The portable e-book: issues with e-book reading devices in the library

With the release of e-readers from Sony and Amazon, libraries have new ways of distributing digital content to their patrons. The option of a lightweight, portable device that can hold dozens of books at a time and has a screen that is as readable as paper offers great promise for libraries looking to provide more titles with limited physical space. The benefit from these devices is balanced by the problems in altering current policies to handle these new devices. What is the appropriate loan policy for them? How should libraries change their acquisitions policies to include devices that allow every user potentially to add new content? And how do libraries catalog the titles on the devices?

JOHN RODZVILLA
Electronic Publisher-in-Residence
Emerson College, Boston, USA

Introduction

Most libraries currently offer electronic resources that are accessed through secure online sites and conform to specific security measures (range of accepted IP addresses, passwords for authorized users, etc.). These limitations force patrons to read digital files either at a public terminal or on their laptops, both of which can cause eye-strain or computer vision syndrome.[1] Several studies on the use of e-text in libraries have shown that patrons would prefer reading e-text on something other than the computer screen. One possible solution is an e-book reader, or e-reader, which offers patrons the portability of a traditional print book but with the ability to access entire online libraries.

In the autumn of 2008, librarians at the Beatley Library of Simmons College received a grant to purchase two e-readers in order to explore the possibility of incorporating e-readers into an academic library environment. After receiving the grant, Megan Fox, the Associate Director of Technology and Special Projects, and I decided to purchase two Amazon Kindle e-readers. The Kindle was chosen as the devices are managed through an Amazon account, thus enabling us to share and manage our title lists. Once the e-readers were ordered, a pilot study was developed. The study would have the library staff use the Kindles for two weeks and evaluate them for use in the library. By limiting the device to the library staff, the study could focus on the usability of the device without needing to investigate the cataloging of the devices or the circulation of the devices to patrons.

Beatley Library

To put this study in context, Simmons College is a private, non-sectarian undergraduate women's college in Boston, Massachusetts. The college also has four graduate schools for women and men in health studies, library and information science, management, and social work as well as nine graduate programs in education and liberal arts. The college community is 1,900 undergraduates, 2,700 graduate students, 206 full-time faculty, 200 part-time faculty and 300 full-time staff. The Beatley Library is the main library for Simmons College and houses over 210,000 volumes of monographs and has 1,700 periodicals. The library is staffed by 19 professional librarians and six full-time pre-professional library assistants.

E-readers

The first generation of e-readers became available in 1990. That year the Sony Data Discman, the

Franklin Bookman, and the NuovoMedia's Rocket Ebook were all released. By the turn of the millennium, most of these early devices had been discontinued or had very small user bases. In 2006, Sony released the first of a new generation of e-readers. These readers used 'E Ink', which creates a 'paper-like' display on the screen that gives the feel of reading a printed page. The new e-readers are also lighter in weight, have longer battery life and have more memory so that individual devices can store up to 200 e-books. They also allow the user to look up words in a built-in dictionary and, at least with the Amazon Kindle, consult an encyclopedic resource. The two major companies with e-readers that have received the most press and represent the largest North American market share are Amazon and Sony.

When the Sony PRS-500 was released in 2006, it was the first widely available e-reader with an e-ink screen (the Sony Librié, released in 2005 with an e-ink screen, having been available only in Japan). E-ink uses magnetized ink to physically create text and images on the screen, and therefore needs a light source in order to be read. With the PRS-500, new titles needed to be uploaded through a USB cord from a physical computer. In 2008, Sony released an updated version of their reader, the PRS-505, as well as a touchscreen reader, the PRS-700. In August of 2009, they released two new readers, the PRS-300, which would have functionality similar to the PRS-500 and PRS-505 but would have a smaller screen and smaller price point, and the PRS-600 which would replace the PRS-700. On the day Sony released the PRS-300 and PRS-600, they also announced that a third reader, the PRS-2121, would be released at the end of 2009. This third e-reader, identified as the 'Daily Edition', will have a seven-inch touch screen and a 3G wireless connectivity feature similar to the Amazon Kindle. During these announcements Sony also noted that these readers would work with the OverDrive system to allow library patrons to borrow e-books for the reader.

Amazon introduced their device, the Kindle, in 2007. The Kindle is an e-reader that offers instant access to books, magazines and newspaper subscriptions through a wireless connection to the Amazon website. Amazon has released the e-reader in three formats: the original Kindle (Kindle1) which is no longer available from Amazon; Kindle2, a slimmer version of the original Kindle with a quicker load time; and the Kindle DX, which has a larger screen and is aimed at the academic market. The Kindle has yet to be released internationally, and the devices can only be purchased through Amazon's US site.

