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ABSTRACT

Individual ownership of handheld e-readers is increasing exponentially. Limited budgets, accessibility issues, and the failure of many e-readers to meet academic needs prevent academic libraries from adopting them at faster rates. Librarians spend a considerable amount of time gathering information about e-readers prior to making an investment. This article provides a history of e-reader availability and selection in the United States, information on the challenges that academic librarians face in e-reader selection, and research results of various studies on e-book/e-reader use by students. The article reflects on the e-reader evaluation and decision-making process and makes recommendations for investment and training.

INTRODUCTION

The majority of academic libraries are hesitant to make an investment in e-readers. Decreasing prices of major e-reader models (Kindle, Nook, and Sony Reader) have not resulted in all academic libraries adopting this technology. Their reasons to avoid investing in e-readers as standard library equipment include shrinking budgets, lack of compatibility with all e-book formats, Americans with Disabilities Act compliance, and "failure to meet the academic needs of students and/or faculty." In addition, students and faculty have not actively requested the devices, which fails to generate the statistics needed to justify the adoption. Among additional reasons are the use of other devices for reading e-books, a persistent preference for print, and the digital divide resulting from the inability to afford the devices.

THE AVAILABILITY OF THREE E-READER MODELS IN THE UNITED STATES

Since the 1990s, bookstores across the United States have shut down due to the convenience of online book ordering on Amazon.com. The wide variety of books and other merchandise for slightly discounted prices on this Web site attracted leisure readers, students, and librarians. Amazon sales continue
to increase every year, bypassing the large American chain stores Barnes & Noble and Borders (which declared bankruptcy in 2011; Kolpon & Eisen, 2012).

Sony was the first major company to sell e-readers to the general public in the United States. In 2006, Sony made the PRS-500 available for sale exclusively at Borders bookstores. In 2007, Sony expanded the reach of its e-readers by making them available at Fry's, Costco, and Best Buy. Sony was the first company to create its own "store" for proprietary e-books to be purchased specifically for its own devices, although Sony did not limit the capacities of its e-readers to upload or display e-books from other sources or formats. The PRS-500 originally sold for $349 in the United States, but Sony needed to depend on other companies to sell its product. Although Sony had captured the e-reader market in Asia and Europe, its American sales strategy might have resulted in reduced

market share among leisure readers in the United States. Nevertheless, the Sony Reader is still available for sale in a variety of chain stores and appeals to music, movie, and audiobook lovers, as well as bibliophiles.

In 2007, Amazon introduced its first-generation Kindle and its own proprietary e-book collection that was available for purchase on its popular Web site for $399. Due to the ubiquity of Amazon.com, many Americans—including librarians—were left with the impression that the Kindle was the only e-reader. (To this day, "Kindle" and "e-reader" are used interchangeably in American English, even among some vendors of academic e-book collections.) In 2009, Barnes & Noble released its Nook in the United States for $259. To stay competitive, Amazon created the Kindle 2 for international and domestic markets, offering a new version for $259. In 2010, Barnes & Noble reduced the price of its Nook to $199, with a Wi-Fi only model for $149. As a result, the price of Amazon's Kindle 2 went down to $189, and later that year reduced to $139. According to venture capitalist Scott Jacobson, it is likely that Amazon will eventually make Kindles available for free if users pay for subscription services (Hickey, 2011).

According to the 2010 Pew Internet and American Life survey, 5% of Americans own e-readers. Those who reported e-reader ownership lean toward the well-to-do and well-educated; 12% of those with an annual household income of $75,000 or more and 9% of college graduates stated that they own an e-reader. This suggests that most Americans still perceive e-readers as luxury items (Smith, 2010).

A BRIEF HISTORY OF E-READER SELECTION IN ACADEMIC LIBRARIES

Some libraries invested in e-readers as soon as they appeared on the market. Public libraries and those academic libraries with budgets large enough to sustain e-reader-specific collection development observed heavy circulation of the devices. However, early adopters quickly discovered discrepancies with some e-reader models that caused problems. For example, a Kindle account could serve up to 10 devices, but all 10 would offer the same e-book collections ordered through that account. Proprietary licensing agreements would not allow for interlibrary loan of Kindle e-books or devices, and a library-owned Kindle could only be used by patrons while in the library.

