

Using Technology to Foster “Real Reading” in the School Library and Beyond



Nancy Flanagan Knapp

nfnknapp@uga.edu

As we all know, school librarians play a key, though often unrecognized, role in teaching literacy skills (Knapp 2011; Lance and Hofschire 2012; Scholastic 2016). Research over two decades has repeatedly confirmed school libraries' and librarians' significant impact on learners' literacy achievement. Studies in more than twenty states and several Canadian provinces have shown that, "a school library program that is adequately staffed, resourced, and funded can lead to higher student achievement [in literacy] regardless of the socioeconomic or educational levels of the community" (Scholastic 2008, p. 10). And this effect is strongest when school librarians take a leading role in collaborating with other educators to foster literacy.

School librarians are likewise increasingly called upon to serve as technology integration leaders in their schools (Calvert 2016; Clephane 2014). In many schools librarians are responsible not just for finding, purchasing, and recommending useful digital resources, but also for offering classroom teachers informal help and even formal professional development on how to best use these resources to maximize

student engagement and learning (Johnston 2015; Theard-Griggs and Lilly 2014).

Unfortunately, some may see these two common roles for school librarians as separate, or even in opposition. Over the past three years I have been working with school librarians all over my state on ways to enhance literacy throughout the school, and many are concerned that the increasing emphasis on technology use in schools may detract from the practice learners need to become proficient readers or their motivation to read for pleasure. Others worry that the time they spend helping classroom teachers and students with technology takes away from what they see as their main purpose: helping students become lifelong readers.

I would not argue with this goal, but I would argue that technology use and traditional literacy do not have to be in competition. In fact, just as traditional literacy skills support and enhance students' use of technology for learning, so can digital technologies support and enhance more traditional literacy development, in five important ways.

I. Technology can make practicing basic literacy skills more effective and more fun.

For most educators, practicing "the basics" is perhaps the most familiar use of technology to enhance reading skills. Beginning readers must develop fundamental vocabulary, decoding, and word-recognition skills. Developing these basic skills often requires a certain amount of repetitive practice, but the flash cards and worksheets traditionally used for this purpose are notoriously disengaging, and therefore often less than effective (Allington 2002). Ever since the first Learning Company programs came out in the 1980s (remember Reader Rabbit and Treasure Mountain?), many school-based and commercial software programs have been developed that give early readers a chance to practice basic skills in engaging, game-based contexts. While such programs should never be used as the primary means to teach reading (OECD 2015), they can be quite useful as add-on components to motivate novice readers to get the basic practice they need (Connor, Goldman, and Fishman 2014). School librarians can not only make these programs accessible in the



library, we can also help teachers and parents find sites like the ones below that offer a myriad of good, free reading games for early readers:

- PBS Kids “Reading Games” website: <http://pbskids.org/games/reading/>

- EducationWorld’s “The Reading Machine” website: www.educationworld.com/a_tech/archives/readingmachine.shtml (includes links to more than thirty free reading games)
- Scholastic’s “Student Activities” website: <http://teacher.scholastic.com/activities/clf/tguidesitemap.htm> (includes books, games, and activities)
- The Learning Company’s games and thousands of other old educational games are available to play online at <https://classicroload.com> or they can be downloaded at <https://www.myabandonware.com>.

2. Technology can greatly increase the number and variety of texts available for readers at all levels.

E-books are usually less expensive than print books, and many websites offer free e-books, including many children’s books and classics. Another advantage of e-books and e-readers is that no one can see what an individual student is reading or how quickly the student is progressing through the book, eliminating easy comparisons and embarrassment

for struggling readers or students with “unpopular” tastes (Isero 2014). But most students aren’t accustomed to finding or reading e-books. School librarians can play a key role in opening up this new resource to them.

Class visits, during which school librarians walk students through the sometimes-complex process of accessing e-books from the school collection (creating an account, signing in, searching for a book to read) and checking out their first e-book can make this procedure less intimidating. By guiding them through this process, school librarians can help students see reading e-books as just another activity of the many they are used to doing on their phones or other devices. Making sure that step-by-step screenshot instructions are always available, both in the school library and online, can also be really helpful. School librarians can purchase extra short-term e-copies of the newest “hot” books, the ones we can’t keep on our shelves, to encourage students to try e-books, and we can also make available many more books than we can afford by sharing with students websites like these, which offer multiple free e-books of all kinds:

E-books are usually less expensive than print books, and many websites offer free e-books, including many children’s books and classics. Another advantage of e-books and e-readers is that no one can see what an individual student is reading or how quickly the student is progressing through the book, eliminating easy comparisons and embarrassment for struggling readers or students with “unpopular” tastes.



