The National E-Books Observatory

Day 3 – Track 3

Hazel Woodward

Cranfield University, UK

Lorraine Estelle

JISC Collections, UK

David Nicholas and Ian Rowlands

CIBER, University College London, UK

Introduction

The concept of the National E-Book Observatory arose from within JISC Collections E-Books Working Group. In 2007 the group had defined its vision for e-books as follows:

- The UK education community will have access to quality e-book content that is of high relevance to teaching, learning and research across the broadest range of subject areas.
- Flexible business and licensing models will support a diversity of needs, allowing users to do what they want when they want and how they want for education purposes.
- All e-books will be easily discoverable and consistent standards will allow all content to be fully integrated into library, learning and research environments.

In order to understand how much of that vision was already being achieved, the group commissioned a team of consultants to examine the current e-book environment from the perspective of both librarians and publishers and to ascertain what the role of JISC Collections—as a purchasing consortium—might be in the future. The consultants' report highlighted a number of challenges that needed to be addressed: 64% of librarians felt that e-book pricing models were not satisfactory; 62% felt that there was too little choice of e-book titles; and 53% said that e-book access models were unsatisfactory. Moreover, about one third of respondents replied that they were "waiting for JISC Collections to offer better e-book deals". A key message to come out of the report was that publishers are not making the right textbooks available electronically on the right terms.

In the light of this report, the working group was convinced that a major initiative was necessary to persuade publishers of the value of making textbooks and core readings more readily available though higher education libraries. But how could publishers be persuaded to do so—given their concern about the loss of student sales of textbooks if libraries provided concurrent, 24/7 online access to such books? The answer might be to provide a collaborative, secure funded project to find out precisely what would happen under this scenario and to share the findings with both publishers and libraries. And so the National E-book Observatory Project was devised.

Project aims

The project aims are as follows:

- To license collections of e-books that are highly relevant to the UK higher education taught course students in four discipline areas:
  - Business and management studies
  - Engineering
  - Medicine (not mental health or nursing)
  - Media studies.
- To evaluate the use of the e-books through deep log analysis and to assess the impact of the "free at the point of use" e-books upon publishers, aggregators and libraries.
- To achieve a high level of participation in the project by making the e-books available on the bidders' own platform (where appropriate) and on a variety of e-book aggregator platforms. Higher education institutions will thus have the option to access the e-books on platforms they already use and which are familiar to their users.
- To transfer knowledge acquired in the project to publishers, aggregators and libraries to help stimulate an e-books market that has appropriate business and licensing models.

Invitation to Tender

Once the project aims had been established, an Invitation to Tender (ITT) was sent out to publishers. The tender emphasised that JISC Collections wished to license e-books of relevance to higher education taught course students for a period of two years and that the e-books would be available to all higher education students in all universities within the UK. Specifically it asked for e-book titles to be the most recent edition, UK-focused and relevant to UK courses, compliant with the JISC Model Licence, and compliant with JISC Information Environment standards. Furthermore, publishers must agree to provide details of print sales for the last three years and supply MARC records for the books supplied. Permission must also be given for the texts to be submitted to the Turnitin plagarism service.

Unsurprisingly, not all the responses to the ITT complied to the conditions stated above. Some publishers were

unwilling to comply with clauses in the Model Licence and said that they were not prepared to allow (even limited) copying, printing and pasting. Others put limits on the number of concurrent users. Pricing was hugely varied. After rejecting non-compliant e-book offers, the working group was still left with 136 e-books across the four disciplines with a total value £2.08 million. Given that the amount in the project budget for licensing the titles was £600,000 clearly some further weeding was necessary.

Community consultation

At this point the working group went out to community consultation. Using pre-existing contacts in all UK university libraries, librarians were asked to prioritise the 136 candidate titles against their local reading lists and to identify which part of the ITT was most important from their perspective. The top three requirements were that (a) MARC records to be provided for the e-books and records available from a central location; (b) compliance with standards such as OpenURL, COUNTER, Z39.50; and (c) the ability to print, copy, save and provide links from a Virtual Learning Environment (VLE).

