Ebooks: An Alternative to Paper Books for Online Students?

Laura E. Hibbard
Ohio University
Athens, Ohio

Abstract. This program evaluation researched ebooks as a source of literature for students attending online schools. Students, parents, teachers, and administrators participated in focus groups, surveys, and interviews so as to determine the effectiveness of providing ebooks to online students. It was found that while students enjoyed browsing ebooks from their school-provided desktop computers, reading ebooks to completion was difficult to enjoy without a portable, digital reading device. Recommendations included providing tablets to allow ebook downloads and adopting an ereading pedagogy.

Keywords: e-learning; school libraries; digital readers; ebooks; low-income students

Introduction

A trip to a school library is an exciting part of the school week for many children. Elementary students often have a set time for their classes to meet with the school librarian, hear a highlighted story, and swap last week's book for a new one. Students may spend quiet time reading their books in class, or they may bring the books home to enjoy with their parents. While this school library model is likely familiar to many adults, a new lens must be created when considering students who attend full time online schools. Without a physical school to attend, how might students access quality children's literature? Might ebooks be an adequate substitute for this digital native demographic? Students attending online schools already have the necessary hardware, so adding an ebook platform could be a relatively low-cost solution to providing reading materials. This program evaluation examined the role and potential of ebooks in a public, online elementary school.

Online schools

In the 2013-2014 school year, 310,000 U.S. students across 29 states enrolled in full time online schools (International Association for K-12 Online Learning, 2013). Online education is among the trends in education that is seeing the most growth (Roblyer, 2008). Children of all economic classes are able to enroll, as public online schools must operate tuition-free and must offer students a computer and internet access (Rose & Blomeyer, 2007). Because of this

procurement, some online schools are even considered *high-poverty* schools (Ohio Department of Education, 2012a, 2012b).

The combination of low-income students attending school online exposes a critical gap in resources, as low-income children are often raised in homes with a limited about of literature, thus disadvantaging them educationally (Crowe, Connor, & Petscher, 2009; Hagans, 2008; Hixson & Mcglinchey, 2004; Popp, 2004). Common Core initiatives push more skill-based analyses of text, with an emphasis of using an equal amount of fiction as non-fiction material (Common Core State Standards Initiatives, 2012). School libraries can typically fill the void, allowing students to select books solely for pleasure reading (Hunter, 2004), but this typical model becomes outdated when considering online schools.

Free reading and access to literature
"Free voluntary reading" can be thought of as someone engaging with a book not because of an assignment, not because they have to, not because of a reward, but because the reader simply wants to read a book (Krashen, 2006, p. 43). Schools tend to call this sustained silent reading time, or SSR, and allow students to devote ten or fifteen minutes each day reading material of their choice. Assignments, grades, and reports typically are not tied into SSR time and little feedback is provided from the teacher (Krashen, 2006; White & Kim, 2008). So why bother having students read simply for fun, without skills explicitly integrated? According to Krashen, author and reading researcher, "Children become better readers by reading"(2006, p. 43). The more children read, the higher their reading achievement (Rasinski & Padak, 2011). In engaging in SSR time, students develop rich vocabularies, begin to comprehend at a higher level, and begin writing proficiently (Krashen, 2006; White & Kim, 2008).

In order for children to begin reading voluntarily, they must have access to high quality books (Hunter, 2004; Krashen, 2006). In most schools, access to literature is not an issue. Students typically have a litany of books from which to choose in both their classroom libraries as well as their school libraries. Access to literature is perhaps most important in schools in which a high percentage of the children come from impoverished families (Hunter, 2004). While the recipe for success may seem rather simple, Krashen (2006) reported that low-income children often have less or diminished access to literature. Children who attend high-poverty schools often have meager classroom and school libraries (Hunter, 2004; Krashen, 2006), and low-income neighborhoods tend to have libraries with limited operating hours (Krashen, 2006). Krashen appealed for high-poverty schools to make school libraries a priority stating, "For children of poverty, libraries are their only chance" (2006, p. 45). Hunter (2004), an international reading consultant, reasoned that libraries in classrooms support students to be the best readers they can. Through access to quality fiction and nonfiction books, students can increase their fluency and foster a love of reading.