- The International Children's Digital Library: <http://en.childrenslibrary.org> (offers free children's books featuring multiple cultures and written and translated in multiple languages)
- Unite for Literacy: <http://uniteforliteracy.com> (provides free children's e-books written in English and narrated in multiple languages of the reader's choice)
- Storyjumper: <https://www.storyjumper.com/book/search> (offers picture e-books, and students can write their own stories as well!)
- Project Gutenberg: <https://www.gutenberg.org> (offers free e-copies of older books, including frequently assigned classics, and many others; more than 30,000 e-books are available)
- Gizmo's Freeware: <https://www.techsupportalert.com/free-ebooks-audio-books-read-online-download.htm> (an amazing compilation of websites offering free e-books and audiobooks, in every category you can imagine!)

- Amazon and Barnes & Noble also offer thousands of free e-books for all ages and readers. Just search "free Kindle books" at Amazon (www.amazon.com) or "free eBooks" at Barnes & Noble (www.barnesandnoble.com).

And increased access to texts through technology goes far beyond e-books! Today the Internet offers almost unlimited quantities of free fiction, indie narrative works, and substantial informational texts on just about any subject that might interest a potential reader. School librarians can capitalize on students' fascination with a video game or movie by steering them to related websites and online fan fiction written in their favorite imaginary worlds. Students with interests as diverse as football and cooking will find more to read about their favorite activity online than we could ever stock in the library. Of course, not all of these texts will be appropriate for all age groups, but school librarians are the experts who can help learners find online texts that are appropriate for them, and help them distinguish the crass, shallow, or misleading texts from those that are worth reading.

Here are just a few examples of the plethora of specialized reading material that is out there, waiting to be discovered:

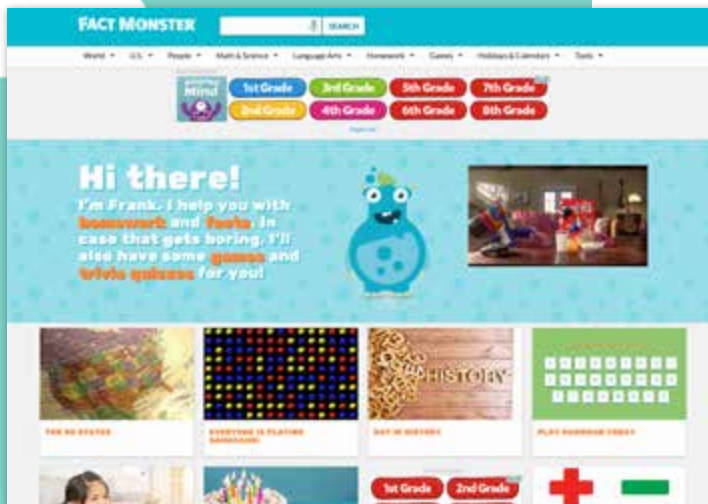
- Teen Ink: <https://www.teenink.com> (a literacy magazine by and for teens and pre-teens; kids can publish here, too)
- Poetry4kids: www.poetry4kids.com (contains lots of fun poems for kids, plus poetry-based activities)
- News – Around the NFL: www.nfl.com/news (provides breaking news and in-depth articles about all aspects of professional football)
- FaveCrafts: <https://www.favecrafts.com> (offers instructions for hundreds of different craft projects, of all types and difficulties)
- FanFiction: <https://www.fanfiction.net> and Archive of Our Own: <https://archiveofourown.org> (contain literally hundreds of thousands of fan-written stories based on everything from the Star Wars movies to the Mario video games to the Little House on the Prairie books)

3. Technology can scaffold texts for struggling readers and writers of all ages.

Many learners avoid reading because they struggle with it. Built-in text-to-speech features on all Macintosh and PC computers, in e-book programs, and in Google Read&Write (a free app that runs on any device using the free Google Chrome browser) can give struggling readers a boost by defining and pronouncing words and phrases on demand; they will even read an entire document or website aloud. Read&Write and Kindle also give oral and/or print translations of words, passages, websites, or complete digital texts into more than twelve different languages, scaffolding access for English language learners. The premium version of the Read&Write app (free to educators) can create a savable MP3 recording of any document, which is especially useful for working with special needs students whose accommodations call for worksheets or tests to be read aloud to them.

