## IMPACT OF E-BOOKS IN UNIVERSITY STUDENTS LEARNING PROCESS

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#### Abstract

Is reading just reading? What do we mean when we talk about "reading" an electronic book? Is this perhaps depending on the situation? Is it different when we are reading for leisure or reading for learning? For information gathering or emotions? Reading longer or shorter texts? What impact does the device we read on have, from books to screens to reading tablets? What is reading for learning as compared to reading for other purposes?

These are major questions that I will not touch. Instead, I will be looking closely at one small issue: How can the emergence of e-books impact the university students learning process, and how can the university library help our students use this source of information in the most efficient way?

Keywords: E-books; Students; Learning; University libraries

## 1. Background

Some research into the reading processes after the emergence of e-books suggests that reading as an activity in it self is changing. There are several definitions of e-books, and one can be:

An e-book, (electronic book or digital book) is a publication in digital form produced on, published by, and readable on computers or other digital devices, either a copy of a printed book, or published solely electronically. It may be read on special e-book readers, or on ordinary computers.

In many instances the book and its content still appear to be the same, even though the format has changed. What is the difference between reading a work of fiction in a paperback or in a Kindle when one reads at the beach or in an airport, for example? In other instances the information value of the contents may wary depending on the device – to use the Kindle as an example again: The current devices show only black and white; no colour, so it is not good for texts where the illustrations are important.

A lot of research has been done into different aspects and issues with e-books, e-readers and the uses. In this paper I will concentrate on one very specific use – the use of e-books in teaching in Higher Education. How can the emergence of e-books impact the university students learning process, and how can the university library help students use this source of information in the most efficient way?

### 2. Earlier research and surveys

Some user surveys on e-books in Higher Education indicate that students and academics are using the e-books like they also use e-journals; by browsing the contents, searching and going

back and forth in the contents. This is as opposed to the traditional view of how printed books are used; by being read from start to end

### **2.1. JISC national e-book project**

In 2007, the British Library organization JISC (formerly the Joint Information Systems Committee) started a national e-book project to investigate how e-books were used, and what impact free e-books for students through libraries can have for the sale of text books. The aim was to provide evidence- and research-based decision making for all concerned; libraries, students, academics, publishers and booksellers.

The project offered a range of text books in medicine (not mental health or nursing), media, engineering and business and management studies, available free of charge for students through academic libraries. The students' use of these resources was observed and analized in depth to uncover impact, attitudes, perceptions and actual use.

JISC's study confirms that the e-books are used as reference works and for short quick reference and search.

There are major challenges around the technical platform: Both users and librarians in JISC's survey found that the large variation in the offer made e-books complicated and difficult to use. Library catalogue, and links from library web pages are important gateways to e-books.

### **2.2 Elsevier and Springer**

Two of the e-book suppliers, Elsevier and Springer, have also done market research about the use of e-books in academic libraries.

"EBooks provider substantial advantages two libraries and their users. Both parties gain from 24 / 7 access, Simultaneous user access, wider selection, and immediate updates, while libraries also benefit from back-end efficiencies, such as a lack of storage requirements, reduced maintenance costs', and reduced staffing hours for physical action and processing of print books. "Springer

### 2.3 Briddon et al

Briddon et al (2009) have made a three-part study from a university in the UK, where they find that e-books, with their superior accessibility and search capabilities, largely seem to be the academics preferred source of information, within the areas where they exist.

It is an interesting paradox that e-books in this survey is seen as giving added value particularly in the traditionally bookish subjects of the humanities such as history and linguistics, while the JISCs large project does not cover these subjects, but especially medicine and engineering, traditionally considered subjects that find their information in journals.

What according to Briddon et al study in the UK promote the use of e-books are primarily students' frustrations over the lack of access to important books, when the printed copy is on loan. Similarly JISCs report suggests that when a student first has been "forced" to use e-books as the printed copy of an important text is unavailable; the threshold of using an electronic copy fall significantly. In addition, it appears that lack of training and knowledge of e-books is the biggest hurdle for usage of e-books. This means that additional training and information, especially of university teachers, will be important means for more use of e-books. It is also important that the e-books can be found in the OPAC.

