Springer eBooks

eBook Use and Acceptance
in an Undergraduate Institution

Springer eBooks

Overview

Libraries have been collecting books in digital format since the late 1990s. In November 2007 Amazon released the Kindle, and the world of eBooks shifted. Although most eBooks in academic library collections cannot be accessed with the Kindle, widespread consumer adoption of hand-held reading devices has greatly affected user awareness and expectations about eBooks. According to the 2011 Survey of eBook Penetration & Use in U.S. Academic Libraries, 58% of responders reported an increased demand for eBooks from their users from the previous year, and that the average number of eBooks held in undergraduate library collections nearly doubled from 2010 to 2011. Academic libraries are committing an increasingly larger portion of their limited collection funds to eBooks. Although librarians may have vendor provided use data and anecdotal evidence of patron acceptance of eBooks, we have been making decisions with little real data about patron attitudes toward academic use of eBooks. The survey reported here will provide librarians at Wellesley College and other institutions data to inform collection decisions and can be used as an entry point for further conversations with patrons.

Other surveys investigating eBook use have been reported on in the past few years, notably the Springer White paper by the University of Liverpool (2010), Global Student eBook Survey by ebrary (2008, 2011), the JISC National eBooks Observatory Project (2009), and the interesting work of Andy Revelle, et al of Miami University. Although this survey is limited to students and faculty at a single institution we will compare the results to these larger studies to identify potential trends or differences.

Wellesley College Library eBook Collections

Wellesley College faculty and students have access to a diverse and extensive collection of contemporary scholarly eBooks. The Library at Wellesley College began collecting eBooks in 2003 with a subscription to a large collection containing titles in all disciplines from a number of academic publishers. In 2009, the Library implemented a large-scale patron driven acquisition eBook program, again including a wide range of recently published titles from many academic presses. The library now licenses eBooks as individual titles and in large collections, providing access to over 400,000 eBooks on several different platforms with many differences in functionality, such as the ability to download, limitations on printing, or specific software requirements.

Survey results from the Wellesley College population will reflect use and attitudes of a patron base with access to a robust and diverse eBook collection over a relatively long time period.

Academic libraries are committing an increasingly large portion of their limited collection funds to eBooks.

Trends in eBook use at Wellesley

It is no surprise that eBook use continues to rise – as publishers provide more of their titles as electronic editions and libraries continue to make available an increasing number of titles. What is more interesting is how the use of eBooks at Wellesley College appears to be shifting.

Comparing 2007 Wellesley use data from a large subscription collection to 2011 use data, the number of unique titles accessed increased by 40%, which might be explained to some extent by the increase in the number of titles in the collection. However, the number of total pages viewed increased by 184% while--perhaps most surprising of all – the number of pages printed dropped by 11%--despite the fact that more titles were accessed. Use data from Wellesley's Patron Driven Acquisitions (PDA) collection shows that patron downloading of eBooks from this collection increased over 300% within the space of two years (Jan-June 2010 and Jan-June 2012). It is interesting to note that there appears to be little variation in eBook use by discipline. Although this is difficult to gauge for a variety of reasons, particularly that our large eBook collections aren't as strong in the sciences, we continue to see strong use across the humanities, social sciences, and sciences.

Springer eBook Use

In any survey research it is valid to ask whether the results are important and apply to a broader population than the population studied. To test this, Springer supplied usage data for schools with the basic Carnegie Classification of baccalaureate, whose size was similar to Wellesley College (2000 to 3000 FTE, all except Wellesley rounded to the nearest 500 to preserve anonymity), and who had owned the full Springer ebook collection for at least three years. The data are shown below, sorted by the usage in the last full year studied – 2011.

The number of unique titles accessed increased by 40%...the number of total pages viewed increased by 184%...the number of pages printed dropped by 11%.