For beginning or reluctant writers, both Macintosh and PC operating systems also offer built-in speech-to-text functions that will print out what they say, generating a beginning draft that they can then edit and improve upon using any word-processing program. The Google Read&Write app and voice input functions on tablets and other mobile devices for both Apple and Android platforms provide the same functionality.

School librarians can show individual students how to use all these features to make complex digital texts more accessible on computers or tablets. We can also offer brief professional development to educators on how they can use these programs to support English language learners and other struggling readers and writers in



their classrooms. These three short, shareable videos give step-by-step, how-to instructions for using these features on multiple devices and platforms:

- “Tech for Teachers: Supporting Struggling Readers with Text-to-Speech & Translate”: <<https://youtu.be/JvlcGxf2ID0>>
- “Tech for Teachers: Supporting Struggling Writers with Speech-to-Text”: <<https://youtu.be/zBLXkAVyJWU>>
- “Tech for Teachers: Supporting Struggling Readers with E books”: <<https://www.youtube.com/watch?v=XlOKfUNwHNc&t=9s>>

4. Technology can help educators personalize and differentiate instruction for diverse readers better than ever before.

The variety of digital texts available online and in electronic format can provide readers on different levels with texts of varying difficulties on the same themes or topics, as well as texts that will connect to readers of diverse cultures and interests. Using the scaffolding tools discussed above can, in turn, make these texts accessible to more readers. In addition, some websites can make the exact same text available at multiple reading levels, permitting all students in a group or classroom to read a shared instructional text at the reading level best for them. Finally, several popular sites offer tutorials and homework help, not just in reading and language arts, but in all subjects, from elementary through college levels. All these free websites can be shared with learners who come to the school library for reference or other help; they can also be shared with classroom teachers to use in the classroom with their struggling students.

The variety of digital texts available online and in electronic format can provide readers on different levels with texts of varying difficulties on the same themes or topics, as well as texts that will connect to readers of diverse cultures and interests. Using the scaffolding tools discussed above can, in turn, make these texts accessible to more readers.

- Newsela: <<https://newsela.com>> (features really good current events and non-fiction articles that can be set to multiple Lexile levels, from 530L up; also provides information in Spanish, so every kid in a class can read the same article, but at their appropriate reading level)
- Simple English Wikipedia: <https://simple.wikipedia.org/wiki/Main_Page> (includes more than 100,000 articles from Wikipedia rewritten in simplified English—around sixth- or seventh-grade level; this site is great for English language learner students, too)
- Storyline Online: <www.storylineonline.net> (features lots of read-alouds, mostly for younger kids, by actors and other well-known people)
- Fact Monster: <<https://www.factmonster.com>> (offers fun facts, trivia games, and homework help for elementary school students)
- Khan Academy: <<https://www.khanacademy.org>> (offers tutorials for elementary, middle, high school, and even college students on almost any topic)

5. Technology can bring out the “social” in reading.

Avid readers have always liked to share what they are reading, and new readers can be especially motivated by the chance to share their reading with others (Schwanenflugel and Knapp 2016). Technology can help school librarians build this kind of “culture of reading” (Makatche and Oberlin 2011) in our libraries and schools. Student-written reviews can be stored on the school library’s website and directly accessed on smartphones or tablets through QR codes on the books’ inside covers. Literacy-focused social media sites can also encourage students to review books, see what their friends are reading, and record “likes” and “dislikes,” just as on any other social media platform. Students can even record book talks and trailers and share them with fellow students and the world on YouTube or Amazon and also on these literacy-focused websites, all free, and some designed especially for children and teens:

- Goodreads: <<https://www.goodreads.com>> (for those 13 years and up; school librarians can create private groups with

membership restricted to their school only)

- **Biblianasium:** <<https://www.biblianasium.com>> (allows users to share their reading preferences; intended for those aged 6–13; coordinates with Follett’s Destiny)
- **Library Thing:** <<https://www.librarything.com>> (lets students create a private, but shareable, personal “bookshelf”; intended for kids 13 years and up)
- **Poetry-Free-for-All:** <www.everypoet.org> (mainly for poets of all ages)