Both the Amazon Kindle and the Sony Reader also do not allow for the "sharing" of e-books from one account to another on the same models. The consequence is that libraries would have to lend the entire device to a patron and hope that it returned intact. Neither an account holder nor a library patron could upload an e-book from a subscription-based collection to a Kindle. Lastly, the first Kindle models were not ADA-compliant for the visually impaired, which led to lawsuits initiated by students at three universities who were required to use them for class assignments (Gross, 2011). Although Amazon promised to improve Kindle features for the visually impaired, it is still difficult for visually impaired students to read from any current e-reader model with complete independence.

In 2010, a Collection Management Librarian and a Professor of Information Media from Saint Cloud State University surveyed academic librarians regarding the current or potential use of e-

books and e-readers in their schools. A brief anonymous online survey was distributed through Survey Monkey to professional listservs, such as LITA, DIGLIB, DEOS, and COLL-LIB. The academic librarians were asked about requests for e-readers, the appropriate use of e-readers, preferred types of e-readers for academic libraries, and whether the library should provide e-readers if the university bookstore sells e-textbooks (Wexelbaum & Miltenoff, 2010). Of the 110 academic librarians who completed the survey, 60% indicated being employed the United States, 25% in a country outside of the United States, and 15% did not identify the country where they worked. Sixty-one percent responded that they were not currently using or planning to use e-readers. This may be due to the fact that the librarians witnessed little or no interest for the devices; 77% reported no demand from students or faculty for e-readers. Seventy-eight librarians expressed an interest in using e-readers, but 61% of them had reported that it was too early to tell what e-reader brand would be most appropriate for academic libraries. Of those 78 librarians who responded to the question "Which eBook reader do you think may be most suitable in a library environment?," approximately 20% stated that the Sony Reader was most appropriate for library use, with 10% supporting Kindle, 9% supporting the Nook, and 14% supporting "Other."

Results of the survey conducted at Saint Cloud State University were similar to those of a national survey of libraries and their investment in e-books and e-readers. In 2010, the Primary Research Group (2010) surveyed public, academic, and special libraries to determine how libraries were investing in e-books and e-readers. Academic libraries, which comprised 62% of the sample, were the least likely library type to have invested in e-readers. Approximately 20% of academic libraries surveyed had made an investment in e-readers. Of those academic libraries investing in e-readers, approximately three-quarters opted for Kindles, more than one-third for Sony Readers, two-thirds for iPads, and one-fifth for Nooks or Franklin eBookmans. The results suggest that some of the libraries surveyed had invested in more than one type of device. The Primary Research Group did not ask librarians whether they thought one particular device was more appropriate for a library environment than others, but when asked "Does the library plan to acquire any e-book Readers next year?", approximately one-third of libraries stated that they would invest in Sony Readers or Nooks next year, whereas less than one-quarter stated that they would invest in Kindles. In the Primary Research Group study, 11 academic librarians who would not invest in e-readers the next year provided reasons for not investing; lack of budget was the most frequently cited reason for not investing in devices, and lack of sufficient academic e-book titles compatible with the devices was the second most frequently cited reason. One librarian stated that another institution on campus—not the library—was providing students with iPads already, so that librarian had decided not to invest in devices.

The City University of New York (2010) published a list of e-reader pilot project summaries from 13 colleges and universities in the United States, many with links to articles or conference presentations about the studies. The pilot projects were initiated by four libraries on their campuses. Ten other universities conducted e-reader pilot projects independently from their campus libraries. Of the 13 institutions that conducted pilot studies on e-readers, eight studied the Kindle (primarily the DX model), five studied the Sony Reader (the PRS-500, PRS-505, PRS-600, and PRS-700), and one studied the iPod Touch for e-Reading purposes (City University of New York, 2010). Of the 13 institutions, Fairleigh Dickinson University is the only one to study the

Kindle DX, Sony Reader (PRS-600 and PRS-700), and the iPod touch concurrently to compare the performance of each type of e-reader (O'Shea, 2009). Fairleigh Dickinson University made the devices available in its library and developed circulation and collection development policies for the devices. In the future, selected classes will be able to use a set of the devices for class assignments to determine whether they are fit for academic purposes. Thus far, student feedback collected by librarians about the devices has not been published.

Lehman College librarians presented their Sony Reader circulation program for the Library Association of the City University of New York; they did not only offer the Sony Readers, but also offered an intensive outreach and support program to educate faculty, staff, and students about the devices (Jayadeva, Havelka, King, & Soto, 2010). They chose the Sony Readers based on the fact that the Sony Readers could upload PDFs and ePubs from any location, including a desktop or laptop computer on which someone may already have a personal collection of e-books. The presenters also stated that, because of compatibility with multiple e-book formats and its low price, a Sony Reader was more cost-effective for their library than a Kindle (Jayadeva et al., 2010).

