JISC national e-books observatory: initial findings from the project and how we might use them

Based on a paper presented by Lorraine Estelle at the 32nd UKSG Conference, Torquay, March/April 2009

The national e-books observatory is undertaking vital research to inform the development of the e-textbook market in UK higher education in line with user requirements. Funded by JISC, the project is observing the behaviours of students and staff as they use a selection of e-books specially selected to meet undergraduate courses in four subject areas. In addition to finding out how the e-books are discovered and used, the project is measuring the impact of making the e-books freely available through the university library on traditional print sales revenue and library circulation data. Understanding the behaviours of users of e-books and the potential impacts on print sales is essential in developing a sustainable and effective market that will provide users with the e-books they need for teaching and learning.

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The project is, as far as we know, the biggest study of its kind, with librarians, staff and students at 127 universities participating. It commenced in 2007 with the licensing of 36 course text e-books for students on business and management, media studies, engineering and medicine courses. These e-books were selected by the higher education community and made available free of charge to all users in UK higher education.

In order to extract as much data from the participants as possible, we commissioned the Centre for Information Behaviour and the Evaluation of Research (CIBER) at University College London to carry out a deep log analysis study. As we reach the final stages, we find we have amassed a wealth of data. With responses from over 48,000 academic users, we now know how academic users perceive and use e-books. The analysis of the raw server logs of the MyiLibrary platform enables us to see exactly how users discover, navigate and use the e-books. Therefore, we know not only what users think about the use of e-books but also how they

actually use them. We also have the data from focus groups held with librarians at eight universities across the UK, and from this, we have a good understanding of what librarians want, which services they require to provide to their users and the types of e-book business models that will enable them to provide those services.

This huge amount of data requires detailed analysis and CIBER is undertaking this work. This paper is a report on progress so far. We will publish the reports and analysis on the project website (www.jiscebooksproject.org) as they are completed. Librarians and publishers will be able to draw their own conclusions as we publish these reports. What follows is some background as to why the Joint Information Systems Committee (JISC) undertook this work and our interpretation of some of the data gathered so far.

JISC Collections negotiates licence agreement for electronic content on behalf of UK higher and further education. In 2006, our library colleagues were telling us that they wanted to licence

e-textbooks, but we found these were generally not available. We spoke to many publishers about this demand, but discovered that they were very cautious. Their concern was the impact of 'free at the point of use' e-textbooks on traditional print sales to students. We wanted to find out if students really would stop buying print if e-book equivalents were freely available from their libraries and what the implications of this might be for business models for e-textbooks. We also wanted to find out what the academic users really did with the e-textbooks when they were available.

The first stage of the project was to licence the e-books. The selection of the e-books was not a simple process as we had to recognize that what is considered core reading in one university is often not considered core in another. However, following a consultation with librarians, a selection of 36 core and recommended reading e-books were licensed in the four subject areas:

- business and management studies
- engineering
- medicine (not mental health or nursing)
- media studies.

Following the availability of the JISC e-books, the deep log analysis study commenced in January 2008 with a benchmarking survey to find out what academic users think about e-books and to establish levels of demand, use and awareness of the e-books licensed in the project. Not only did the survey receive over 23,000 responses, there were over 11,000 responses to the free text question 'in your opinion, what were the biggest advantages that the e-book offered, compared with a printed book'? Overwhelmingly, the answer was 'online access', meaning that they could get them anywhere, any time. According to the users, this far outweighs advantages such as searching, and other functionality such as easy navigation, or copy and paste. When we examined the time of day the e-books were used through the log data analysis we saw that one quarter of all use is between 6pm and 8am and one fifth of all use took place at weekends. We think this sends a clear message to publishers and libraries: Please do not spend resources on 'bells and whistles', but please do ensure authentication works, so that users really can get to the books any time and anywhere, as and when is convenient for them.

The convenience factor is also central to the route by which users discover e-books.

We ensured that all the academic libraries that took part in the project were able to download the MARC records for the 36 JISC e-books. In line with the free text comments and the low amount of searching taking place on MyiLibrary (89% of users did not use the search functionality), the study has found that the platform is not as important as providers think it is; students are going directly into the e-books via links from the OPAC or from the library website. The study showed that 34% of users got to the e-books through a link on the library website and 21% from a library management system. We think this indicates that if e-books are going to be well used and successfully embedded in education, MARC records (or any future standard) are essential for discoverability. Publishers and aggregators should focus on providing libraries with quality metadata to ensure discoverability in the places where staff and students go to find out what is available. If we can get the metadata and linking right, we probably will not have to do very much to promote the use of e-books. Users will link to them seamlessly, really without having to think.