While Sony and Amazon claim approximately 75% of the e-reader market in North America[2], there are several other e-readers available. Some of the other devices that could be part of a loan program at libraries are Bookeen's Cybook, Coolreader's Cool-er, Fujitsu's Flepia, and the Irex Iliad (see Appendix 1 for a list of all e-readers mentioned). Barnes and Noble and Plastic Logic have also announced an e-book reader in development. Another device that bears mentioning as an alternative to the e-reader is the smart phone (iPhones, Palms's Pre and BlackBerries), for which several e-reader applications are available (including applications from Amazon and Barnes and Noble). Librarians should be aware how these smart phones are changing reading habits. A recent report from Forrester claims that the number of consumers who read on their iPhones exceeds the combined sales figures of Amazon and Sony e-readers.[3]

Issues for libraries

Simmons was not alone in exploring the value of a loan program for e-readers. The Penn State University Libraries are working in conjunction with the Sony Corporation to make e-readers available to faculty and students[4]. Yale University, Oxford University, Texas A&M, the University of California, North Carolina State University and Duke University are a few of the colleges that have implemented Kindle loan programs on their campus. Starting with the Fall 2009 Term, Princeton University will also have a pilot program to use Kindle DX as part of a green initiative[5]. However, while we were far from alone in developing a program, we found that instead of a set of best practices developing, each college was creating policies specific to their institutional needs.

The biggest change from purchasing traditional print media is that e-readers and the content are purchased separately. While this has become the standard economic model for other media (music, videos and video games), print media has always had package and content bound together. The e-book is not available in a physical format so it only exists on the device and at the distribution

company's servers. With this absence of a physical format, a library's policies for cataloging, acquisition and circulation need to be re-examined.

Cataloging

How should a library catalog an e-reader and the e-books on that reader? As part of the pilot study, the library researched the three main methods for cataloging devices in order to identify the best match for a possible all-college loan program. The first method is to catalog only the device. Catalogers may add the titles on the device as a note in the 500 field of a MARC record. The Forbes Public Library in Northampton, Massachusetts is currently cataloging their Amazon Kindle this way[6]. The second method is to catalog the device as well as each of the titles separately in the catalog. This would require the cataloger to create a record for the device and continually update the catalog whenever new material was added to the device. This is the most thorough way to catalog the device but it can be labor intensive for a cataloging department. The most common method is to not catalog it at all. Instead, libraries have specific web pages and frequently asked question (FAQ) pages on the library's main website for the devices. While the first and last methods do not collocate the e-books with similar titles in the catalog, they mirror the ways libraries are currently handling electronic databases.

Acquisitions

Besides cataloging decisions, libraries also need to determine which e-reader to purchase and how to manage the acquisition of the titles. As mentioned, the Amazon Kindle is only available for purchase through Amazon's US site, while the Sony e-readers are available through Sony retailers and a select group of chain stores. Other devices may be available only through their company's distributor. This adds considerable work to the acquisition process as the department will need to add new vendors or get authorization to deal with the vendors. There is also some concern on the number of devices that can have certain content downloaded onto them. According to the Amazon website, content purchased for the Kindle can only be shared over a maximum of six machines. Therefore, a library can load purchased titles on only a limited number of devices[7].

Libraries also need to be aware of the fact that the 'purchase' of content is a license to use the content that can be revoked by the distributor. The latest example of this happened in June 2009 when several owners of Amazon Kindles found that e-book editions of George Orwell's *1984* and *Animal Farm* had been removed from their readers. The files were removed without notice by Amazon because of a complaint of copyright violation by the publisher of the e-book[8].

The last decision an acquisitions librarian needs to make is where to purchase content for the devices. Sony and Amazon both provide content through their e-book portals, but there are alternative sites that will provide free content that can also be read on the devices. Sites such as Feedbooks[9], the Internet Archive[10], and Project Gutenberg[11] all provide public domain content in different formats. There are also sites that provide e-books under Creative Commons license.[12] As each device has a specific group of formats they can use, an acquisitions librarian will need to make sure the book's format will work on the e-reader.

Circulation

Once the decision to loan devices is made, circulation staff will need to develop a way to provide the device, its charger and an instruction sheet to inform users how to operate their devices. The library will also need to draft a loan policy. The loan policy needs to identify both the loan period and what titles are on the devices. As one purchased e-book can be loaded on up to six devices at once, it is possible that multiple devices will have the same content on them. As tempting as this may be for libraries, a single e-book on multiple devices violates copyright laws in most countries, so libraries need to track what titles are on which devices. Since these devices cost a few hundred dollars, a policy should also be created for replacement charges if the devices are lost or broken.

For libraries loaning Amazon Kindles, one of the most important questions about these e-readers is if they can even be loaned out at all. As several librarians have discovered, Amazon's terms of service and marketing have provided conflicting information on whether Kindles can be borrowed.[13]

While there is still not a clear answer to this question, Amazon representatives have told some librarians that the terms of service limiting the loaning Kindles is for for-profit groups only.[14]

Pilot study

The pilot study at Simmons College started in October 2008. Library staff members were allowed to borrow an Amazon Kindle for a two-week period. E-books were loaded on to the readers, and librarians were asked to read an entire work on the device. The sample titles were mostly popular works of fiction and non-fiction. The pilot study continued through the spring term with around ten of the librarians borrowing the reader over the course of the academic year. When the readers were not being borrowed they were locked in the Associate Director of Technology and Special Projects office.

