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Lonsdale, Raymond; Armstrong, Chris

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Challenges in managing e-books collections in UK academic libraries

Chris Armstrong^{a,*}, Ray Lonsdale^b

^a*Information Automation Ltd., Aberystwyth, UK*

^b*Department of Information Studies, University of Wales, Aberystwyth, UK*

Abstract

This paper reports on research into issues surrounding the collection management of e-books in tertiary education libraries in the UK. Focus groups were conducted with university librarians representing three disciplines—business and management; engineering; and health and medicine, and librarians in post-16 education. Semistructured interview schedules were employed, and the proceedings were recorded and transcribed. The research identified the types and levels of e-books required. The nature of bibliographical control and the selection, acquisition, modes of access, and issues surrounding the licensing of e-books were delineated. The study identified problems associated with these fields and confirmed the need for a national model licence.

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1. Introduction

E-books were first discussed as a library resource in the 1990s, and recently it has been reported that one consultancy firm is predicting that “by 2005, e-books will make up 10% of all book sales.” [1, p. 144] During the late 1990s there was a growing recognition

* Corresponding author.

E-mail addresses: lisqual@cix.co.uk (C. Armstrong), rel@aber.ac.uk (R. Lonsdale).

among publishers and the Information and Library Services (ILS) profession in the UK of the importance of the e-book market. Within the post-16 education sector, the government-funded body responsible for the network infrastructure to universities and colleges, and the provision and licensing of electronic resources, the Joint Information Systems Committee (JISC), also recognised the significance of e-books as a new electronic medium. As a result, it commissioned the first national study of the production and provision of electronic academic monographs and textbooks, which offered an analysis of publishing trends and the nature of e-books, and identified issues associated with access and delivery. [2]

Subsequently, this led to the establishment of a national e-Books Working Group, charged with promoting the provision and use of e-books within the tertiary education sector. This sector includes both universities—higher education (HE) and further education (FE), which cover all other post-16 institutions. The remit of the Working Group is to provide leadership in establishing a strategy for the development of e-books which embraces both the creation of a critical mass of e-book titles, and the management of e-book collections within academic libraries. A detailed discussion of the national strategy established by the e-Book Working Group is offered by Lonsdale and Armstrong. [3]

Thus far, the published literature on e-books has focussed on the nature of technology and the process of publishing. There has been a gradual increase in awareness of a need to explore the challenges which e-books present for collection development. This has been reported in the literature, usually in the guise of case studies relating to individual institutions [4–8] offer useful summaries of the emerging literature. Cognizant that there had been no substantive investigations into the issues surrounding the management of e-book collections in academic libraries in the UK, the e-Book Working Group commissioned research—the e-Book Mapping Exercise. This was the first of a number of studies to facilitate the uptake of e-books by the FE and HE communities. The study was undertaken by the authors in conjunction with Louise Edwards, then the JISC Collection Manager for e-books, and reported in 2003. [9]

This paper presents those findings of the study which relate to the nature of e-book collections and the issues surrounding selection and acquisition, bibliographical control, and licensing. These results are supplemented by relevant findings from a wider study of the provision and use of electronic resources in academic libraries in the UK. That project, JUSTEIS, was a 5-year longitudinal study co-directed by the authors, which constituted a significant element of the JISC User Behaviour Monitoring and Evaluation Framework, which concluded in 2004. A statement of the aims, methodology, and findings can be found in Banwell. [10] Discussion of both pieces of research is set in the context of the international literature and other relevant research which was commissioned by the e-Books Working Group during the past 2 years.

1.1. Aims and objectives of the e-book mapping exercise

The primary aim of the e-Book Mapping Exercise was to inform the Working Group on the e-book needs of specific disciplines within FE and HE and on the issues which

academic librarians face in managing collections of e-books. The objectives included the following:

1. an investigation of the types of e-books required for individual disciplines;
2. an examination of collection management issues associated with the format; and
3. an investigation of licensing and pricing of e-books.

The project was designed also to introduce academic librarians to the concept, the technology, and the capabilities of e-books, and to the range of titles currently available.

2. Methodology

The research was designed to collect qualitative data, and data collection was by means of structured focus groups. In order to address the aim of informing the community and introducing new e-products, the conventional focus group methodology was extended by the authors. The decision was taken to precede the focus group with an introductory talk and product demonstrations by e-publishers or aggregators. This constituted a morning session, which had the advantage of orientating the participants, acted as a catalyst for the subsequent discussions, and proved highly successful.