Figure 1: Chapters viewed from Springer eBooks at baccalaureate institutions

	FTE	2009	2010	2011	Q1,2 2012	2012 Projected
Wellesley College	2,324	221	2,154	3,878	3,037	6,074
College 1	2,500	1,521	2,458	3,915	2,184	4,368
College 2	2,000	272	1,715	2,780	1,418	2,836
College 3	2,000	312	1,483	2,341	1,464	2,928
College 4	2,000	333	1,259	2,335	1,198	2,396
College 5	3,000	243	262	2,040	2,539	5,078
College 6	2,500	47	567	1,874	645	1,290

As can be seen, the usage patterns are very similar for this set, with some slight variations in early years attributable to purchasing prior to 2009 by some of the schools. As of 2011, Wellesley recorded the highest use per FTE in this group at 1.669, perhaps reflecting their long-term commitment to eBooks. The average use per FTE in the other schools was 1.185. Wellesley's projected use for 2012 also ranked highest in this group of libraries. This illustrates that the Wellesley approach, featuring a focus on eBooks in terms of comprehensiveness of offerings, discovery support, and adoption of those resources offering value, is important to success with the format. Colleges in this group show a very similar pattern of improved usage over time. Based on these similarities for a uniform package of content among a group of similarly sized schools with similar liberal arts educational missions, it seems reasonable to conclude that the eBook preference results for Wellesley can be instructional for other bacca-laureate institutions.
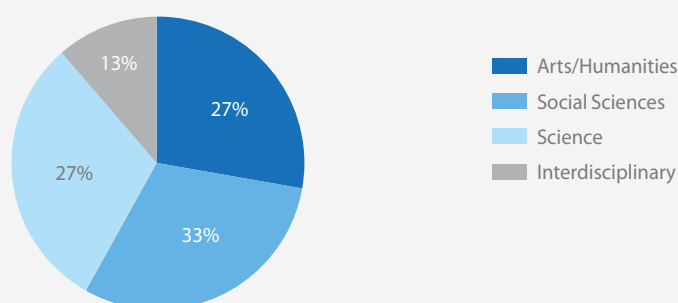
Survey Methodology

A web-based survey was sent by email to all 2897 students, faculty, and academic department staff listed in the campus directory in January 2012. The email included the following explana-tion that the purpose of the survey was, "to help us understand if and how you use eBooks and how we can develop our collections and services to support your needs," and offered the chance to win an iPad or gift card as an incentive. Although the message was designed to maximize participation and minimize biased responses there is a chance of bias toward participants who have an opinion about eBooks (positive or negative). We received 1661 responses (230 faculty, 1375 students, 45 staff, 11 unspecified) for a 57% response rate.

An initial analysis of responses by role (student, faculty, staff) revealed that although faculty and student responses were quite similar, staff responses were substantially different. In particular, staff responses indicating that they primarily used eBooks from sources other than the Wellesley College Library, and that they read entire books on a reading device, led us to conclude that staff were reporting on their leisure reading habits, not academic reading. We decided to remove staff responses from further analysis so that the results would focus on academic use of eBooks.

Figure 2 shows distribution of respondents by discipline. Respondents were asked to identify their area of teaching or study: Arts/Humanities, Social Sciences, Science, and Interdisciplinary (with an open text field). (Figure 2)

Colleges in this group show a very similar pattern of improved usage over time.

Figure 2: Which best describes your area of teaching/study?