As well as listening to the users, we gathered real time evidence about how students and teachers actually use e-textbooks. The usage pattern over the year the books were available shows some very sharp peaks and deep declines in certain months and at certain times of the day. This might be as expected, however, when compared to e-journal use, e-books appear to be even more dependent on the academic timetable. Use rose and fell by 50% from one month to another. November was, by some distance, the busiest month. On 18 and 19 November 2008 the JISC e-books received 5,605 and 6,730 page views, three times more than the average daily rate. Only 39 views per day were made to JISC e-books on 30 August 2008 and 91 on the 26 December 08 – the lowest rates across the 14-month period. The fact that the highest views corresponded to the academic timetable and the lowest views to the holiday period clearly show that we need to think about e-book use in terms of the demand. We need to recognize that use of e-textbooks is not spread evenly through the year and take account of this in setting digital rights management systems. Limiting the number of concurrent users only frustrates students who have essay deadlines and are hitting the e-books in extreme ways, but for very short periods. The sharp spikes in use are not the activity of robots but students accessing the e-books when they need to.

Further evidence of uneven use is seen in the deep log data, with the majority of users dipping in and out of the e-book rather than reading a whole chapter. Session times on the MyiLibrary platform lasted just 13 minutes, with eight pages being viewed in that time. The average page view time was 22.8 seconds, and 85% of users spent less than one minute per page. The e-books were well used but the users were not raiding the cookie jar. This non-linear use would seem to indicate that students are using only small sections of each e-book, and scanning through quite quickly to find the information they want. This might mean that e-books are for 'just in time' or remote use, and that if the users want to read in a linear way they will buy or borrow the print version.

These behaviours have implications not just for publishers and e-book aggregators but also for libraries. Libraries recognize that whether they purchase or subscribe, e-books are available on the platform all year, and that there is a cost of maintaining that access. Although publishers and aggregators have to maintain this constant access, they should also recognize that students make use of the e-books for very short periods in each academic year and use the e-books in a non-linear way. We need to work together to think about the business models that will account for these patterns of use.

During the course of the project, we have been looking at the impact on the print sales of the 36 books that we licensed and made freely available to all UK higher education intuitions. We also looked at the impact on the circulation of the print equivalents in the libraries. We wanted to know if, when an e-book is freely available from the library, the users still buy or borrow the print equivalent. The data we have suggests that the availability of the e-versions has no impact at all on the print sales, or indeed on the use of the print versions in library short-loan collections.

These findings would support what the librarians told us in our focus groups. The librarians across the UK consistently said that they want e-textbooks in order to take the pressure off the short-loan collections. One librarian put it as follows: *"I think it's mainly the issue of availability – it depends on providing the extra access for short periods of time ... so that you are providing supplementary access for things that are on reading lists – or in short loan; so everyone is getting access to them."*

Librarians do not want to replace the print but want to be able to manage those high peaks of use and ease the pressure on the short-loan collections.

Both the deep log data and the feedback from libraries support the idea that, certainly at the moment, e-textbooks are a back-up to the print and will co-exist. Indeed, the study shows that as use of the e-version peaked, so too did the use of the print versions in the short-loan collections.

It would seem that users might also think of the e-version as a back-up to print. Many will still buy print versions, and many will still try to borrow print from the library. Others (particularly remote users) will welcome the e-versions. The study showed us that almost a third of user access comes from off campus.

Having looked at these initial findings we believe that e-textbooks are not necessarily a threat to established business models. Rather, they may well provide publishers with the opportunity to grow a new and different market. JISC Collections is undertaking further work in this area with a new study examining the management and economic impact of e-textbook business models on publishers, e-book aggregators and universities. Already under way, the study has reviewed the current e-textbook business model landscape and selected a variety a trials following consultation with a range of stakeholders. The trials will take place over a full academic year and the impacts on print sales, time and resource will be measured. The key to these trials is to make them as real-life as possible to ensure that the data gathered can be applied and utilized by all.

Through the national e-books observatory project, we have engaged with librarians across the country. They are consistent in saying that the current models for e-books do not work. The pricing does not work and the business models do not work. We now have an opportunity to use the data gathered through the project to find a sustainable and fair metric for the pricing of e-books and find the models that really make sense. A model that recognizes that print and 'e' can, and probably will, co-exist for quite a long time will enable publishers to grow their e-book markets and libraries to grow and build their e-book collections.

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