The three disciplines selected for the study represent fields in which there was a substantive base of e-book publishing in the UK. They are also important teaching areas, and informal feedback from the academic communities suggested a high level of provision:

- business and management;
- engineering; and
- health and medicine.

Although these three disciplines are represented in the FE sector, due to the broad-based curriculum in those institutions, there are no subject librarians, and FE librarians were thus reporting on a wider range of subjects. For this reason, it was felt that FE representation should be facilitated by including some cross-disciplinary meetings.

Ten focus groups with librarians from both sectors were conducted. Care was taken to ensure that all categories of university and FE institution were represented in the sample. The focus groups that were undertaken were organised with the aid of representatives of the disciplines and FE. The groups are shown in [Table 1](#).

The engineering groups were run in conjunction with the The Association for Information Management (Aslib) Engineering Group and this accounted for the presence of seven librarians from special, rather than educational, libraries. Similarly, the health and medicine group was attended by representatives from a national library and two professional bodies. It can be seen from the figures that in some cases more than one delegate from a single institution attended; two or three institutions also fielded representatives at more than one

Table 1
Phase 1 focus group

Group	Number of groups	Number of individuals	Number of institutions
Business and Management	2	24	21
Engineering	2	31	25 ^a
Health and Medicine	1	10 ^b	10
FE/HE (cross-discipline)	3	20	16
FE (cross-discipline)	2	9 ^c	7
Totals	10	94	69 ^d

^a Includes seven nonacademic, special libraries.

^b Includes representatives from a national library and two professional bodies.

^c Includes a JISC representative.

^d Total allows for institutions that attended on more than 1 day.

meeting. The publishers who had given the demonstrations earlier in the day were invited to take part in the focus groups and to offer such comments as their unique perspective might suggest.

An abbreviated version of the survey instrument was sent to all participants in advance of the meeting so that they had a clear understanding of the areas and issues to be discussed. The focus groups were recorded on tape, and written notes were made by a third party. Transcripts were taken from the tapes and a manual analysis of the transcripts and notes was undertaken.

2.1. Presentation of results

Where quotations from the transcripts are made, these are followed by the institution number—primarily to demonstrate the range of institutions taking part in the debates. ‘XXX’ has been used to indicate words that could not be understood during transcription from the tapes or to disguise the name of an institution.

3. Collection requirements

One aspect of the national strategy for e-books is the desire to help publishers create a critical mass of pertinent titles for the academic sectors. Consequently, a central objective of the study was to identify the types of e-books which the individual disciplines felt were most likely to be in demand and to ascertain the preferred levels. Similar studies conducted in North America underline the desirability of determining precise collection needs. [11, p. 22]

3.1. Textbooks

Unequivocally, for all disciplines in both HE and FE, textbooks constitute a priority. While all disciplines in HE agreed that the undergraduate body is the preferred target audience, Business and Management and Engineering also identified another priority, titles that relate to taught Postgraduate courses. Within the field of health, another significant group constituted

qualified nurses and medical practitioners—indicative of an academic institution having to serve other communities.

However, unlike the HE sector, librarians from FE institutions were unable to distinguish between particular levels and user groups. It was felt that e-textbooks would be appropriate for the whole spectrum of users in FE, from those undertaking vocational courses, through A-levels (the advanced level of the UK General Certificate of Education examination) and the International Baccalaureate, to undergraduates. With respect to undergraduate courses, those FE colleges that franchise HE undergraduate courses believed that there are particular implications for e-book provision. Adult learners from nontraditional backgrounds and underrepresented groups who gain admission to undergraduate education through Access programs were also included in some comments:

You've got your basic FE for 16 years olds and some graduate levels to business degree, and then you've got sort of older students like Access and return to work, and you've got the basic skills. I think it would be useful for all of them actually in different ways. {54}

The issue of individual FE institutions having discrete emphases with respect to student populations also surfaced, and makes it difficult to identify a common level:

I was just going to say I think within the FE sector, the different colleges have such disparate clienteles that it's very difficult for us to generalise because from my institution, materials would be tailored to A-level students because that is our main client group during the day. {55}

The implication for e-publishers is that, while there may be a call to prioritise certain levels of textbook publishing for universities, no such prioritisation can be made for FE, and consequently there are broader market requirements. This would appear to be borne out by the findings of a recent study into electronic textbooks in tertiary education in the UK, commissioned by the Group, which indicate that “it is difficult to consider the whole HE/FE sector as one market for e-textbooks.” [12, p. 6]

A further analysis of the responses revealed two more priorities. A preference for titles held in short loan collections or, in the case of Business and Management and FE, “core titles,” was expressed by all disciplines. Representatives of academic institutions in Health and FE were also keen to include titles for which new editions appeared annually.