Ebooks in education
During their free time, students are often watching a screen of some sort. Whether it is a television show, a movie at the local theater, a Nintendo DS, texting with friends, or checking for Facebook updates, screens are all around us.

It takes a very motivated student to turn off the screen and pick up a book instead. Teachers and researchers alike felt compelled to battle this discrepancy by turning to digital books, or ebooks, in the classroom so as to develop congruence with what students are naturally attracted to outside the classroom (Larson, 2009a).

In her article "ReKindling an interest in Reading with At-Risk Students," Engel-Unruh felt that "by giving the students a 'gadget' like the Kindle, [she] could spark their interest and get them to read in a format that gadget-centric teens could appreciate" (2010, p. 54). Through support from a grant, Engel-Unruh purchased eleven Kindles and a gift card for purchasing ebooks. It was her hope that her struggling, unmotivated high school students would find the pleasure in reading. She described her students as "aliterate." That is, they were able to read, they just chose not to read (2010, p. 54).

Engle-Unruh formed a Kindle Club at her high school. Beginning on the first Friday of the school year, students selected for the program learned how to use the Kindles, learned how to download books, and spent class time reading self-selected stories. Engle-Unruh reported that the students engaged in the Kindle Club began to read for pleasure, thoroughly enjoyed reading on Kindles, and sustained this enthusiasm for the duration of the school year. Self-reported student surveys showed a 12.1% increase in time spent reading, and a 31.2% increase in the number of books read throughout the school year.

Other researchers have reported similar success stories with elementary students. Larson (2009b), worked with fifth grade students in an effort to gauge their reading motivation and attitudes following reading on laptops. After reading award-winning literature available online, students in the qualitative study participated in asynchronous online message board discussions. Students read one of two books and posted personal feelings and thoughts on a discussion board. Larson commented that because the students were reading online, the transition to the discussion boards was seamless. A typical session consisted of 30 minutes of reading time and 15-20 minutes dedicated to the written response.

Along with high school students and middle school students, primary school students have also interacted with ebooks in novel ways. In a separate publication, Larson (2010) described a case study in which a teacher allowed two second-graders to read on Kindles. The teacher gave a brief lesson to her students regarding the use of a Kindle. She explained how to manipulate the text size, access the built-in dictionary, use the text-to-speech feature, and post notes. Students were encouraged to use the tools as they desired and were not required to use them at any time. On their own accord, one student added 43 personal notes and the other inserted 33 notes. Larson stated, "The note tool provided them with a literature-response mechanism that suited their individual needs and purposes as readers" (2010, p. 18). The teacher was able to use the notes as measures of comprehension as well as to provide "a unique glimpse into the minds of individual readers" (2010, p. 19).

Besides the use of the note tool, the students used the text-to-speech feature in clever ways. After learning of the feature, both girls decided to listen to a portion of the story for about ten minutes. After those ten minutes, the girls decided to read on their own because, in listening to the Kindle voice, one girl stated that "he just didn't sound the way the story reads in my head"(Larson, 2010, p. 20). Throughout the rest of the story, one student accessed the text-to-speech feature when encountering difficult passages.

While both girls in this case study were reading at or above grade level, the use of text-to-speech features on portable reading devices certainly holds promise for struggling readers. When reflecting on her Kindle Club, Engle-Unruh wrote that she found her at-risk high school students accessed this feature regularly, reporting that they often read while they listened. The built-in dictionary aided comprehension and the development of a rich vocabulary.

In concluding her article, Larson (2010) called for further research on the integration of ebooks in schools. She claimed, "Teachers must explore the potential of digital readers, as one device can potentially take the place of hundreds of printed books and allow for unique transactions between the reader and the text" (2010, p. 22). Concerning demographic populations, ebooks hold promise for readers with special needs due to the ability to individualize a book to suit the needs of the reader (Larson, 2010).