- 27% Arts/Humanities
- 33% Social Sciences
- 27% Science
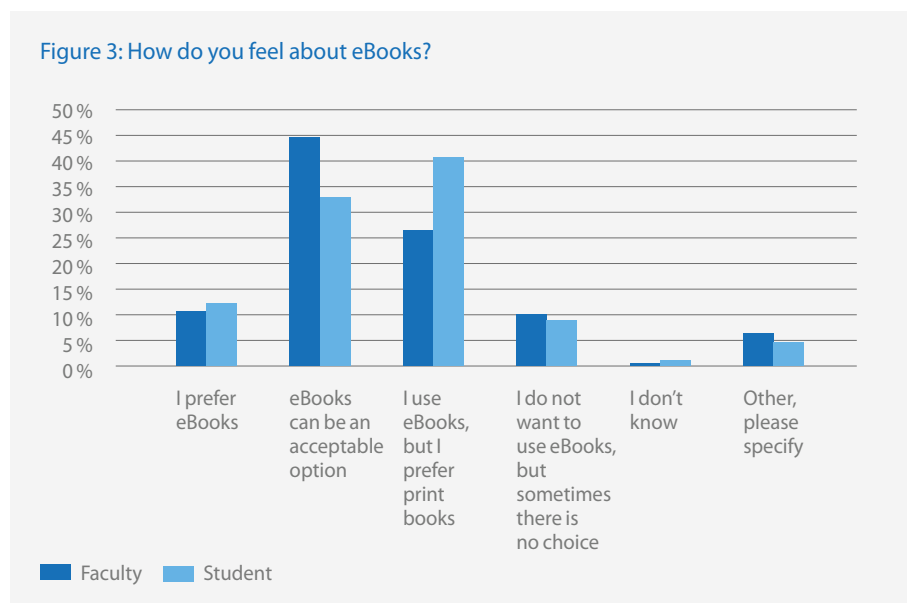- 13% Interdisciplinary

Survey Results

Use of eBooks

Seventy-three percent (73%) of faculty and seventy percent (70%) of student respondents reported having used an eBook. Respondents who reported never having used an eBook (28%) were asked to skip to the last question of the survey. A slight majority of respondents (51%) reported having used eBooks from the College Library.

Acceptance

Respondents were asked about their format preference, Figure 3. In considering these responses it is important to remember that this question was asked only of respondents who had reported having used eBooks. A small percent of respondents expressed a preference for eBooks (12%), while 35% find eBooks to be an acceptable option to print. Thirty-nine percent (39%) indicated that they use eBooks, although they prefer print books. (Figure 3)

Figure 3: How do you feel about eBooks?

Seventy-three percent (73%) of faculty and seventy percent (70%) of student respondents reported having used an eBook.

There is an interesting difference in responses by students and faculty. Faculty appear to show a more positive acceptance of eBooks than students; 44.8% of faculty responded that eBooks can be an acceptable option. The highest student response (41%) is that although they use eBooks they prefer print.

What follows are a sample of respondent's comments:

Print books are easier to use/take notes in, but eBooks are very useful because they give us access to more books.

[It] depends on how navigable and readable it is, in terms of font size, whether one can easily jump back and forth to specific pages, and whether chunks of text can be successfully copied or printed in a reasonable font size. If these features are available, eBooks will be quite as good as print books.

I like eBooks and print books for different reasons. eBooks are easier to search and scavenge for pieces of information. Print books are better for long projects, where we can tab pages and have physical resources that are easier to flip through.
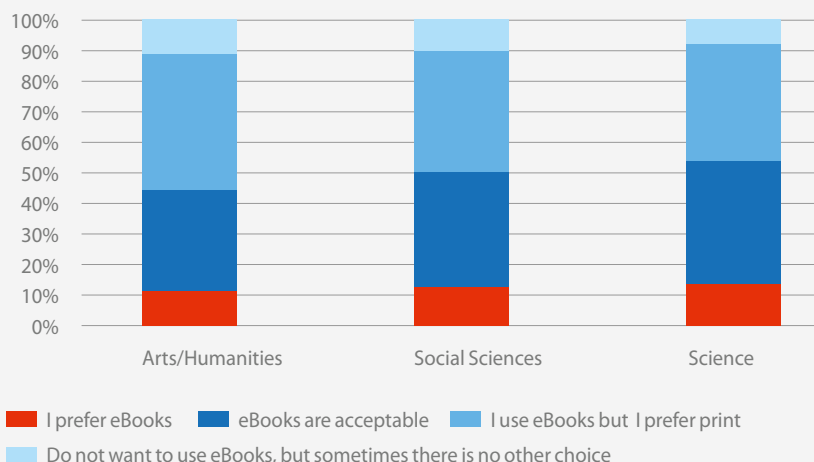
Skimming/searching and reading a small number of consecutive pages are the most usual uses of eBooks.