Although not mentioned by participants in our focus groups, the e-textbook study revealed that several other factors account for the priority accorded to textbooks, especially in the FE sector. The most prominent of these concerns the development of new e-learning strategies and the emergence of virtual learning environments (VLEs), “FE colleges are on a ‘fast track’ to the comprehensive use of VLE and e-learning content for courses, and they are not likely now to be interested in e-textbooks that are linked to print, should such products arise.” [13, pp. 6–7]

3.2. *Reference materials*

Since 2002, the e-Books Working Group has focused on enhancing the publishing of e-reference materials by facilitating licensing agreements and pricing models for academic. [14, p. 225] This was symptomatic of the international e-book publishing trends reported by Dorner, who suggests that the predicted growth in e-book sales “will be largely reference

works conglomerated in massive online databases.” [15, p. 144] Thus, it was not surprising that next in order of preference were reference materials for all subject fields in both HE and FE. In many of the focus groups, participants voluntarily offered examples of specific paper-based titles which they felt publishers might add to their e-book lists.

There has been a significant take up of electronic reference ‘libraries’ offered by publishers such as xRefer Plus and Oxford. In some ways these represent an extension of conventional reference databases, and participants voiced the opinion that the emergence of these electronic collections would have implications for the use of the reference collection in their libraries.

3.3. *Scholarly monographs*

In the 1990s, scholarly monographs constituted the most significant publishing field, particularly in North America. [16, p. 38] Despite the critical mass of e-book titles available, it appears that in both the HE and FE sectors, little priority is accorded to the acquisition of scholarly monographs. Only a small number of participants from Health and Engineering identified scholarly monographs as being an important format for the e-publishing, and again the views of academic librarians in the Engineering sector were supported by their colleagues from special libraries. With the increasing take up of NetLibrary, which is rich in monograph titles, by UK university libraries, and the experience of academic librarians in North America for whom NetLibrary now constitutes the basis of their e-book collections, [17–19] it will be interesting to see if attitudes change.

3.4. *Grey literature*

Given that e-book publishing has focussed largely upon scholarly monographs, textbooks, reference works, and fiction, it was intriguing to note a small but significant demand for the development of a core of electronic grey literature. Representatives from engineering and FE prioritised certain forms, the most prevalent of which were technical reports, standards, and conference proceedings. Indeed, as the following quotation indicates, engineering librarians were keen to identify specific sources, which are heavily used:

Research monographs and technical reports, and I’m not sure . . . standard design documents, sometimes the standards themselves, conference volumes would be wonderful electronically, because they could just download the papers. But I mean there are some of the people, the organisations, who publish, and publications do get asked for a great deal and I’m not sure they’re going to be available in this electronic format. I mean the Concrete Society, Transport Research Lab, Hydraulics Research, standard design documents that your practising engineers require. {25}

3.5. *Out-of-print and free e-books*

Several participants mentioned the fact that irrespective of the type of resource, a particular need was for out-of-print titles:

Yes, I’m, being forced to go to a books.com to buy individual copies of things that are out of print, being offered for sale by second hand booksellers, and this is very time consuming because you’re buying 1 book at a time, raising an order for 1 book. {50}

Free e-books and e-reports were also cited as valuable resources:

Certainly we have links to free long publications, which would probably count as books. {13}

Really we have free Web-based reference things like BMF and the medicines compendium ... {16}

Issues associated with the field of free e-book publishing and their uptake in academic libraries are the subject of the recently initiated research project commissioned by the e-Books Working Group which was undertaken by the Oxford Text Archive. [20, pp. 47–48] Apart from “the kaleidoscope of different formats in which the texts are available [which] is at best confusing, and at worst an insurmountable barrier to their use,” the research identified usage issues including the following:

- lack of availability of a complete range of titles for any given course;
- doubts about quality assurance;
- lack of confidence in the persistence of availability of resources;
- poor design of free e-books and poor ergonomics of reading on screen; and
- lack of formally marked-up structures, which is a barrier to reformatting, aggregation or use in VLEs.