#### 2.4. Shelburne and Springer

Wendy Allen Shelburne, Electronic Resources Librarian at the University of Illinois, Urbana-Champaign, in cooperation with Springer, did a major survey in 2008 over the use of and attitudes to e-books through their university in a Dutch, a German, a Finnish and an Indian university / academic libraries. In the article from 2009 she relies on data from the University of Illinois. Her conclusion is clear: "Clearly if libraries make e-books available to their users they will be used." (Shelburne 2009 p 65) At the same time: "The open comments on why ebooks have not been used are especially interesting and indicate that lack of awareness of the content is clearly a problem "(Shelburne 2009 p 61)

### 2.5. Slater

Robert Slater may stand as representative of a different part of the research into e-books, namely the one that deals with collection development. His article from 2009 addresses the question of which books are most used - in print or online, and if there is any difference whether the selection of the electronic happened locally in the library or as part of a larger package. The study was conducted in a university library in California.

In his review of previous research, Slater finds that it mainly seems that e-books have traditionally had equal or greater use than the corresponding printed, and that in recent years to an even greater extent, the electronic books to be used. There are some areas where it is more popular with electronic books than others. Slater, 2009 s 32

One of the interesting findings Slater is in information science / computing, where the printed textbooks disappear as a result of theft, which is not possible for e-books. Slater tries to compare the use of Safari (where the individual library has great control over the selection of the collection) with NetLibrary, which increasingly appears as a "package", with printed books. Because of differences in format and allows this model is only partially possible, but the trend seems to be that the locally selected collections are used most.

This can however also be related to the fact that NetLibrary requires a special reader, which seems to entail a higher threshold for use.

#### **2.6. Joint**

Nicolas Joint (Joint 2010) has the following comments about what it takes to get e-books to "take off" in the library of the future:

- First, there must be an adequate "business model", eg in line with file sharing for music

- Text books for students must meet the students' needs and not, as now, be built around what development "techno freaks" want. Compared with the relatively ease of reading articles in journals in an electronic format, he comments that all the additional services to e-books also make them more complicated to use then maybe neccesary.

- Libraries want better tools to find e-books. (Joint 2010)

The latter is also supported by many other studies, eg, Briddon et al (2009) their findings.

Two of the early findings from JISCs large study from 2008 concerning the use of e-books: that academics (both staff and students) do not read the books - they read the parts, and that all age groups, read on screen, and with enthusiasm - they do not prefer paper.

#### 2.7 Summary of the student experience

To sum up what seems to be the student experience:

- 1. E-books are a part of academia JISC found that almost 65% of all students and academic staff have been using e-books.
- 2. Reference books and text books are the most commonly used e-books. Other kinds of e-resources, like journals, have been a part of the student experience for a long time.
- 3. The technical aspects can be seen as a hindrance. Still, some of the surveys done suggest that once students have been "forced" by necessity to start using e-books, they seem to have crossed a threshold and will continue to use them.
- 4. The demand for textbooks in libraries far exceeds supply, and this leads to frustration from both students and teachers. For libraries textbooks in e-format comes as relief and supplement.
- 5. The loan of textbooks fluctuate greatly in line with the academic calendar, and e-books also seem to provide a greater degree of flexibility in that they can be read at all times and also from outside the campus.
- 6. The possibility to link directly to learning platforms is assumed to have a positive effect.

# **3. Implications for teaching**

It is clear from the surveys and research that we have looked at so far, that the e-books are now an integrated part of the life and work tools of researcher's and academic staff at institutions of higher education. This means that they also will be "spilling over" to their teaching and the students.

E-books can have a pedagogical value in themselves if the teachers and students learn how to utilise them properly. The e-books can support "problem based learning" by giving the user access to reference tools, thesauruses, interactive software etc. This will be an advantage when seen in connection with pedagogical development, and the ongoing transformation of libraries into learning centres.