Digital reading devices
Ebooks may be read on dedicated devices, which are devices created solely for the purpose of reading ebooks, or on non-dedicated devices such as desktops, laptops, tablets, or smartphones (Zambarbieri & Carniglia, 2012). Larson (2012) conducted a study with preservice teachers to introduce ebooks as educational tools as well as to determine students' comfort with and perception of reading from different devices. Allowing students to select their reading device, but requiring the use of an ebook, Larson found that 53% of the preservice teachers indicated that digital reading supported their comprehension, 16% felt hindered by reading an ebook, and 31% reported neither being hindered nor helped by reading an ebook. Among the participants indicating that an ebook hindered the reading experience, one student reported that reading from a non-portable computer was inconvenient.

While ereaders appear to have an advantage for reading digital books, it is important to note that schools are *likely* to have desktop computers as technology already in place for ereading. Tablets and dedicated ereaders have only in the recent past been affordable for schools to integrate into their technology arsenal (Felvégi & Matthew, 2012).

Statement of the Problem
Students attending the school of focus were encouraged by teachers to read for pleasure in an effort to accelerate their reading growth. While parents and students were sympathetic to the teachers' plights, students reported not having

appropriate reading material in their homes. Local libraries were available to some families, while others reported a lack of transportation or excessive fees owed. To provide literature resources to students, teachers suggested students read ebooks; previously unchartered territory for students at this school.

Purpose of the Study

The intent of this study was to determine the effectiveness of supplying ebooks to students attending online schools to be read on their desktop computers. Students already access the majority of their schoolwork via the internet, thus have the infrastructure already in their homes to be able to read books online. The study aimed to discover if reading ebooks from a desktop platform allowed students to increase the amount of time spent reading books for pleasure.

Significance of the Study

Much research has commenced on the benefits of students reading digital books on mobile reading devices (tablets, laptops, and dedicated ereaders), however research is scarce regarding the potential for students to read via desktop machines. Over 300,000 students attend full-time online schools and therefore have technology at the ready to be able to read online. Online students of low-socioeconomic status may not have physical books available to them, but offering books online affords students the opportunity to read for pleasure when other avenues of accessing books have been closed.

Context

This program evaluation examined a Midwestern online school's inaugural year of instituting an ebook program, and focused on the elementary division of the school, specifically fifth grade. Over 15,500 students attended this school during the 2012-2013 school year, 75% of whom were classified as economically-disadvantaged.

The school purchased Follett Shelf, an online library of ebooks available to students on demand (Follett Corporation, 2009). More than 1,900 titles were purchased by the school and available to students. Because the school supplied desktop computers and internet connections, students simply clicked a link to access Follett Shelf. After providing login credentials, students were able to browse the collection of ebooks and were able to sort books by genre, subject, and reading level. If students decided they were interested in reading the book, they could read it on a temporary basis and return it to the *shelf* when they were finished, or they could check out the book. Students who checked out books had uninterrupted access for seven days.

Method

A program evaluation model was used so that stakeholders had an integral part in determining the benefits and challenges of supplying ebooks to online students. Students, parents, teachers, office staff, and administrators participated. All 258 fifth grade students and their parents were invited to complete a survey regarding their prior ebook reading habits. Thirty-six families agreed to participate, resulting in a 14% participation rate. Evoking an emergent

design, the researcher added student and parent interviews to fill in the knowledge gap, thereby using a multimodal approach to reach a 20% target. Stratified purposeful sampling was used based on class membership. Twelve families participated in the interview phase. Because of high transiency rates at this school, only 178 of the original 258 students remained at the school in the spring. By combining the data from the interviews with the survey responses, a total of 48 families participated, which, considering the amount of year-long students, yielded a response rate of 27%.

Eleven fifth grade language arts teachers were invited to participate. Nine agreed to attend three focus groups, spread evenly throughout the school year. A snowball sampling approach was used to recruit administrative participants. Participating administrators included: the elementary principal, a reading specialist, the director and assistant director of intervention, a curriculum specialist, and the school librarian. Three separate focus groups were held with administrative staff.