Figure 4: eBook Preference by Discipline

Legend:
- I prefer eBooks
- eBooks are acceptable
- I use eBooks but I prefer print
- Do not want to use eBooks, but sometimes there is no other choice

eBook acceptance by discipline shows a slightly higher acceptance rate in the sciences, but with very similar acceptance rates across all disciplines. (Figure 4)

Reading methods

Respondents were asked about the amount of an eBook they usually read. Skimming/searching and reading a small number of consecutive pages are the most usual uses of eBooks. Eighty-six percent (86%) of responders report reading at least a chapter "sometimes," "somewhat often," "often," and "always." Forty percent (40%) responded that they read an entire book "sometimes," "somewhat often," "often," and "always." (Figure 5)

Figure 5: How often do you do the following?

Legend:
- Never/ Not very Often
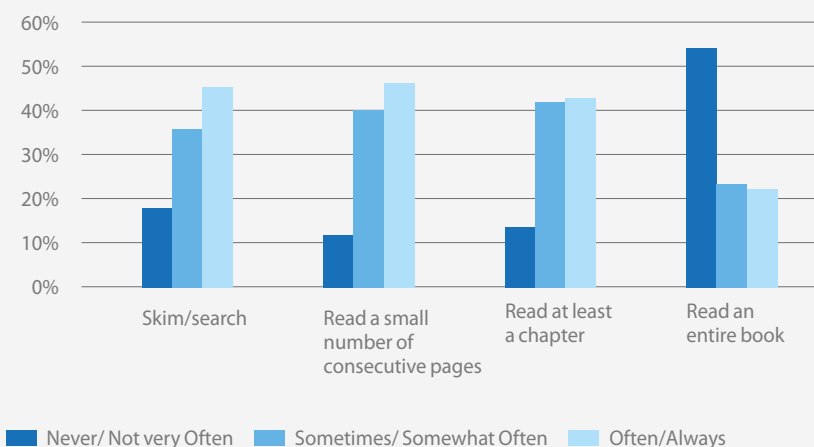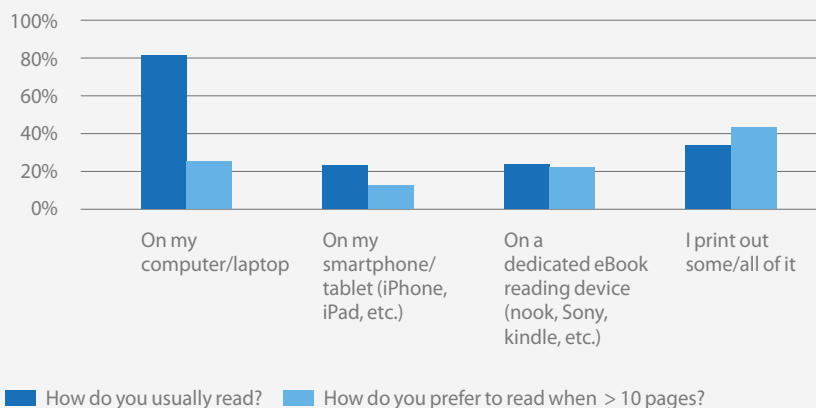- Sometimes/ Somewhat Often
- Often/Always

Figure 6: Reading Method

Faculty report a slightly higher preference for smartphone/tablet use.

Respondents were asked how they usually read eBooks and how they would prefer to read an eBook "if you need to read more than 10 pages?" Figure 7 shows differences in reading method preference based on these two questions. Faculty and student responses to this question were similar, but students report a higher preference for printing while faculty report a slightly higher preference for smartphone/tablet use. (Figure 6)

Functionality

Respondents were presented with a Likert scale to rank eleven pre-selected eBook features from "not important" to "very important." The functions with the highest reported importance are: the ability to search within the text, read offline, and download to a device, all with 70% or more selecting "important" or "very important." Unlimited printing is fourth in importance with 23% ranking it as "important" and 34% as "very important." (Figure 7)