IS THERE STUDENT DEMAND FOR E-BOOKS OR E-READERS?

Prior to a discussion about student demand for e-readers, it is necessary to return to the discussion of student demand for e-books in general. Studies of students' perceptions and use of e-books have taken place since 2008. Results gathered prior to the e-reader revolution have shown that students tend to access e-books for "research and study purposes" or "work" ("eBooks usage trends," 2008; ebrary, 2008; UCL: CIBER, 2008; Wexelbaum, Miltenoff, & Parault, 2010), and that students appreciate the convenience, accessibility, and enhanced functionality of e-books ("eBooks usage trends," 2008; ebrary, 2008; UCL: CIBER; 2008; Wexelbaum et al., 2010). The studies have shown that before the e-reader revolution few students would read e-books in place of print books by choice.

According to a 2008 e-book usage study conducted by Springer in five academic institutions in the United States, Europe, and Asia, academic library users primarily accessed e-books for "research and study purposes," and that the types of e-books most frequently used in academic libraries are reference works and textbooks. Furthermore, users perceive the benefits of e-books to be convenience, accessibility, and enhanced functionality. At the same time, users who prefer e-versions of reference books and textbooks for research choose print books for the perceived "ease and enjoyability" of reading. When asked "What do you expect to happen with e-books in 5 years time?," 53% of users surveyed responded "For some books I will prefer to read the print books, for others I prefer the e-book," whereas 35% responded "I will mostly read print books," and a 7% stated that they would mostly read e-books ("eBooks usage trends," 2008).

In the spring of 2008, ebrary surveyed 6,492 students from approximately 400 colleges and universities from around the world on their e-book use. Fifty percent of the students stated that they never used e-books, and 30% stated that they use e-books for less than one hour per week. Of the students who stated that they never use e-books, 60% said that they do not know where to find e-books, and 45% stated that they preferred printed books. Other students who never use e-books

gave reasons such as "e-books have not been required by my professors as part of my program," "I have not had a need for e-books," "I cannot print, annotate, highlight, or underline text in e-books," "e-books are not portable," "I primarily use journals as a main source of information," and "I do not know how to use e-books." Although some students indicated that lack of portability was a factor in their reluctance toward using e-books, when asked to rank the importance of e-book features, 87% of students surveyed rated "searching" as the most important feature for e-books and 42% rated "downloading to a handheld device" as the most important feature. Students also indicated that it was important to them for e-books to be available in multiple formats, as well as have the ability to link to and search other databases and reference books (ebrary, 2008).

In the United Kingdom in 2008, the Joint Information Systems Committee national e-books observatory project board and members of the Centre for Information Behavior and the Evaluation of Research (CIBER) e-team at University College conducted an online survey asking British university students and faculty about their academic use of e-books (UCL: CIBER, 2008). The researchers collected data from 20,000 surveys, primarily focusing on students and faculty in business, engineering, media, and medicine. According to the survey results, 91.6% of users consulted e-books "for work or study." When asked "How many EBooks have you used in the past month?," approximately half of students and faculty stated that they had used one or two titles that month, with students being heavier e-book users than faculty. According to this study, regardless of level of education or gender, e-book use decreased with age. Engineering students and faculty were the most likely to read e-books; 43.3% responded that they consulted three or more titles in the past month for their research.

Although e-books appear to be popular research materials in the CIBER study, 87% of students surveyed indicated that they go to the physical library primarily to borrow books, and more than 70% of students surveyed visit the physical library once a week. Although the CIBER study did not gather data on whether students preferred e-books to text, the number of surveyed students who borrowed books and visited the physical library frequently suggests that print books are still valued by students. In the ebrary (2008) study, traditional print books were still perceived by students as "the most trustworthy resource for research" (p. 12).