Follett Shelf usage reports were analyzed to determine patterns of fifth grade students' use. Available data included school wide usage as well as data parsed by grade level. The reports indicated the amount of books read online, the amount checked out, and the amount downloaded to a digital reading device. Comprehensive student reports were accessed to determine specific titles read and dates accessed.

The nature of this mixed methods study called for a variety of analysis techniques. Focus group and interview transcripts were coded using both a priori and inductive coding. Descriptive statistics, using SPSS, have been created on Follett Shelf records and student survey responses.

Results

Stakeholders agreed that reading ebooks on a desktop computer lacks the comfort of reading on a digital reader or of reading a book, thus affecting students' motivation to read books to completion.

Administrators, teachers, students, and parents all commented that it may not be feasible to expect that students would choose to read a book solely for pleasure on their desktop computers. In light of the fact that students at an online school are on their computers for a large portion of the school day, administrators and teachers agreed that breaks are needed from their desktop screens. Parents and teachers suggested providing portable digital readers, or tablets, for the students. The librarian mentioned that students ought to be taught how to download Follett Shelf books onto digital readers, as some families have these devices in their homes.

Figure 1, below, shows a breakdown of fifth graders' Follett Shelf usage from August of 2012, until April of 2013:
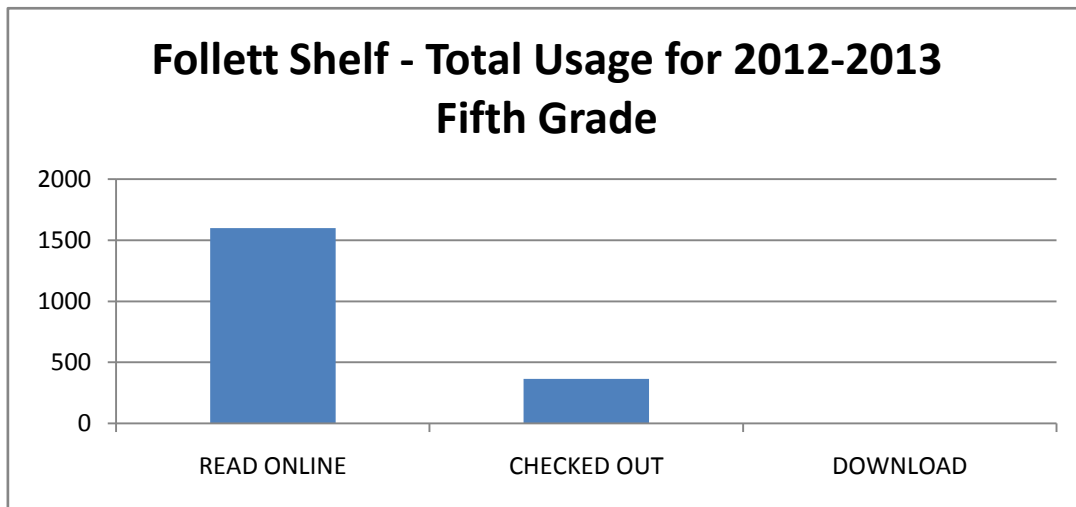
Follett Shelf - Total Usage for 2012-2013 Fifth Grade

Figure 1. Follett Shelf usage statistics for fifth grade.

As shown in Figure 1, fifth graders at this school read (or browsed) ebooks a total of 1,965 times from the beginning of the school year until the end of April. Among this total, 1,599 books were read online and 365 were checked out. Only one book was downloaded.

While the above data looks impressive at first glance, a deeper analysis of fifth grade students' ebook usage patterns was also conducted. The available data included an access log of all fifth grade students who have used the program. Included in the log is the student's name, the title of the book read, the date read, and whether the book was read online or checked out. In order to understand a particular student's usage, one must simply locate the student on an alphabetical list to see all ebooks read on Follett Shelf.