After the extensive consultation exercise a total of 36 e-books was selected:

- Media Studies: 7 e-books—6 published by Taylor & Francis and 1 by Palgrave—all available on the MyiLibrary platform
- Medical: 10 e-books all published by Lippincott Williams & Wilkins—all available on the Books@Ovid platform
- Business and management Studies: 5 e-books published by Palgrave and Pearson—all available on the MyiLibrary platform
- Engineering: 14 e-books published by Elsevier, Thomas Telford and Cambridge University Press—all available on the MyiLibrary platform

All the books were made available to all UK higher education institutions (HEIs) for the start of the academic year 2007/08 in September. The project team was delighted with the high level of uptake: 127 (76%) HEIs signed up for the books on MyiLibrary and 80 (47%) signed up for Books@Ovid. Such a high participation rate boded very well for the next stage of the project, the deep log analysis that started in January 2008.

The deep log analysis

The deep log analysis is being led by CIBER, a research group based at University College London, who helped to develop the notion of a national observatory model. The team's research philosophy is that we need to undertake careful evaluation of large-scale digital roll outs, since things do not always turn out as expected.

The data requirements for the E-Books National Observatory drew from the need to be able to provide some sensible answers to a series of questions that are absolutely critical to the success of electronic course texts. These include:

- What are the views and perceptions of students and faculty regarding electronic course texts? For example, what are the existing levels of student e-book use and what are their perceptions as regards the virtual as opposed to the physical university library?
- What is the overall context into which these JISC titles are being embedded? How committed are libraries already to e-book provision, as exemplified by the range and depth of their collections, ear-marked budgets and experience of promoting and developing electronic collections? How does e-book provision fit into library strategy?
- What is the impact of free-at-the-point-of-use access to electronic texts, specifically in regard to library circulation of existing hard copies and, most critically, upon publishers' sales?
- How, in reality, do students actually use electronic course texts, and what are the wider implications for learning and teaching and that all-important "student experience"?

In order to begin to answer these questions, the Observatory has developed a multi-pronged research design that is beginning to throw some very interesting light on what is possibly the world's first large-scale e-books action research project.

The study kicked off with a massive benchmarking survey of students and faculty at almost every university and institute of higher education in the UK. More than 22,000 responses were completed making it probably the largest library survey yet conducted.

The survey confirmed one of the primary reasons why the e-books experiment was launched in the first place: there are serious bottlenecks in the provision of essential (mission-critical) course texts in the physical library model. A worryingly large minority, 21.8% of students in the four main subject areas catered for in the JISC experiment reported that they were "dissatisfied" or "very dissatisfied" with current library provision. Around half of teachers also reported back that their students regularly lodge complaints and negative feedback on this issue. This is very damaging to student perceptions in an educational environment that is increasingly consumer-driven. Library provision of course texts is, of course, a particularly acute issue for part-time and occasional students whose working patterns mean they have very limited (and concurrent) access to library bookshelves.

Table 1:
Do you use e-books?
Students and teachers (*n*=17,669)
Column percentages

	Full-time students	Part-time students	Teachers
Yes	62.7	60.1	58.3
No	29.9	32.4	37.5
Not sure	7.5	7.5	4.3

The survey's finding that more than 60 per cent of students and teaching staff are already using e-books, either for work-related reasons or in pursuit of leisure or hobby interests, locates the Observatory experiment in extremely fertile soil. But this positive message carries with it a germ of an issue that all is not well in library land. Male undergraduates in particular seem to exhibit early signs of being turned off by libraries and are adopting a range of non-library information coping strategies: preferring the bookshop to the library for accessing hard copy; the open web for their e-books and other course-related information. At this moment, this is merely a detectable statistical tendency, not a mass desertion, but the warning signs are there. While 61.8 per cent of students say that they have used an e-book at some point, this proportion falls to 47.2 per cent in the case of library-provided titles for women students and 40.9 per cent for men. There seems to be a significant gap in the market here waiting for libraries to fill it, especially as it may be a way to re-connect with male students.

The perceived advantages of e-books were very clear from CIBER's analysis of the huge number (11,624) responses to an open-ended question that elicited a free text response. Online access and convenience were top of the poll, mentioned by more than 55 per cent of respondents. This means users can avoid a trip to the university, especially important if they are busy part-time or distance students, or if they live in remote locations. Searchability, portability and ease of navigation also featured highly as positives associated with electronic course texts, a sense perhaps that these features fit in well with users' more general experience of the web and electronic library provision.