During the pilot study, it was decided that all purchases would come through the Amazon e-book store and would be tied to the Acquisitions Department's account with Amazon. This would allow the Acquisitions Librarian to monitor all new material that was purchased and downloaded to the device directly through the device itself.

The librarians used the e-readers as they would print books, taking them home to read at night, reading on their commute, or outside during lunch breaks. They found the screen resolution comparable to a printed page, but found the interface confusing and non-intuitive. Some of the librarians with smart phones expected a touch screen and found the scroll wheel awkward. (The Kindle2 has removed the scroll wheel and replaced it with a five-way navigation control). Several librarians downloaded sample chapters from Amazon and used the experimental web searching to see how well websites looked on the site. Some of our research librarians even used the Kindle to look at online articles in the library's databases through the web search but were unimpressed with the usability of the display. While most of the librarians who participated in the pilot would not purchase the device for personal use, they did see the value of having the device available to faculty, staff and students. One librarian commented "the feeling that you can get (almost) any book, anywhere, anytime is empowering as a reader." The librarians did see a value in developing a larger study that included faculty and students to see if the community would use the devices as part of their research at the library.

Conclusion

Before starting an e-reader loan program, libraries need to decide if the devices currently available are ideal for use within their library.

Based on the feedback gathered from the pilot study at Simmons College, in which the librarians who played with the devices strongly recommended getting input from a broader group of users, it was determined that it would be worthwhile to launch a second stage of testing. This would be to gather input from professors and graduate students in the Library and Informational Studies program. The library would then move beyond the original pilot study and create a committee to develop policies for the library on circulation, acquisition and cataloging as well as conduct a survey on e-reader usage. Therefore, although the library has two devices that now seem outdated compared to current devices, our initial pilot study found that the e-book readers had value for the library but that further testing with a larger group was needed.

Product	Website
Amazon's Kindle	http://www.amazon.com/dp/B00154JDAI
Bookeen's Cybook	http://www.bookeen.com/ebook/ebook-reading-device.aspx
Coolreader's COOL-ER	http://www.coolreaders.com/readers.asp
Fujitsu Flepia	http://www.frontech.fujitsu.com/services/products/paper/flepia/application/video/
IREX iLiad	http://www.irextechnologies.com/products/iliad
Sony e-readers	http://ebookstore.sony.com/reader/

Appendix 1. Table of e-reader manufactures' websites

References

1. Computer Vision Syndrome (CVS): http://www.aoa.org/x5374.xml (accessed 7 September 2009).
2. Jhonsa, E, Amazon Has an Early Lead, but the Game's Not Over: http://www.fool.com/investing/general/2009/08/31/amazons-got-an-early-lead-but-the-games-not-over.aspx (accessed 7 September 2009).
3. Husson, T, The Mobile Internet Creates new Opportunities for Direct-to-Consumer Strategies: http://www.forrester.com/Research/Document/ Excerpt/0,7211,47739,00.html#endnote1 (accessed 7 September 2009).
4. The latest information on this project can be found at http://www.libraries.psu.edu/psul/lls/sony_reader.html (accessed 7 September 2009).
5. Lee, H, U. to Launch Kindle Pilot Program: http://www.dailyprincetonian.com/2009/05/08/23660 (accessed 7 September 2009).
6. Forbes Public Library Amazon Kindle Catalog Record: http://wmars.cwmars.org/record=b3559250~S41 (accessed 7 September 2009).
7. Amazon.com digital help: http://www.amazon.com/gp/help/customer/display.html?nodeId=200316870&#howmany (accessed 7 September 2009).
8. Clayburn, T, Amazon, Says it Will Stop Deleting Kindle Books, *InformationWeek*: http://www.informationweek.com/news/personal_tech/drm/showArticle.jhtml?articleID=218501227 (accessed 7 September 2009).
9. Feedbooks: Food for the Mind: http://www.feedbooks.com
10. Internet Archive: Text Archive: http://www.archive.org/details/texts (accessed 7 September 2009).
11. Project Gutenberg: http://www.gutenberg.org (accessed 7 September 2009).
12. Creative Commons, Text: http://wiki.creativecommons.org/Text#Featured_Text_sites (accessed 7 September 2009).
13. Oder, N, Mixed Answers to "Is It OK for a Library to Lend a Kindle?," *Library Journal*: http://www.libraryjournal.com/article/CA6649814.html?rssid=191 (accessed 7 September 2009).
14. van Dyk, G, Amazon: "OK to Lend Kindles in Libraries": http://shapinglibraries.wordpress.com/2009/03/13/amazon-ok-to-lend-kindles-in-libraries/ (accessed 7 September 2009).

Article received 31 July 2009; revised 3 September 2009; accepted 7 September 2009; published online November 2009

■ **John Rodzvilla**
Electronic Publisher-in-Residence
Emerson College
120 Boyleston Street
Boston, MA 02116, USA
E-mail: John_rodzvilla@emerson.edu