In tracking the majority of the students' usage, it appeared that students were doing more casual reading, or browsing, of ebooks rather than reading a book from beginning until end. Approximately 75% of the students appeared to read multiple titles in one sitting (many of which are lengthy chapter books), so it can be assumed that the books are being looked at, but not finished. For example, one student's log shows that *Catching Fire* and *Mockingjay* (both books in the *Hunger Games* series) were read on November 9, 2012. While many a reader has raved about these books and "not being able to put them down," it is doubtful that a fifth grader read them both on one day. The usage report available at the time did not detail time spent on each book or number of pages read. Students who *check out* a book on Follett Shelf will not show multiple logins under the same book, so it is possible that books that are checked out are also being read in their entirety. In order to ascertain the extent to which students were reading ebooks to completion, students were interviewed about this phenomenon.

Student interviews corroborated the fact that students were more likely to browse Follett Shelf, than read ebooks on their desktop computers. A boy said, "I think I read one book, then I thought it wasn't cool. I like to have a book in my

hand, sort of." He was asked if it was too hard to read on the computer and he replied, "It is kind of complicated to find the book that you read the day before. And turning the pages! It takes forever to turn pages!" Another boy was asked if he had trouble reading on the computer and he said that he sometimes "gets lost in the words." A girl agreed stating, "A lot of times I don't like looking at the screen a whole bunch. It hurts my eyes sometimes."

Among the four students who answered that they did not use Follett Shelf, one student stated "I prefer to read a physical book because it's easier for me. I mean, I *can* read online but I prefer a physical book." Another student said, "I don't like to sit at my computer more than I have to." A girl, when asked about reading on Follett Shelf, said, "I don't really read that much online. I like to sit on the couch to read [books]."

Parents agreed. In responding to an interview question regarding their child's use of Follett Shelf, one parent stated:

> For that Follett reading thing; if it was more like on a small screen, something you can carry around, she might be interested in it that way because she likes to relax in the evening and just read. But if she's on a computer, she's not relaxing.

Focus group data from both teachers and administrators echoed the discomfort prevalent in reading ebooks on desktop computers. One teacher responded that after a long day on her computer, she prefers to complete additional school work from a laptop away from her office. When asked if the pattern of students *browsing* books rather than reading them to completion was an issue, teachers felt any access was an important first step, but that the lack of in-depth reading was in need of remediation.

A question on the student and parent survey asked students the extent to which ebooks were read prior to access to Follett Shelf. It was shown that that among the non-economically-disadvantaged students, most (71%) were reading zero or few ebooks. Students who were economically-disadvantaged have turned to ebooks more frequently. Thirty-nine percent have read two-to-three ebooks prior to access to Follett Shelf, and 29% have read more than five ebooks. (The school provided access to ebooks to students for the previous school year using Tumblebooks. At the time, Tumblebooks offered primarily picture books geared to students in grades three and below.)

After having had access to Follett Shelf for the school year, survey questions asked students to report how many ebooks they read on Follett Shelf throughout the school year. Answer choices included: *0-1*, *2-3*, *4-5*, and *More than 5*. SPSS was used to differentiate responses between students classified as economically-disadvantaged and non-economically-disadvantaged. Low-income students selected *More than 5* and *2-3* an even amount of times (25% each). For students who were not from low-income families, a little over half selected *2-3* and the other half selected *More than 5*. In comparing spring ebook reading rates to the

baseline in the fall, low-income students' habits were similar, yet students not from low-income homes increased their rates of reading ebooks.

Discussion

In their study on increasing readers' stamina, Reis and Fogarty (2006) found that students read for longer durations when they had the ability to move around and choose where to read. Students at the school of study who elected to read an ebook on Follett Shelf primarily needed to access the books from their desktop computers. Data from administrators, teachers, parents, and students confirmed that reading via a desktop computer is uncomfortable, straining to the eyes, and makes for a long day for students who attend school online.

Portable reading devices may provide a solution to the problems incurred on reading on a stationary desktop computer. In a small study (N=9), it was found that mobile digital readers create no disadvantages when compared to reading printed books (Grzeschik, Kruppa, Marti, & Donner, 2011). In a slightly larger study of fifth grade students (N=20), researchers found no significant differences in reading speed or comprehension when using tablet digital readers versus reading text on paper (Dundar & Akcayir, 2012).