In 2009, the University of Illinois conducted a large-scale survey designed to investigate use patterns and library patrons' attitudes toward e-books. Of 1,547 University of Illinois students and faculty, undergraduates were most likely to have awareness of e-book access. However, 45% of survey participants were not aware that the university library provided access to e-books. Of the 55% of survey participants who were aware that the library provided access to e-books, approximately half of that number had actually used e-books (or roughly one-quarter of the sample). Forty-one percent of those who did not use e-books indicated a lack of knowledge of their availability, 18% of the same category indicated that they had not used them because they had not been required, 15% of those who did not use e-books indicated that they did not like to read them from a screen, and 7% indicated a preference for print books. The participants who used e-books cited "instant desktop access" (25%) and "ability to keyword search" (17%) as primary advantages, whereas "difficulties in reading from the screen" (33%) and "navigation issues" (10%) were the primary disadvantages. Although users considered e-books better than print books in terms of

space and storage, accessibility, and ease of making copies, the preference for print books remained, especially if they needed to read the entire book, and the existence of e-books was not leading them to read fewer print books (Shelburne, 2009).

In a recent national study of 400 full-time college students in the United States, results showed that students with above average SAT scores were more likely to be frequent e-book users, whereas less than 17% of community college students found library e-book collections useful or very useful (Primary Research Group, 2009). To date, although the majority of academic libraries in the United States have made some investment in ebook collections, a significant number of college students seem unaware of or uninterested in e-book holdings. Among the same 400 full-time college students, only 30.42% reported receipt of any form of training from an academic librarian in the use of the library's e-book collection, and almost one-third of the statistical sample was not even sure what an e-book was (Primary Research Group, 2009).

From 2009 to 2011, undergraduate students in a Research Strategies class at Saint Cloud State University were given a homework assignment—to find an e-book using the online library catalog, to read some of the e-book, to describe their experience, and to address whether they had read e-books or used e-readers before this assignment (Wexelbaum & Miltenoff, 2010). The students received no training on how to upload e-books to devices from the professor who gave the assignment. The 90 students who completed this assignment nearly unanimously said that they did not enjoy the experience of reading an e-book from a computer screen. Of the 25 students who figured out how to upload the e-book to their smartphone, 92% enjoyed the experience. None of the students owned an e-reader or knew how to use one prior to the assignment. In another study conducted among undergraduate Information Media majors at Saint Cloud State University in 2010, 85% were only interested in e-readers if they could use them to read textbooks for class, and 50% believed that e-readers were a waste of money (Wexelbaum, Miltenoff, & Parault, 2010).

In 2009, the Lloyd Sealy Library of the John Jay College of Criminal Justice of the City University of New York decided to provide e-readers to students and faculty to determine whether this technology would be advantageous for use by its college community. The librarians selected a group of 163 Hispanic, African American, and White youths between 17 and 19 years old. The population was equally divided between male and female students. The students were organized into small groups of six to eight students; each group had to manipulate the e-readers for 15-minute sessions and respond to a one-page questionnaire. The librarian administering the test had to observe the students and gather their oral impressions and written responses from the questionnaire. Sony PRS-505s were used initially for this study; those students who liked the electronic devices asked whether they could also try using PRS-700s. Only 4 of the 163 students already owned e-readers; the majority owned iPods (71.4%) and cell phones (78.3%), so most of the students in the sample had no previous experience with e-readers. When asked "What do you read on your mobile device?," 95.7% stated that they read e-mail, 29.3% read newspapers, and 26.1% read e-books on their mobile devices.

After a 15-minute session with the Sony Readers, the librarian asked students whether they would prefer to read a print book or an e-book on an e-reader. Approximately 85% of the students

responded that they would prefer to use an e-reader. Reasons for their preference included ease of use and searchability, the portability and convenience of the device, and the fact that many of the young students expressed that they had "experience" in operating technology and felt comfortable using the e-reader. Data from this study may suggest a potential training strategy to orient students with e-readers prior to requiring their use for class assignments or accessing e-textbooks. This study also may suggest that 17 to 19 year olds may be more eager to adopt mobile devices for reading than older students.

Students and educational institutions have not adopted e-textbooks nationwide. The National Association of College Stores (2010) conducted a national survey through OnCampus Research to determine how often college students accessed e-books and on what devices. Of 627 students, only 13% purchased e-books within the past three months. Of those students who did purchase e-books, 56% indicated that their e-book purchase was required course material. One-third of the same group identified their e-book purchase as leisure reading, whereas the remaining 10% identified "Other" as their primary reason for purchasing an e-book. When asked to identify the primary device they use to read their e-books, 77% stated that they use a laptop or Netbook, 19% use a specific e-reading device, 19% use a Smartphone, and 4% use a tablet (e.g., iPad). Students in the study identified the Apple iPhone as the most popular digital reading device, but only one-quarter of students surveyed actually owned the device. Only one-third of the students who purchase e-books stated that their e-reading experience was "somewhat better" than reading a print book.

