Technology in Children's Programming A View from the Digital Trenches

COMPILED BY MARIANNE MARTENS

ooking for inspiration on utilizing digital technologies in programming? Here are some ideas, gathered by ALSC's Children and Technology Committee.

For Preschoolers

Angela Reynolds, youth services manager for the Annapolis Valley (Canada) Regional Library, uses apps in a monthly Milk & Cookies Story Hour, for children ages three to six. Her multimodal programs include print books, iPads, apps, and cookies (the edible kind!). In her first program, she read *Simms Taback's Farm Animals* by Simms Taback, and then extended the story digitally by using Innovative Mobile Apps' Animal Sounds—Fun Toddler Game. For complete details, read Reynolds' blog entry on *Little eLit*.¹

For School-Age Children

At the Adams Street Branch of the Boston Public Library, children's librarian Guy Harris ran a six-week program called Cool Tech for Kids, intended to introduce kids to different websites and software. Using the library's laptops in their community space, Harris gathered school-age children for a program that combined instruction with play by allowing children to explore online art programs, games, and more. Some of the sites they explored were Pixton, a cartoon creation site; Draw Your Own Marvel Comics; Gamestar Mechanic, a video game creation site; and Manga High, a math games site. At each session, Harris directed kids to a site, showed them how to set up an account, and introduced a few activities. He would then establish a challenge (such as building a cartoon, or solving five math games) and let them work toward that independently. He notes the Gamestar Mechanic site is particularly good for programming because it has sample lesson plans for workshops and includes printables.

- Liz Fraser from the Ela Area Public Library in Lake Zurich, Illinois, said libraries in her area are using Lego Robotics, a drop-in Tech Open Lab, where staff members help kids explore and play on technology, including laptops with different software open, and a Digital Craft Time series at another library where kids created videos with a green screen, stop-motion animation, and so on. Other libraries have done programs on light painting, MaKey MaKey, Toontastic, Scratch, and Claymation techniques.
- Bradley Jones at Skokie (IL) Public Library has created the LEGO CodeBots Club, a monthly workshop where kids are introduced to simple coding with Scratch using LEGO WeDo robotics sets. Joint Media Engagement is a term used to describe the importance of parents engaging *with* their children on tablets, rather than using the devices as electronic babysitters. Jones has also conducted K–1 storytimes that incorporate joint media engagement with iPad storybook apps.

Marianne Martens, PhD, is Assistant Professor at Kent State (OH) University's School of Library and Information Science and a member of the ALSC Children and Technology Committee, which also includes chair Amy Graves, Cen Campbell, Liz Fraser, Robin L. Gibson, Rachel Keeler, Melanie A. Lyttle, Rachel Lee Medina, Andrea Vernola, and Melissa Zymboly Depper. Thanks to Kent State University MLIS student Rebecca Price for her help with this article. Amy Terry-Keister, children's outreach services librarian at the Reed Memorial Library in Ravenna, Ohio, has been working at the library for less than a year. The library recently received a gift of thirty assorted devices, including iPads and other e-readers. At her job interview, Terry-Keister was asked to describe how she would use these in programming. She came up with the idea of collaborating with the Ravenna School District to create an after-school literacy program called Be a ST.A.R (Stay and Read). This program, originally brainstormed for an interview, has now become a very popular reality for first, second, and third graders. Terry-Keister had hoped for about fifteen children in each grade for each program, but more than five hundred children signed up across the town's four elementary schools. As a result, two of the schools have had to split the program. Each of the tablets has a range of book apps and games, mostly purchased from iTunes, Barnes & Noble, and Google Play. The educational games include Montessori Words, Monkey Word School, Word Ball, and Word Spinner. Additional books (not owned by the library) can be downloaded from BLIO (and Access 360) and OverDrive, but since Terry-Keister does not have access to Wi-Fi in the schools, she selects and loads books ahead of her visit. While this program is intended to bring apps into the hands of children and enhance their digital literacy, it also addresses parents who may or may not be tech savvy. Parents are also welcome to make an appointment to come to the library to try the tablets themselves. \mathcal{S}

Resources

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