Table 2:
Thinking back to the last time you used an e-book, how did you get hold of it?
Students by gender, e-book users only (*n*=11,916)
Column percentages

	Female students	Male students
Bought a copy	3.7	6.1
From my university library	47.8	40.9
From another library	1.8	1.8
Free off the internet	42.4	45.3
From a friend or colleague	2.3	4.0
I don't remember	2.0	1.9

As regards future purchasing intentions for course texts, the survey shows that students still rely heavily on the library but that a surprisingly high proportion of them (39.4%) say that they are clubbing together with friends to buy and share hard copy texts. This does not augur well for publishers and booksellers if, as we believe, this may be an upward trend.

One of the myths surrounding e-books is that users will not read from screen, preferring instead to print and read offline. This may be true or not at the trade end of the market, but the self-reported data in our survey suggests that for the purposes of learning and research, this is not the issue many have cracked it up to be. Even in the age range 56-65, more than half (53.2 per cent) say they read content from the screen; only a tiny proportion (less than 10 per cent) even in age group say they will exclusively read from print.

Of perhaps greater surprise to most readers, although no surprise to CIBER researchers or the JISC team, is the way that students and teachers say they use e-books (Table 3).

Table 3:
How much of [the last e-book you looked at] did you read online?
Students and teacher e-book users (*n*=10,966)
Column percentages

	Students	Teachers
I read the whole book	5.7	3.9
I read several chapters	19.8	13.5
I read one whole chapter	8.4	6.8
I dipped in and out of several chapters	54.3	60.0
I looked at it very briefly	11.1	15.2
I don't remember	0.9	0.7

Dipping is the preferred mode of access: viewers of e-book content are perhaps acting in a very smart way, using the capabilities offered by a sophisticated electronic platform to browse, cross-check and link between and across material in completely new ways. What is striking here is that while just over a third of university students (33.9 per cent) say that they read at a whole chapter or more, the equivalent for (highly-trained) university teachers is less than a quarter (24.2 per cent). So much for "Google generation" stereotypes! Later on in this paper we will present some early findings from a careful analysis of information-seeking behaviour on the MyiLibrary platform that holds the majority of the JISC-licensed titles. That promises even bigger surprises.

But perhaps the biggest lesson from the user benchmark survey was that the national observatory model has real legs. Its success lies in the enthusiasm and hard work of a large number for librarians who energized their local communities.

We will be repeating this survey early next year so that we can gauge how successful this injection of e-content has been in terms of raising and promoting awareness and interest in electronic course texts.

The library perspective

As well as running a user survey, the CIBER team also collected information from the libraries participating in the Observatory experiment. At one level, this was simply a mechanism to collect such essential baseline data as the number of hard copy equivalents already available across the sector, their popularity in circulation terms, and whether or not electronic licenses were already in place for any of the JISC titles. The signs are very favourable: existing print copies of JISC titles went out on loan for a total of around 600,000 days during 2006/07 and there was little overlap with existing electronic provision. From their free-flowing (and voluminous) comments, librarians are cautiously optimistic about the future for e-books, citing the following advantages: the need to support growing numbers of part-time and distance learners; better manage the intense demands for core texts on large modules; a desire to reduce the high overhead associated with print (space, vandalism, ordering and processing multiple copies, speed of delivery, easing the transition to new editions and promoting remote 24/7 access).

For these very real advantages, however, the academic library e-books market remains stuck in a number of chicken-and-egg loops. There are too few relevant titles, so little expressed demand as yet. There is little external pressure on libraries to shift decisively in favour of e-books and so the result is little formal demand, a lack of critical mass, and little leverage to apply in discussions with publishers when striking deals.

There are concerns on the publisher side too regarding the sustainability of e-licensing models (an area where JISC has been very active). CIBER is in the early stages of assessing the impact of the Observatory experiment on hard copy sales but the signs are that sales to students have held up remarkably well. The perfectly understandable worst case publishers' and booksellers' scenario of print sales being decimated following on from free-at-the-point-of-use electronic access seems to be misguided. A full analysis of the impacts of the experiment on print sales, print circulation and widening access will follow later in the project.

However, the librarians' comments suggest that a major shift is beginning to take place. Where students have been exposed to e-books awareness has greatly fuelled demand,

as indicated by library satisfaction surveys; and, increasingly, e-books are beginning to feature in higher level, institution-wide learning and teaching strategies as one component among many in an increasingly electronic landscape.