Seventy-five percent of all students surveyed stated that, if they had the option, they would prefer to buy a print textbook; this percentage did not change from the results obtained from a similar study conducted in 2009 by the National Association of College Stores (2010). Of the students who preferred to purchase print textbooks, more than half expressed a general preference for print books over e-books. Of the students who prefer e-textbooks to print, only 42% stated a preference for "technology" in general, whereas 83% favored e-textbooks because they reduce the weight of textbooks in their backpacks. A significant number of the students who preferred print textbooks to e-textbooks had concerns about the ability to take notes or highlight text in the e-textbooks, as well as the ability to print out pages from the e-textbooks to take notes or highlight text manually.

Of all students surveyed, 92% indicated that they currently do not own an e-reader; 59% of those students had no plans to purchase one in the next three months and 36% were unsure whether they would buy one. Of the students who expressed an interest in purchasing an e-reader, almost all would like to use it for leisure reading. Seventy-four percent responded that they would also use it for school. Only 37% stated that they would buy one just to keep up with the latest technology.

An increasing number of educational institutions are pilot-testing the Kindle and Sony Reader to determine whether faculty and students should shift to e-textbooks (Behler & Lush, 2011; Clark, Goodwin, Samuelson, & Coker, 2008; Foasberg, 2011; Kiriakova, Okamoto, Zubarev, & Gross, 2010; O'Shea, 2009; Tees, 2010). As part of the pilot programs, e-readers were provided by the university bookstores as opposed to the libraries. Northwest Missouri State University almost became the first public university to offer e-textbooks in place of traditional print textbooks for all

academic disciplines (Young, 2009). The university ran a pilot study using the Sony Reader. According to the study, students quickly asked for their print textbooks back because they received neither sufficient training nor time with the e-readers to have a smooth reading experience. Other problems with the Sony Reader model used in the study included the short battery life of the device for long study periods, illegible pop-up versions of dense numerical charts that would be easier to read in print, and lack of color capability for science or medical students who wanted to use the Sony Reader to study color illustrations. Young's (2009) research article fails to mention what role the library of Northwest Missouri State University played, if any, in the university's e-reader selection process or student support.

THE FUTURE OF E-READER ADOPTION IN ACADEMIC LIBRARIES: RECOMMENDATIONS

Academic libraries still face numerous challenges in their decision-making process as to whether to adopt e-readers. First, e-reader models are changing rapidly. Within four years, the Amazon Kindle has evolved three times. Its third-generation model can now access PDFs through e-mail, although higher quality resolution is limited to its proprietary e-books. The Sony Reader has also gone through at least one model change per year, and even the Barnes & Noble Nook, within two years, has developed a new model that can read e-books in color. As new versions of the three main brands of e-readers appear on the market nearly every year, with upgrades to existing features or completely new features to improve accessibility, academic libraries may hesitate to invest in hardware that becomes rapidly obsolete.

The relevance of an e-reader device for an academic library will depend on the number of e-book formats it can upload and the number of sources from where the device can upload an e-book in the first place (Dougherty, 2010; Gielen, 2010; Sigenthaler, Wurtz, & Groner, 2010). In this way, an academic library can use the e-reader to increase access to subscriptionbased academic e-book collections, free e-books published by the federal government or independent writers, and, if granted permission, PDFs of articles on course reserve.

Although the majority of academic librarians believe that e-readers do have a place in academic libraries (Primary Research Group, 2010; Wexelbaum & Miltenoff, 2010), their investment in e-readers has lagged behind that of public libraries (Primary Research Group, 2010). This is because the majority of e-book collections advertised specifically for e-readers have traditionally targeted individual leisure readers and public libraries. Most libraries that invest in e-readers have developed devicespecific collections that patrons would only be able to access through the device itself because licensing agreements may prohibit sharing of those e-books between devices to an e-reading application. As more individuals invest in e-readers or mobile devices with e-reading applications, libraries are moving toward subscription-based e-book collections that allow for patron borrowing and uploading of e-materials to different types of devices, including Amazon Kindle, Sony Reader, and Barnes & Noble Nook. Academic libraries must inquire with their existing and future e-book collection vendors about e-book compatibility, uploading capability, and shareability of titles, which may be uploaded to multiple devices.