Benefits have been cited to using digital reading devices, specifically the ability to manipulate text size (Dundar & Akcayir, 2012). Additional advantages of digital reading devices include the ability to look up word meanings, the ability to activate a text to speech feature, and the ability to take digital notes while reading. While the above study mentioned no significant differences in reading speed or comprehension, the researchers did find a significantly positive relationship when studying students' opinions on portable digital readers. Students appreciated the ergonomics afforded by the digital devices and reported that reading books on them was enjoyable.

Blindly adopting ereading devices and distributing them to students without explicit instructions and guidance is unlikely to magically transform non-readers into readers. A "technology-empowered literacy pedagogy" is needed to aid students in their transition from physical books to ebooks (Felvégi & Matthew, 2012, p. 43). It is important for readers to understand how to operate both the hardware and the software in order to be successful ebook readers. Larson (2013) agreed that educators must adapt their literacy pedagogy to reflect the incorporation of ebooks. She stated that reading ebooks requires "varying levels of student interaction, reading skills, knowledge of language, and technology prowess" (p. 172).

Recommendations

Based on data from students, parents, teachers, and staff, it was suggested that the school in the study conduct a pilot program of distributing ereader tablets to online students. While the students expressed excitement in the on-demand feature of Follett books, students did not feel comfortable reading on desktop computers. It was found that reading literature for pleasure on desktop computers caused fatigue and difficulties that hampered reading motivation.

Assuming that ereader tablets became a reality, it is recommended that teachers take part in professional development to learn not only *how* to use the devices themselves, but also *how to teach students* to effectively utilize the ereader features. Teachers also must learn ways to motivate students to engage in pleasure reading, employing new strategies so that reading can be collaborative, stimulating, and enticing.

Recommendations for future research include the effect of supplying tablets to students attending an online school, specifically the use of the tablets to access ebooks. When students are able to access ebooks from the comfort of their couches, back yards, or in their beds at night, does reading motivation increase? Can ebooks on tablets be a viable alternative to paper books for online students? Might students come to prefer ebooks over physical books, once desktops are supplemented with tablets?

Conclusions

Follett Shelf has allowed students at this online school to access quality children's literature. While access is an important first step, this study has shown that students' comfort (both comfort with technology as well as physical comfort) is critical to creating a culture of readers. Students showed excitement by having access to a world of ebooks, as they frequently visited the site and clicked on titles. Students reported to their teachers that the on-demand access to popular literature was thrilling, but the fascination soon waned as the children became fidgety and edgy reading from a stationary computer screen. Students, parents, teachers, and administrators agreed that portable ereaders, such as tablets, would make ereading much more enjoyable.

With the advent of ebooks and ereaders, curricula need to reflect the novelty of these devices. Students and teachers need to work together to navigate the most appropriate ways to use this technology both in and out of the classroom. Besides just engaging in professional development sessions, teachers need to hold discussions with their students to understand *what works* in students' quests in reading for pleasure via ebooks. Just as the ereading devices available are varied, so too will be students' ereading habits and preferences. Only by keeping the discussion open and honest will students be able to *curl up with a good (e)book* and truly enjoy reading.

References

Crowe, E. C., Connor, C. M., & Petscher, Y. (2009). Examining the core: Relations among reading curricula, poverty, and first through third grade reading achievement. *Journal of School Psychology*, *47*(3), 187–214.

Dundar, H., & Akcayir, M. (2012). Tablet vs. Paper: The Effect on Learners' Reading Performance. *International Electronic Journal of Elementary Education*, *4*(3), 441–450.

Engel-Unruh, M. (2010). ReKindling an Interest in Reading with At-Risk Students. *Library Media Connection*, *29*(3), 54–56.

Felvégi, E., & Matthew, K. I. (2012). eBooks and Literacy in K–12 Schools. *Computers in the Schools*, *29*(1/2), 40–52. doi:10.1080/07380569.2012.651421

Follett Corporation. (2009). *Follett Shelf: eContent anywhere. Anytime* (Vol. 2013).