- **Teen Ink:** <<http://www.teenink.com>>
- **Book Crossing:** <www.bookcrossing.com> (forum for sharing actual print books in a unique way)
- **Epals:** <<https://www.epals.com/#/connections>> (reputable global pen-pal site that can encourage reading and writing)

The Takeaway

School librarians don’t have to choose between embracing technology and developing tradi-

tional literacy skills in the school library. Instead, through incentivizing practice, greatly expanding the pool of available texts, scaffolding texts for struggling readers, personalizing and differentiating instructional texts, and helping kids experience the “social” in reading, technology can facilitate, rather than compete with, traditional literacy. And by using technology in these ways, we can also help learners and fellow educators see how literacy is all of one piece, whether on a tablet or a computer or within the covers of a regular print book, and exciting and fun and accessible for all.



Nancy Flanagan

Knapp is an associate professor of learning, design, and technology at the University of Georgia

in Athens. She is co-author of *Psychology of Reading: Theory and Applications* (Guilford Press), and co-writes an invited monthly blog for *Psychology Today* called “Reading Minds,” available at <<https://www.psychologytoday.com/us/blog/reading-minds>>. She also researches and writes about technology and post-secondary teaching; two recent publications in this area are “The Shape Activity: Social Constructivism in the Psychology Classroom” in the January 2019 issue of *Teaching of Psychology* and “Increasing Interaction in a Flipped Online Classroom through Video Conferencing” in the November 2018 issue of *Tech Trends*. Through funding from the U.S. Department of Education’s Teacher Quality Grant Program, she has been fortunate to work with school librarians and collaborating teachers all over the state of Georgia in a number of year-long professional development programs on supporting literacy through the school library.

Works Cited:

- Allington, Richard L. 2002. “What I’ve Learned about Effective Reading Instruction.” *Phi Delta Kappan* 83 (10): 740–747.
- Calvert, Phillip. 2016. “School Libraries in New Zealand as Technology Hubs: Enablers and Barriers to School Librarians Becoming Technology Leaders.” *School Libraries Worldwide* 22 (2): 51–62.
- Clephane, Susan. 2014. “New Zealand School Librarians: Technology Leaders?” *School Libraries Worldwide* 20 (2): 14–27.
- Connor, Carol M., Susan R. Goldman, and Barry Fishman. 2014. “Technologies that Support Students’ Literacy Development.” In *Handbook of Research on Educational Communications and Technology* (4th Ed.), edited by J. Michael Spector, M. David Merrill, Jan Elen, and M. J. Bishop, 591–604. New York: Springer.
- Isero, Mark. 2014. “Rekindle the Love of Reading: Giving Students Kindles Reinvigorates Young Readers and Improves Their Reading Achievement.” *Phi Delta Kappan* 95 (7): 61–64.
- Johnston, Melissa P. 2015. “Blurred Lines: The School Librarian and the Instructional Technology Specialist.” *TechTrends* 59 (3): 17–26.
- Knapp, Nancy Flanagan. 2011. “The Vital Role(s) of School Librarians in Literacy Learning.” In *Educational Media and Technology Yearbook, Vol. 36*, Eds. Michael Orey, Stephanie A. Jones, and Robert Maribe Branche, 91–97. New York: Springer.
- Lance, Keith Curry, and Linda Hofschire. 2012. “School Librarian Staffing Linked with Gains in Student Achievement, 2005–2011.” *Teacher Librarian* 39 (6): 15–19.
- Makatche, Kathryn, and Jessica Urick Oberlin. 2011. “Building a Culture of Reading.” *School Library Monthly* 28 (3): 12–14.
- OECD. 2015. *Students, Computers and Learning: Making the Connection*. <<http://dx.doi.org/10.1787/9789264239555-en>> (accessed Dec. 31, 2018).
- Scholastic. 2016. “School Libraries Work!” <<http://www.scholastic.com/SLW2016/>> (accessed Dec. 31, 2018).
- . 2008. “School Libraries Work!” (accessed Feb. 20, 2010).
- Schwanenflugel, Paula J., and Nancy F. Knapp. 2016. *Psychology of Reading: Theory and Applications*. New York: Guilford Press.
- Theard-Griggs, Carolyn, and Christopher Lilly. 2014. “The School Librarian: Teacher Advocate and Instructional Coach.” *School Library Monthly* 30 (6): 31–32.