Academic libraries might not receive requests from students or faculty for e-readers, especially if e-textbooks are not included in the syllabi requirements. At least one representative from an academic library should serve as a liaison to the university bookstore to keep current with changes in textbook formats and whether the bookstore will be supplying e-readers to students. E-reader pilot studies conducted at educational institutions point out that the adoption of e-readers had less to do with the e-reader brand and more to do with training and support that students received in using the devices. Before academic libraries invest in these devices, all departments that would be involved in handling the devices (i.e., Circulation, Reference, Instruction, Interlibrary Loan, and Systems) must be given the opportunity to become proficient with the devices themselves before making them available to students and faculty.

Colleges and universities must provide accommodations for students with visual and hearing impairments and learning disabilities so that they can complete their required coursework. Due to the verdict of the Kindle lawsuits, academic libraries interested in investing in e-reading devices must study their features to ensure that they are ADA compliant. Although newer e-reader models and iPads include talking touch screens and the capability to read e-books aloud, not all e-books or PDFs have audio capacity or can be read by the software. The academic library should work together with Student Disability Services and faculty to provide appropriate reading options for differently abled students. Despite the existence of assistive technologies, almost no e-reader studies focus specifically on the needs of disabled student populations.

Insufficient funding is the most frequently cited reason for the lack of investment by academic libraries in e-readers. It is notable that parents are starting to give e-readers to their older children as birthday and holiday presents (Bosman, 2011), and an increasing number of high school students will be expected to read online resources more frequently for class assignments. Some school libraries are replacing print books with e-books on a mass scale (Abel, 2009). Therefore, this younger generation of students may develop an expectation or preference for e-books in the academic environment. Once in college, this future generation of students might request that libraries make e-readers available for loan because their school or public library had done so. Academic libraries should work closely with school districts in the area to find out what exposure students from preschool through twelfth grade have had to e-books and e-readers in their schools' media centers, as well as what educational institutions in their consortia are doing in regard to e-reader investment, to transition smoothly toward the use of these devices. The possibility for a discounted rate with e-reader vendors should actively be pursued if members of the consortia decide to invest in a particular model.

CONCLUSION

Will electronic resources—e-books in particular—become less accessible to patrons if academic libraries do not adopt e-readers? Recently, almost all academic libraries are investing in e-books, databases, and online journals. The number of e-subscriptions and their annual costs continue to increase, but academic libraries must continue to make them available due to high faculty and student demand for the content. Although patrons have expressed displeasure for reading long

passages of text from a computer screen, the academic library must expand its options for patrons to access these expensive resources.

The use of e-readers is a rapidly growing trend. Academic librarians have recognized this trend in their research literature, professional conferences, and daily tasks. Further study and research into this new trend, as well as implementation of the findings to the peculiarities of individual academic libraries, will lead to in gradual adoption of e-readers in academia.

REFERENCES

Abel, D. (2009, September 4). Welcome to the library. Say goodbye to the books. Cushing Academy embraces a digital future. *The Boston Globe*. Retrieved from http://www.boston.com/news/local/massachusetts/articles/2009/09/04/a_library_without_the_books/

Behler, A., & Lush, B. (2011). Are you ready for E-readers? *The Reference Librarian*, *52*, 75–87. doi:10.1080/02763877.2011.523261

Bosman, J. (2011, February 4). E-readers catch younger eyes and go in backpacks. *The New York Times*. Retrieved from http://www.nytimes.com/2011/02/05/books/05ebooks.html

City University of New York. (2010). *E-readers and libraries*. Retrieved from CUNY Academic Commons: Groups: E-Books and E-Readers in the Academic Libraries: http://commons.gc.cuny.edu/wiki/index.php?title=E-Readers_and_Libraries

Clark, D. T., Goodwin, S. P., Samuelson, T., & Coker, C. (2008). A qualitative assessment of the Kindle E-book reader: Results from initial focus groups. *Performance Measurement and Metrics*, *9*, 118–129. doi:10.1108/14678040810906826

Dougherty, W. C. (2010). E-readers: Passing fad or trend of the future? *The Journal of Academic Librarianship*, *36*(3), 254–256. Retrieved from http://dx.doi.org/10.1016/j.acalib.2010.03.009

eBooks usage trends and statistics—The Springer Report 2008. (2008). Retrieved from http://www.masternewmedia.org/ebooks_usage_trends_and_statistics/

ebrary. (2008). *2008 global student e-book survey sponsored by ebrary*. Retrieved from http://www.ebrary.com/corp/collateral/en/Survey/ebrary_student_survey_2008.pdf

