Young Children, New Media, and Libraries: A Guide for Incorporating New Media into Library Collections, Services, and Programs for Families and Children Ages 0–5* (Little eLit: October 2014–May 2015), http://littleelit.com/book/.
2. Sarah Roseberry, Kathy Hirsh-Pasek, and Roberta M. Golinkoff, "Skype Me! Socially Contingent Interactions Help Toddlers Learn Language," *Child Development* 85, no. 3 (May–June 2014): 956–70.
3. Cynthia Chiong and Judy S. DeLoache, "Learning the ABCs: What Kinds of Picture Books Facilitate Young Children's Learning?" *Journal of Early Childhood Literacy* 13, no 2 (2013): 225–41.

Resources

A Brief History

The 2011 American Academy of Pediatrics (AAP) guidelines, and even the 2013 update, advised against any screen time for children under the age of two. As pointed out in the National Association for the Education of Young Children (NAEYC) and Fred Rogers Center (2012) joint statement, a complete ban on screen time for this age was unrealistic. The 2015 revised AAP guidelines now allow screen time and they focus on co-engagement (or joint media-engagement between parents and children).

The ALSC White Paper

In 2015, ALSC librarians Cen Campbell, Claudia Haines, Amy Koester, and Dorothy Stoltz created the white paper "Media Mentorship in Libraries Serving Youth." It gives a detailed history of the screen time debate, describing the role of children's librarians as media mentors, who, in addition to helping connect the right book with the right child at the right time, can help connect the right app with the right child at the right time. They can also help parents by explaining best practices for using digital media with children in non-judgmental terms. In addition to explaining the issues and recommending guidelines, the ALSC white paper has an excellent bibliography (http://bit.ly/media-mentorship).

Evaluating Apps

Understanding the educational value of apps is clearly important for media mentors. A framework called the four pillars of learning was developed by Kathy Hirsh-Pasek and her colleagues. They recommend evaluating apps according to how the apps encourage active learning, engagement in the learning process, meaningful learning, and social interaction.

Kyle Snow summarizes the approach in his post, "NAEYC: How to Find Educational Apps" (www.naeyc.org/blogs/gclarke/2015/05/how-find-educational-apps). For the full paper, see Kathy Hirsh-Pasek et al., "Putting Education in 'Educational' Apps: Lessons from the Science of Learning," *Psychological Science in the Public Interest* 6, no. 1 (2015): 3–34, http://bit.ly/educ-apps.

We'll end this column with a quote from Tess Prendergast, from the Little eLit book on New Media mentioned earlier:

> Building on these studies, it would seem that librarians should seek to strike a balance between the affordances of experiencing technology and the importance of meeting all of young children's other developmental needs. Understanding what children need to thrive should therefore guide librarians' approaches to integrating new media experiences into our existing developmentally beneficial programs, services, and collections.