It is significant that there was an awareness of these usage issues among participants, reflected in the rather blunt comment on the quality of free e-books:

Most free e-books are pretty atrocious. {3}

4. Factors influencing the selection and acquisition of e-books

Asked what is likely to influence the selection of e-books, three principal factors – course reading lists; high borrowing/use; and multiple paper copies – were cited regularly, reflecting concerns previously voiced about challenges in managing conventional printed book collections (in particular, budgetary constraints, concurrent access to texts), and preferences for types of e-books identified above.

The most economic way of providing a title was clearly a dominant issue, and some ILS staff, especially in the FE sector, are wary that licensing fees might militate against the acquisition of e-books:

Cost is a massive one. I get the feeling talking to my colleagues that they are quite expensive and you’ve got to justify that. {1}

I suppose the licensing as well. What worries me with the move to electronic resources is you then have to keep buying your subscription, so you can actually end up paying a lot of money out and then if you have a budget crisis one year which we seem to quite often have, I can’t buy it, whereas if you’d bought the paper copy it’s there and it might be a year out of date but it is there. {52}

A detailed consideration of licensing issues is given later in the paper.

Underlying all responses was the strongly articulated opinion that ILS staff prefer to be responsible for the selection of specific titles, rather than leaving it to publishers who often licence by collection rather than individual titles.

While recognising that selection is determined largely by the needs of academic staff, especially in the FE sector, several participants did proffer an important caveat. There was considerable concern over the ignorance which persists among academic staff about e-book publishing, and a feeling that such ignorance could adversely influence the degree and nature of e-book selection and acquisition:

It goes back to academic awareness. We buy what academics ask us to buy. They don't know what's out there. {4}

These responses are supported by the findings of a recent study into the promotion of e-books in academic libraries, which concluded that:

The academic is only imperfectly in receipt, or not in receipt at all, of information on e-books from his or her accustomed channels—review copies, reviews, peer-group and student recommendations, and information from publishers and booksellers. [21, p. 20]

Ironically, during the discussions it was equally evident that academic librarians themselves felt uncertain about their knowledge of the emerging e-book market and of the needs of their users. Indeed, Dillon's conclusion regarding title selection and collection development appears to hold good in the UK:

Despite demonstrated user interest in e-books, title selection and collection development have proven to be a slightly clumsy progress akin to groping in the dark while wearing oversized mittens. Selectors are unsure what types of e-books their users are likely to want . . . [leading] to a process in which libraries and consortia bulk order titles with little rationale to back up their choices. [22]

The ignorance that exists about the bibliographical apparatus to support selection among ILS and academic staff, which is discussed below, exacerbates this dilemma.

The major factor affecting acquisition and articulated by the focus groups was the cost of e-books. There was some underlying suspicion among all groups that the electronic version must be cheaper to produce than the hard copy version and that this should be reflected in the price:

I'm interested in all this talk of a premium price for electronic access and paying an annual subscription, and so on. For a product that is cheaper for the publisher to produce, surely we should be paying less for the electronic copy because they're not having to go through the printing and everything, and why should we have to keep paying every year for something we bought? {19}

The high costs seemed particularly unfair because, at the same time, costs are being passed down to the libraries or their users. Reading from the screen is not popular so the common practice is to print texts for conventional reading at a later time. Costs are borne by either the students or the library: the former seems unfair to users and likely to deter use, while the latter simply adds an unknown amount to the cost of the licence.

5. Approvals and trials

Participants from all disciplines expressed the need to extend the concept of approvals to e-books:

Well, we get a lot of stuff on approval for staff to look at, paper copies, because introduction to XXX mechanics, how many titles are there, so a new one comes out, they want to know if it's going to fit in with their teaching or not. I'm not quite sure how that would fit in with the electronic versions, whether we could have . . . you know, the same on approval, with, say, two weeks to have a look at it. {31}

While several publishers indicated that free trial periods were available for e-books and participants acknowledged the value of these, some librarians were concerned about the length of trials and felt that there was a need for longer trial periods:

The shortness of trials is a great concern to me because academics are extraordinary busy people. {17}

The problem at our place is that while publishers are really pushing towards the undergraduate texts; academics won't look at textbooks or new textbooks, I've found, except at certain very short window periods. {23}

Furthermore, there was a call for a broadening of the array of titles currently being offered for trial, titles which should be related to the needs of the institution:

What I'm saying is that really what has to be looked at is what sort of material is going to be offered to us on these trials, and quite honestly, it's research material that I often need, but the publishers won't even look at it. {23}

It was interesting to note that in those focus group attended by publishers, their representatives were sympathetic towards the sentiments expressed by the ILS staff.