Foasberg, N. M. (2011). *Adoption of e-book readers among college students: A survey*. Retrieved from http://www.ala.org/lita/ital/sites/ala.org.lita.ital/files/content/30/3/pdf/foasberg.pdf

Gielen, N. (2010). *Handheld e-book readers and scholarship: Report and reader survey* [ACLS Humanities E-Book White Paper No. 3]. http://www.humanitiesebook.org/heb-whitepaper-3.html

Gross, G. (2011, January 13). Kindle in classroom hurts blind students, DOJ warns. *Computerworld*. Retrieved from http://www.computerworld.com/s/article/9144418/Kindle_in_classroom_hurts_blind_students_DOJ_warns?taxonomyId=13&pageNumber=1

Hickey, M. (2011, March 8). Amazon considering free Kindles for Prime members? *Crave: The Gadget Blog from CNet*. Retrieved from http://news.cnet.com/8301-17938_105-20040764-1.html

Jayadeva, R., Havelka, S., King, J., & Soto, A. (2010, November). *Sony E-reader borrowing program at Lehman College*. Presentation at an Emerging Technologies Committee event for the Library Association of the City University of New York, New York. Retrieved from http://www.lacuny.org/committees-androundtables/committees/emerging-technologies/past-events/206-2009-2010

Kiriakova, M., Okamoto, K.S., Zubarev, M., & Gross, G. (2010). Aiming at a moving target: Pilot testing ebook readers in an urban academic library. *Computers in Libraries*, *30*(2), 20–24. Retrieved from EBSCOHOST Academic Search Premier.

Kolpon, I., & Eisen, S. (2012, April 8). Barnes & Noble prospers in wake of Borders bankruptcy. *The Pitt Business Review*. Retrieved from http://www.thebusinessreviewpitt.com/2012/04/barnes-noble-prospers-in-wake-of.html

National Association of College Stores. (2010). *Electronic book and e-reader device report*. Retrieved from https://www.nacs.org/LinkClick.aspx?fileticket=blmPMgdQ_LA%3d&tabid=2471&mid=3210

O'Shea, D. (2009). *E-Reader pilot program at Fairleigh Dickinson University*. Retrieved from http://www.slideshare.net/denoshea/e-book-reader-pilotprogram-at-fdu

Primary Research Group. (2009). *Student use of library e-book collections*. New York, NY: Author.

Primary Research Group. (2010). *Library use of ebooks 2011 edition*. New York, NY: Author.

Shelburne, W. A. (2009). E-book usage in an academic library: User attitudes and behaviors. *Library Collections, Acquisitions, and Technical Services*, *33*(2–3), 59–72. doi:10.1016/j.lcats.2009.04.002

Siegenthaler, E., Wurtz, P., & Groner, R. (2010). Improving the usability of E-book readers. *International Journal of Usability Studies*, *6*(1), 25–38. Retrieved from http://www.upassoc.org/upa_publications/jus/2010november/siegenthaler1.html

Smith, A. (2010). *Americans and their gadgets.* Washington, DC: Pew Research Center. Retrieved from http://pewinternet.org/~/media//Files/Reports/2010/PIP-Americans%20and%20their%20Gadgets.pdf

Tees, T. (2010). Ereaders in academic libraries—A literature review. *The Australian Library Journal*, 59(4), 180–186. Retrieved from http://alia.org.au/publishing/alj/59/ALJ_2010_59_4.pdf

UCL: CIBER. (2008, May 20). *Textual analysis of open ended questions in e-book national observatory survey.* London: CIBER: JISC E-Books Project. Retrieved from http://ciber-research.eu/download/20091102-freetext.pdf

Wexelbaum, R., & Miltenoff, P. (2010). *Using the EReader in academic libraries.* Retrieved from the Handheld Librarian Archives: http://www.handheldlibrarian.org/archives

Wexelbaum, R., Miltenoff, P., & Parault, S. (2010). EBooks and reading comprehension: Perspectives of librarians and educators. *Bibliosphera.* Retrieved from http://bibliosphere.nbu.bg/13_2.htm

Young, J. R. (2009, June 4). 6 lessons one campus learned about e-textbooks. *The Chronicle of Higher Education.* Retrieved from http://chronicle.com/article/6-Lessons-One-Campus-Learne/44440