Grzeschik, K., Kruppa, Y., Marti, D., & Donner, P. (2011). Reading in 2110 – Reading behavior and reading devices: A case study. *Electronic Library*, *29*(3), 288–302.

Hagans, K. S. (2008). A Response-to-Intervention Approach to Decreasing Early Literacy Differences in First Graders From Different Socioeconomic Backgrounds. *Assessment for Effective Intervention*, *34*(1), 35–42.

Hixson, M. D., & Mcglinchey, M. T. (2004). The Relationship between Race, Income, and Oral Reading Fluency and Performance on Two Reading Comprehension Measures. *Journal Of Psychoeducational Assessment*, *22*(4), 351–364.

Hunter, P. C. (2004). Classroom Libraries Level the Playing Field. *Instructor (New York, N.Y.: 1999)*, *113*(5), 36–40, 71.

International Association for K-12 Online Learning. (2013). *Fast Facts About Online Learning*. iNACOL: International Association for K-12 Online Learning. Retrieved from http://www.inacol.org/cms/wp-content/uploads/2012/11/iNACOL_fastfacts_October_2012.pdf

Krashen, S. (2006). Free Reading. (Cover story). *School Library Journal*, *52*(9), 42–45.

Larson, L. C. (2009a). Digital Literacies: e-Reading and e-Responding: New Tools for the Next Generation of Readers. *Journal of Adolescent & Adult Literacy*, *53*(3), 255–258.

Larson, L. C. (2009b). Reader Response Meets New Literacies: Empowering Readers in Online Learning Communities. *Reading Teacher*, *62*(8), 638–648.

Larson, L. C. (2010). Digital Readers: The Next Chapter in E-Book Reading and Response. *The Reading Teacher*, *64*(1), 15–22.

Larson, L. C. (2012). It's Time to Turn the Digital Page: Preservice Teachers Explore E-Book Reading. *Journal of Adolescent & Adult Literacy*, *56*(4), 280–290. doi:10.1002/JAAL.00141

Larson, L. C. (2013). From Print Texts to e-Books: The Changing Nature of Literacy. *Kappa Delta Pi Record*, *49*(4), 168–173. doi:10.1080/00228958.2013.845505

Ohio Department of Education. (2012a). *Electronic Classroom of Tomorrow 2011-2012 School Year Report Card*. Ohio Department of Education. Retrieved from http://www.ode.state.oh.us/reportcardfiles/2011-2012/BUILD/133413.pdf

Ohio Department of Education. (2012b). *Virtual Community School of Ohio 2011-2012 School Year Report Card*. Ohio Department of Education. Retrieved from http://www.ode.state.oh.us/reportcardfiles/2011-2012/BUILD/143537.pdf

Popp, P. A. (2004). *Reading on the Go! Students Who Are Highly Mobile and Reading Instruction*. National Center for Homeless Education. Retrieved from http://www.eric.ed.gov/PDFS/ED489999.pdf

Rasinski, T. V., & Padak, N. (2011). Who Wants to Be a (Reading) Millionaire? *The Reading Teacher*, *64*(7), 553–555.

Reis, S. M., & Fogarty, E. A. (2006). Savoring Reading Schoolwide. *Educational Leadership*, *64*(2), 32–36.

Roblyer, M. D. (2008). Virtual Schools: Redefining "A Place Called School." In J. Voogt & G. Knezek (Eds.), (Vol. 20, pp. 695–711). Springer International Handbooks of Education.

Rose, R., & Blomeyer, R. (2007). *Access and Equity in Online Classes and Virtual Schools*. NACOL: North American Council for Online Learning. Retrieved from http://www.inacol.org/cms/wp-content/uploads/2012/11/iNACOL_AccessEquity_2007.pdf

White, T. G., & Kim, J. S. (2008). Teacher and Parent Scaffolding of Voluntary Summer Reading. *The Reading Teacher*, *62*(2), 116–125.

Zambarbieri, D., & Carniglia, E. (2012). Eye movement analysis of reading from computer displays, eReaders and printed books. *Ophthalmic and Physiological Optics*, *32*(5), 390–396.