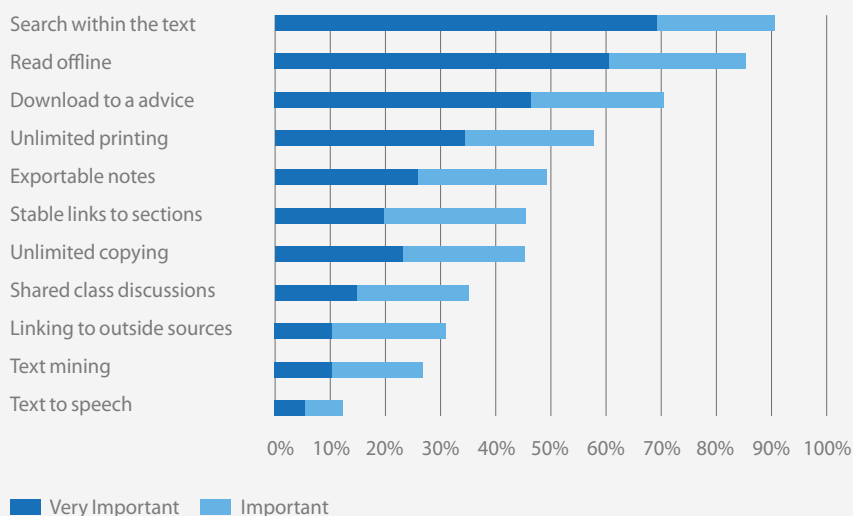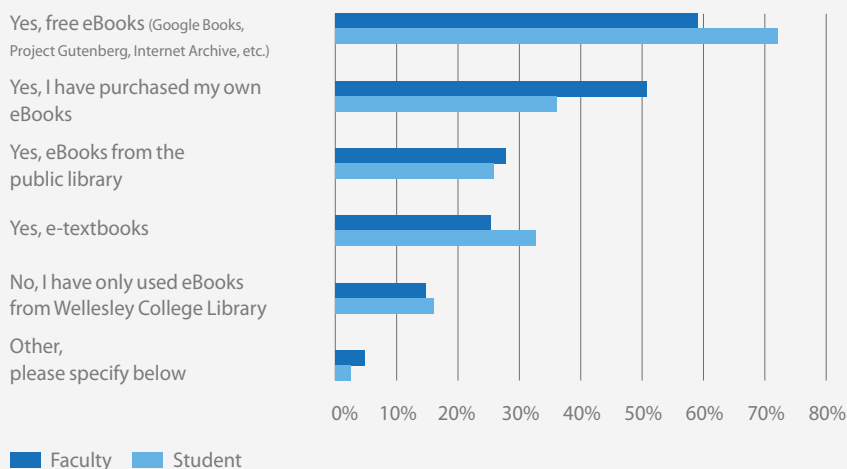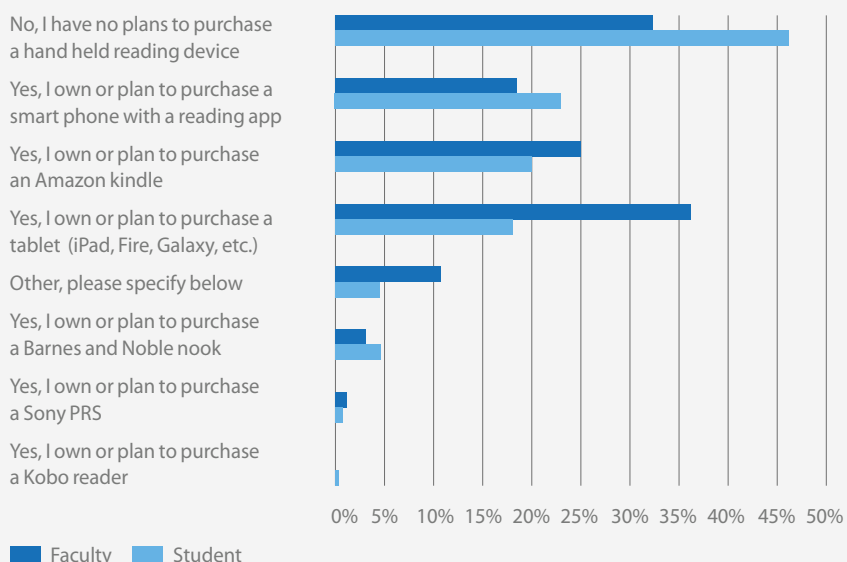### Figure 7: What functionality would you find useful when using an eBook?