6. Bibliographical access

Bibliographical control of e-books is an area of concern for the authors who first reported on it in 2002. [23] The findings of the e-Book Mapping Exercise confirmed the conclusions of both our investigations and earlier studies [24] that the lack of systematic bibliographical control is a major problem for academic librarians and has a negative influence upon selection.

There was a consensus among all disciplines and education sectors that ILS staff and academic staff found it extremely difficult to find information on what e-book titles are available:

I think you have already mentioned bibliographic access. Just knowing what is out there is a big issue. I don't quite know where to start in terms of getting a reasonably comprehensive view of what is available. {36}

Are you aware of the major specialist sources, bibliographic sorts of services to identify the existence of electronic book titles, internationally? [*Moderator*]

No, is the short answer. [*unattributed*]

The process of searching for material is exacerbated by the constraints on their time:

Frankly, the evaluation is the time consumer . . . I think I was moaning to someone earlier on in the day about how I never get the time to do any resource discovery and I love it, and it's so interesting. {1}

It is also evident that many participants are unaware of the array of bibliographical sources and services, which might be, used as identification tools and selection aids; specifically, several experienced problems in discovering whether electronic editions were available for printed titles.

Previous research by the authors established a chart of different general and specialist bibliographical approaches, which are available. [25] However, participants in this study were largely ignorant of these, using publishers' catalogues and Web sites, and Amazon (Internet bookshop) as the principal sources. There was a strong body of opinion that a

single source of information on e-books would be an especially useful bibliographical tool:

Maybe you could produce a whole list of these things and circulate it widely. I mean what you said about do we go to the publishers, or occasionally the publishers coming to us, I mean if something lands on your desk from Wiley or whatever you say oh, that's interesting, electronic, you know, rather than go out and find out what is actually available. {31}

... if we can look at The Bookseller and get complete lists of books that are available, we could do with something similar for e-books but we could also do with quality control, people who advise on quality of these new things coming through, like we can look on BookFind and get a little summary of reviews and so on. We really need something similar for e-books. {53}

Following the voluntary deposit of e-materials, and the ad hoc inclusion of certain e-formats in the *British National Bibliography*, UK legislation on legal deposit is now on the statute books (*Legal Deposit Libraries Act 2003 (c.28)*, which received Royal Assent on 30 October 2003). The Act extends previous legislation from print materials to accommodate CD-ROMs and selective harvesting of Web sites with a '.uk' suffix. The enabling nature of the new law means that new formats – including e-books – must be included through secondary legislation as it becomes necessary. Ultimately, this may lead to the establishment of a national bibliographical source. However, given the absence of any immediate panacea, several participants did raise the question as to whether the JISC had a potential role to play in enhancing awareness of bibliographical source and services—a matter to be considered by the e-Books Working Group.

An issue touched upon by some participants, but not explored in any depth, was metadata. Dillon [26, p. 355] notes that the “discovery metadata are required to help consumers locate desired titles and will include the author, title, cover image, e-book description, and author biography.” The importance of metadata to bibliographical control was highlighted in a Working Group study, *Promoting the Uptake of E-Books in Higher and Further Education*. [27] One of the challenges that Green identified concerned the lack of standardised e-book catalogue records and the lack of interoperability between different e-book metadata records. It is difficult to integrate e-book metadata records within library catalogues and VLEs and to keep this information up to date, and this lack of information makes raising awareness of the materials among staff and students problematic. The e-Books Working Group has commissioned a new study which is designed to develop an e-book metadata and interoperability test bed to help progress the issue of standardising access to e-book catalogue information. The study is due to report in November 2005.