Evaluation of e-book usage

Central to the CIBER study is the analysis of usage logs. So far, we have evaluated the usage of 26 student text e-books covering the fields of media studies, engineering, and business and management on the MyiLibrary platform for the period November 2007 to May 2008. Use was measured in terms of page views, sessions conducted, views per session, and time spent online, and trends over time established. The following types of sub-analysis were also conducted: type of page viewed, e-book title, subject of e-book, university, referrer link, form of navigation and type of organisation used to obtain access to the titles. The usage of JISC-sponsored books by the Observatory universities was also compared with their use of 13,000 non-sponsored books on MyiLibrary.

Essentially, what we discovered was that the students took to the resource with some alacrity. Thus, during the six months studied, the JISC titles attracted more than a third of a million (content) views, were the subject of 26,000 online sessions—about one in four of which were particularly busy (viewing more than 20 pages), and the average session lasted about 20 minutes, quite a long time for the virtual information environment and double the figure cited by Connyway and Snyder (2005) in their study.

Use was found to be characteristically volatile throughout the six-month survey period, although there was a general pattern which corresponded to: a) the rhythms of the academic year with considerable dip in usage during the Christmas and Easter vacations; b) the (considerable) differences between weekday and (low) weekend usage. A high of 3,600 page views was achieved in early February and the last month (May) proved to be the busiest month, suggesting there was a rising trend in use, as people became increasingly aware of the JISC titles and started to populate their reading lists with these titles (there was some evidence to show that this was happening). The volatile and patterned usage means that to obtain a true representation of e-book usage a year's data has to be evaluated and studies like that of Connyway and Snyder (2005), which took a single day only, albeit for three different years, could prove to highly misleading.

Around three quarters of views were to e-book content, 11 per cent to menus, 8 per cent to the homepage, 5 per cent to search pages and 3 per cent to other types of pages. This suggests quite focussed use. All the JISC titles attracted more than 1,000 page views, with the most popular e-book titles being Media, Gender and Identity, Integrated Marketing Communication, and Marketing Strategy & Competitive Positioning—all three of which attracted more than 10 per cent of total usage. There was a high degree of concentration in use with just five books accounting for 50 per cent of all usage. Management Concepts & Practices and Power without Responsibility were the books which most universities used: 118 of them used these titles. The success of the JISC experiment was further demonstrated by the fact that eight books from the JISC collection featured in the top ten of all MyiLibrary e-books used by the Observatory universities. Concentration in use was also evident at the university level, with the top ten universities accounting for 30% of JISC title usage

As was the case with Dillon (2001a) and Nelson and O'Neil (2001) it was found that business and management titles proved especially popular: 43 per cent of JISC e-book usage related to business and management titles, about a third (32 per cent) to media studies titles and less than a quarter (24 per cent) to engineering titles. There was a general relationship between student numbers studying a subject, with business and management have the most and media studies the fewest.

There was a strong correlation between usage and expressed demand as shown in the project's benchmark questionnaire, where students were asked whether they were interested in any of the titles (Nicholas et al, 2008). This kind of triangulation, from two very different data sources (the questionnaire attracted more than 22,000 responses), suggests a high degree of confidence in the Observatory data. On a more practical level, there is strong evidence here that publishers could predict the take-up of e-books with some confidence on the basis of well-constructed surveys of print demand.

Browsing was by far the most preferred means of locating e-book content, with 78 per cent of students employing only this method in a session. Searching only sessions, accounted for just 2 per cent of sessions conducted.

As the SuperBook study (Nicholas et al, 2007) found, there were differences in the pattern of use between campus and off-campus users, with off campus viewing being undertaken more quickly—a case, maybe, of scholars squirreling the data while they could, just in case remote access was only temporary.

Further findings from the Observatory project will be released at the Online Conference.

Bibliography

The Higher Education Consultancy Group (2006) A Feasibility Study on the Acquisition of e-Books by HE Libraries and the Role of JISC

Connyway, L., Snyder, C. (2005) Transaction log analysis of electronic book (ebook) usage. *Against the Grain*, 17(1), p .85-9.

Dillon, D. (2001) E-books: The University of Texas Experience, Part 1. *Library Hi-Tech,* Vol. 19(2), p. 113–124.

Nelson, L. and O'Neil, F. (2001) Electronic monographs in the academic library: an implementation story. *LASIE* 32(2/3), p. 13–20.

Nicholas D et al. (2008) UK scholarly e-book usage: a landmark survey. *Aslib Proceedings* 60(4), 2008, p 311-334.

Nicholas D. et al. (2007) Superbook: an action research project. *Online Information 2007 Proceedings*, p 50-57.

Contact

Lorraine Estelle
l.estelle@jisc.ac.uk