Figure 8: Have you used eBooks from somewhere other than WCL?

- Yes, free eBooks (Google Books, Project Gutenberg, Internet Archive, etc.)
- Yes, I have purchased my own eBooks
- Yes, eBooks from the public library
- Yes, e-textbooks
- No, I have only used eBooks from Wellesley College Library
- Other, please specify below

Faculty   Student

Figure 9: Do you currently own a hand reading device, or do you plan to purchase one in the next six months?

- No, I have no plans to purchase a hand held reading device
- Yes, I own or plan to purchase a smart phone with a reading app
- Yes, I own or plan to purchase an Amazon kindle
- Yes, I own or plan to purchase a tablet (iPad, Fire, Galaxy, etc.)
- Other, please specify below
- Yes, I own or plan to purchase a Barnes and Noble nook
- Yes, I own or plan to purchase a Sony PRS
- Yes, I own or plan to purchase a Kobo reader

Faculty   Student

Students are more likely to use free eBooks.

Respondents were asked if they had used eBooks from somewhere other than the Wellesley College Library. Eighty five percent (85%) reported having used eBooks from other sources. Nearly 70% reported having used free eBooks, and 39% reported having purchased eBooks. Faculty are more likely to purchase their own eBooks, and students are more likely to use free eBooks. Comments from this question provided more detail on sources of eBooks including: purchases from Amazon, borrowing from a high school library or other college library, and using eBooks provided by their professor. (Figure 8)

The survey concluded with a question to determine what types of devices were owned by the user community, or would likely be purchased in the near term. This question was asked of all survey responders including people who did not use eBooks. The two findings that stand out are that a large number of students (45%) did not own and had no plans to purchase special reading devices, and that 35% of faculty owned or planned to purchase a tablet/iPad, with the Amazon Kindle next in faculty popularity (25%). (Figure 9)

Conclusions

The survey finds high use of eBooks at Wellesley College, with 70% of the respondents indicating they have used eBooks. Other recent international surveys of eBook use have shown 52-64% of students or faculty responding that they have used eBooks (Figure 10). Within the general U.S. population 21% of adults reported having used eBooks in 2011. Some eBook use by Wellesley students and faculty may be non-academic, leisure reading, but half of Wellesley's eBook users report having used eBooks from the Wellesley College Library's collection. Many Wellesley students and faculty have also used eBooks from other sources including free eBooks, purchased eBooks or eBooks from the public library.

Within the general U.S. Population 21% of adults reported having used eBooks in 2011.

Figure 10: Reported Ebook Use

Survey	Year	Respondent population	percent
JISC	2008	Faculty, Students (grad, undergrad), International	59%
Ebrary	2009	Students (grad, undergrad), International	52%
JISC	2009	Faculty, Students (grad, undergrad), UK	64%
Ebrary	2011	Students (grad, undergrad), International	53%
Wellesley College	2012	Faculty, Students (undergrad)	71%
Pew Internet	2012	American Public (non-academic)	21%