7. Modes of access

Another important dimension of collection management concerns the means by which institutions facilitate access to e-books. Across all disciplines the predominant modes of access are from the ILS Web site and the OPAC, with approximately equal use of each. Dillon [28, p. 357] noted that once MARC records for e-books had been added to the catalogue, “usage increased immediately” by about 50% over 3 months. While more recent literature is

in general agreement that integrating e-books into catalogues is essential for widespread use, [29, p. 345], [30, p. 54], [31] a number of participants in our study did express reservations about what they perceived as the potential limitations of using the OPAC to access e-books:

I would think it was the Web site because the OPAC you don't want someone to study on it because it's a catalogue, not a machine to use to study on. {54}

We've . . . got people abusing things; they're using them for the wrong purpose. They knocked out our OPAC terminals by using them for word processing or Internet use. They're not available to anybody else. {47}

One Engineering institution faced the difficulty of OPACs that could not access e-books directly:

We have OPAC terminals which wouldn't actually link to e-resources. That's not very helpful. {27}

Green notes that it is also difficult to provide login information available via a catalogue record. [32, p. 54]

The JUSTEIS project has noted the growing influence of departmental, course, and academic staff Web pages [33] in providing access to e-resources, and there was some evidence of this in the FE focus groups too:

I use departmental or Internet pages a lot for the departments to focus on particular areas, and that's where our students I think are beginning to look first for their information. {53}

All groups, but participants from the FE sector in particular, indicated that access to e-books from VLEs was increasing, reflecting the significant developments in online teaching, and the need to give serious consideration to VLE/electronic library integration echoed in the literature. [34, pp. 34–35] One publisher commented on the work which they are doing with academic staff in integrating e-books within VLEs and how this will constitute the major mode of access for some students—albeit a 'spoon-fed' approach. The JISC has recognised the significance of the importance of developing the electronic library within the broader institutional and educational context, and the e-Books Working Group is now exploring the implications of integrating e-books in VLEs.

8. Promotion

Associated with modes of access is the issue of promotion, and participants across all disciplines emphasised the significant role of academic staff in promoting or publicising an awareness of e-books:

I think academic promotion is quite important. If an academic recommends it and says it's available electronically, it's half way there to getting the students to use it, really. {46}

Again, this correlates with the findings of the JUSTEIS project which has amassed considerable evidence over the past 5 years to show how influential academic staff can be in promoting awareness and effective use of e-resources. [35, p. 176] Evidence from the Gold Leaf report indicates that as a consequence of the lack of awareness of e-books by academic staff, awareness of e-books may not permeate the student body:

The academic is only imperfectly in receipt, or not in receipt at all, of information on e-books from his or her accustomed channels . . . The student is therefore unlikely to get information about e-books from the reading list, despite the fact that this, according to previous research, has the greatest single influence on student reading. [36, p. 20]

This reinforces the need to ensure that academic staff receive adequate staff development training in the area of e-book and other e-publishing.

Participants were equally concerned about lack of awareness of e-resources on the part of students and the challenges of developing information literacy skilling to facilitate their use. The particular problems faced by British academic libraries are articulated in the publications emanating from the JUSTEIS project, and the promotion of e-books has to be viewed as just one aspect of this broader issue. [37, pp. 48,78], [38, pp. 172–176] A description of the array of strategies employed by academic librarians to promote e-books to both students and academic staff is offered in the Gold Leaf study. [39]

9. Evaluating use

The final aspect of collection management concerns how ILS staff monitor and evaluate the use and effectiveness of e-book collections. On the face of the evidence from the focus groups, this is an issue that has not really been addressed, and given that e-books are a relatively recent publishing form, it is not surprising:

Do you have any procedures in place to actually measure the use of electronic books and evaluate their use, or information systems that do that? *[Moderator]*

I think all the presentations have said today, the reference sources, they've all said there's statistics there; we've never looked at them, and we do need to do that. {52}

There was an acknowledgement, however, that e-book publishers can make statistics available, and although little use was being made of this facility, the potential contribution of the publishers in this respect was recognised as being critical:

And finally here, this issue of how do you see yourselves evaluating e-books use? *[Moderator]*

We depend on publishers there. I mean NetLibrary has got a usage stat. kind of program with a dusty e-books type facility and that's quite appealing if it's accurate in terms of measuring usage or readings. {63}

The literature recognises the importance of publishers' and aggregators' statistics and that, for example, NetLibrary offers management information about e-book usage. This facility can be used to monitor usage by targeted groups [40, p. 85] although Langston [41] points out that the NetLibrary statistics only offer data about when a book is "opened," and there is no indication of the extent of usage, "whether a user is briefly glancing at an e-book, or reading it at length." One aspect of monitoring and evaluation which was raised by several participants concerned the need to elicit qualitative data (e.g., the relevancy of particular titles and how they were used), as well as quantitative data:

And that can only give quantitative data, doesn't give qualitative, in terms of what the students are reading. {58}

Are you using some qualitative? *[Moderator]*

Not yet, we will. {58}

Reflecting on the findings of the study, it is evident that there is a need for enhanced dialogue between ILS staff and publishers/aggregators to ensure that appropriate statistics are

made available. Since the study, the e-Books Working Group has been working to facilitate this.