The extra value users may find when accessing e-books can be various services or functionalities, such as the opportunity to:

- Look up references listed in a document
- Look up a word unfamiliar to you in a dictionary
- Translate selected phrases, if you do not understand the language used in the text
- Search an encyclopaedia for more information
- Access related maps or other multimedia materials containing background information
- Make notes or mark relevant text passages
- Add bookmarks
- Find related bibliographies and addresses to evaluate the author
- Cross search the library catalogue to find relevant additional sources
- Search the web to find more information about the subject
- Export references and citations to reference handling tools

(Mikki and Stangeland, 2006)

Some of these functionalities are included to give users the same options as they have when reading a printed book and some are there for "added value". Some of them are useful; they involve the reader, and can thus make the learning process more effective.

E-books also meet the demand for more efficiency within teaching and research by being more available, offering possibilities for searching within texts, in multiple databases, combined with

bibliographical tools and implemented software etc. The enhanced availability comes from the internet being open 24/7. One may also see that this enhanced availability is especially beneficial for groups of students that face different kinds of challenges, like students with small children, distance-education students, foreign students and e.g. handicapped students. (Landøy et al, 2004)

The fear that some of the university staff expresses at their students becoming "intellectually lazy", and also of the threat of plagiarism requires a new kind of teaching, where the aspects of information literacy and information evaluation are more in focus. This also may open for a closer collaboration between the subject teachers and the library, either in the form of embedded teaching in information literacy in the ordinary teaching in the subjects, but taught by the librarians; or by the academic staff having the competences to teach this.

The representing of the e-books in the library OPAC can also be a challenge. Often, e-books are adopted into OPACs that have not changed substantially since the days of the card catalogues. This can mean that the students will not have full benefits of the e-books' advantages, for instance that they are available in full text. What will be the need for key words, for instance? At the same time, there is a significant danger of information overload.

To address both these questions it is evident that students will need to learn new ways of searching for information, that will both include the sorting and evaluation of information, and the proper use of this information once found.

JISC's survey revealed a significant group of users who are early "adapters" to e-books. They read more and longer texts in e-format, with a positive attitude to e-books and libraries and are important opinion makers. This will be an important group for the university to find and research, in order to have an ongoing dialogue about the best way of using the e-books, that many university libraries will purchase dearly.

#### References

- [1] Briddon, J et al: "'E-books are good if there are no copies left': a survey of e-book usage that UWE Library Services *in* Library and Information Research Vol 33 No 104 2009 pp 45-65
- [2] http://www.jiscebooksproject.org/ 2009
- [3] Joint, N: "The electronic book: a library transformational technology" *in* Library Review, vol 59, no 2, 2010, pp 82-91
- [4] Landøy, Ane et al: "Ebooks at Bergen University Library?" *In* Tidsskrift för Dokumentation 59(1) (2004) <u>http://hdl.handle.net/1956/1820</u>
- [5] Mikki, Susanne and Stangeland, Elin: "E-books and their future in academic libraries", *in* Aspects of the Digital Library (2006) Alvheim&Eide, http://hdl.handle.net/1956/1832
- [6] Nichols D, et al: "UK scholarly e-book usage: a landmark survey" *in* Aslib proceedings: New Information Perspectives Vol 60 No. 4, 2008, pp 311-334
- [7] Shelburne, W: "E-book usage in an academic library: User behaviors and attitudes" *in* Library Collections, Acquisitions, & Technical Services 33 (2009) s 59-72
- [8] Slater, R, "E-books or print books," big deals "or local selections What gets more use " *in* Library Collections, Acquisitions, & Technical Services 33 (2009) pp 31-41
- [9] Springer White books: <u>http://www.springer.com/librarians?SGWID=0-117-6-958921-0</u>
- [10] The University of Bergen Library (2003) Ebøker ved UIB, Bergen.