Results from the survey seem to show that faculty have a slightly higher acceptance of eBooks, and students a slightly higher preference for print books (Figure 3). We also find that faculty at Wellesley are much more likely than students to either own or plan to purchase a mobile device particularly tablets (Figure 9). By analyzing responses from those who own or plan to purchase a mobile device we can further clarify this difference in format preference.
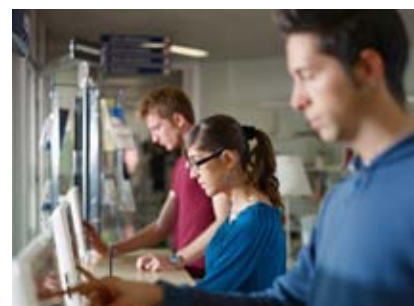
Device owners in general show a much higher level of acceptance of eBooks than people who do not own devices.
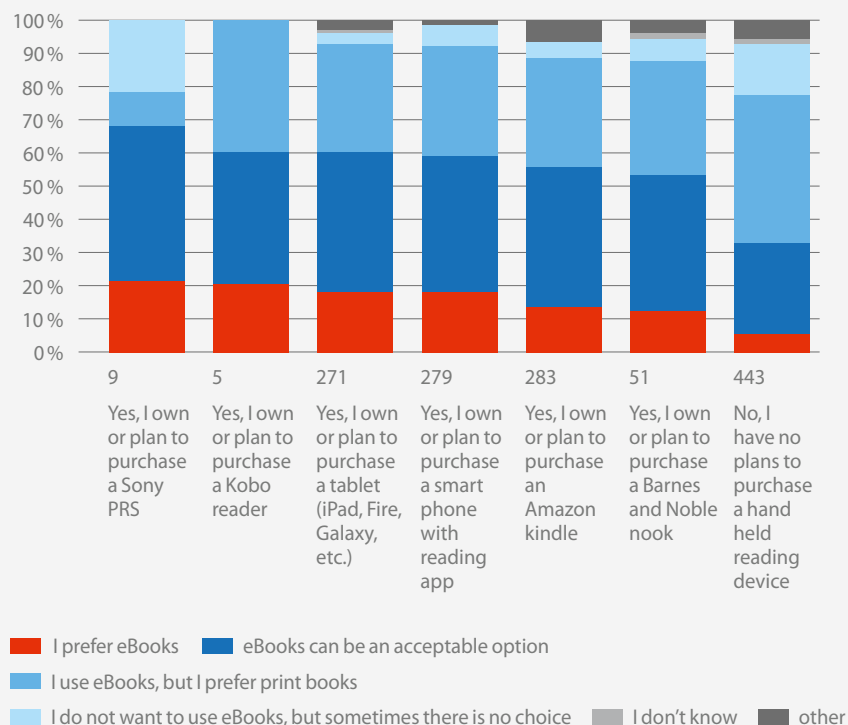

Figure 11. eBook Acceptance and Device Ownership

Figure 11 shows format preference by device owners. There is slight variation in the level of eBook acceptance by owners of different types of devices. However device owners in general show a much higher level of acceptance of eBooks than people who do not own devices. Respondents who do not own and do not plan to purchase a mobile device show a much higher preference for print. The data does not provide a clear cause and effect. We do not know if ownership of a device leads to eBook acceptance or if people who find eBooks acceptable are more likely to purchase a device. Further research is needed to understand this distinction. (Figure 11)

The JISC study of eBook use from 2009 showed that the majority of readers (56%) "dipped in and out" of eBooks and only 27% reported reading one or several whole chapters. Results from the Wellesley study show that 86% of respondents read at least a chapter either "sometimes," "somewhat often," "often," or "always" (Figure 5). The phrasing of the questions from the two studies is slightly different and would certainly effect the response, but we believe the sharp difference in the amount usually read may be due to two factors: acceptance of eBooks over time-- the Wellesley study taking place three years after the JISC study, and the increased use of devices to enable long form reading. We believe that devices make reading an eBook at length more comfortable, thus adding to the value of the eBook and its acceptance. The relationship between device ownership and reading behavior shows possible evidence of this effect. Figure 12 shows the Median scores of a Likert scale response.

- People who own dedicated eBook readers most often read at least a chapter.
- Tablet and phone owners often read a few consecutive pages or at least a chapter.
- Device owners sometimes read an entire eBook, while people who do not own devices do not read entire eBooks very often.
- People who do not own devices most often skim/search eBooks or read a few consecutive pages. (Figure 12)

Figure12: Device ownership and reading behaviour
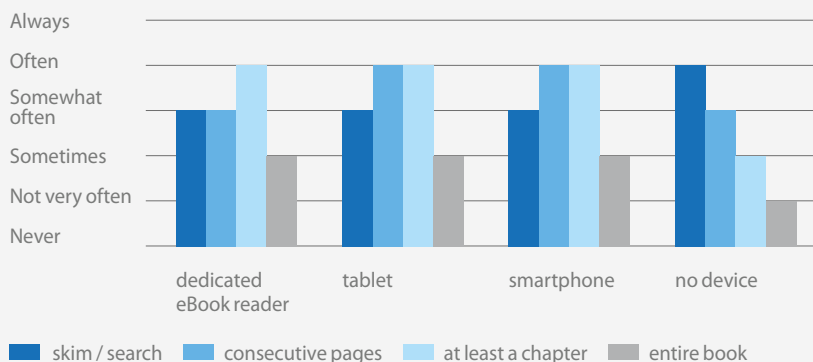
When we view eBook acceptance by preferred reading method from the question, "if you need to read more than 10 pages of an eBook how would you prefer to read it?" we see similar results. Figure 13 shows the highest acceptance of eBooks by those who prefer to read eBooks with their smartphone or tablet. Patrons who prefer to print from an eBook show a strong preference for print books. (Figure 13)

These results are intriguing and require further research. If the widespread adoption of tablets and other hand held devices make reading of eBooks at length more comfortable, libraries are likely to see the acceptance and the demand for eBooks increase dramatically as device ownership grows. Students may continue to lag behind faculty in ownership of personal mobile devices; libraries may want to explore ways to reduce this "digital divide" by providing devices to students. Wellesley College Library has experimented with the circula- tion of iPads and dedicated reading devices (Sony PRS and Nook) but has had mixed results so far. Devices do not necessarily work well, or consistently, with the library's various eBook platforms, and the devices can be idiosyncratic and not necessarily intuitive to use. Tablets

...libraries are likely to see the acceptance and the demand for eBooks increase dramatically as device ownership grows.

Figure 13: ebook Acceptance and Preferred Reading Method
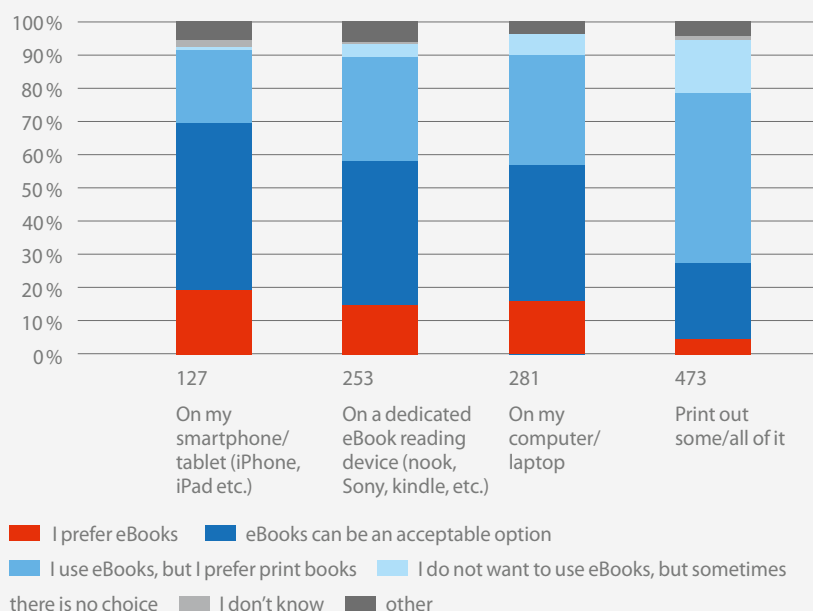
overcome some of these problems, but because they are multifunction devices patron demand may make them difficult to circulate primarily as eBook readers. Standardization of eBook formats and platforms is needed to allow direct downloading to devices in a format that includes re-flowable text and color images that can be enlarged for better viewing.

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