An important complementary issue concerns the possibility of eliciting evaluative data from managed learning environments. Representatives of those institutions that are currently integrating e-books within the VLEs are able to make use of a monitoring and evaluation facility within the VLE itself:

Do you actually have any mechanism in place to actually evaluate the use of e-books at the moment?
[Moderator]

Yes, we will monitor access and use through the VLE. {5}

10. Licensing issues

A final objective of the study was to investigate the views of the participants towards licensing, and several issues associated with this subject were identified. Licences have to be negotiated to be flexible and accommodating to the kinds of use found in FE and HE—distance learning and off-campus use, out-of-library use, 24 × 7 access, integration into MLEs and VLEs, and multiuser licences were all mentioned:

Ideally you would be able to access wherever you wanted whenever you wanted it. {45}

There is also potential to be charging on user basis or on a copy basis; so do you buy 10 copies of the same book or a licence to have 10 users access it? I think we would tend towards having a multiuser one. {63}

Flexible start dates for licences and archive copies of texts were also seen as being essential features of licences:

An option of starting your annual subscription at any time of the year, or extending it by a couple of months would probably be a welcome proposal as well. {12}

If we were taking out an annual subscription to a book and at the end of that year we decided we didn't want to take it any more it suddenly disappears and we've got researchers need to use it until the middle of August or something like that. {12}

There was a general dislike of bundling (the need to licence a possibly large number of titles from a publisher or aggregator), as it was seen as removing book selection based on academic needs from the librarian and academic staff. Bundling means that titles are acquired and used according only to what is available. A number of participants favoured individual monograph purchases,; however, there is also a clear preference for purchasing individual chapters of e-books:

I think for us we'd like to give something a go and not be tied to taking a massive bundle. This is what put us off XXX with 100 minimum. {46}

The short loan aspects of it, pulling down chapters and having a virtual issue. {58}

The inability to clump it with different publishers as you say, chapters from different books and that is really attractive. {63}

Participants expressed discontent with the situation where a given title may be available from a range of different sources, under differing licence conditions and for different prices.

ILS staff noted that it made title selection very difficult, but that this was a problem that already occurred with e-journal aggregation:

One other thing that really embarrassed me [was] that there seemed to be certain titles for which there are a multiple different deals, and trying to choose your deal, in addition to trying to use your contact, is really annoying. {27}

Behind these individual concerns lies a more general concern over the changes imposed on book buying by the arrival of the new medium:

What worries me with the move to electronic resources is you then have to keep buying your subscription, so you can actually end up paying a lot of money out and then if you have a budget crisis one year which we seem to quite often have, I can't buy it, whereas if you'd bought the paper copy it's there—it might be a year out of date, but it is there. {52}

One publisher at least felt able to respond positively:

From our point of view I think certainly being able to make books available to purchase, rather than subscribe, rather than a subscription model and then again, talking about separating it into two different offers: an offer on current textbooks for a year-long subscription and then a separate offer of core books archive collection to be downloaded to the university servers. Presumably that would be what you would be after. [*Publisher*]

The debate in the literature on models for the licensing, acquisition, and pricing of e-books has focussed on the differing needs of the principal stakeholders: readers, libraries, and publishers. Edwards [42] summarises the three main options as outright purchase, subscription and pay-as-you-go, while the PELICAN project offered a hybrid solution. [43] Dillon [44] recognises the attraction of the 'print pricing model' or outright purchase for librarians who are used to a 'first sales doctrine' approach but concludes that the "key to making e-books work for all of us in the traditional publisher/library market is to find middle ground that meets all our needs."

Debate about the different models also surfaced during the focus groups. A general, overarching feeling among all groups was that the variety of models, as discussed in the literature, was too great and that individually they are too complex. There was a feeling that publishers should be engaging in greater dialogue with each other, and that they should be moving forward in an attempt to standardise:

I think it will only take off when there's an accepted model and everyone moves towards that model. This is in a sense what's happened to the journals. [*unattributed*]

There was no consensus as to a preferred model, and the views expressed by the librarians did not necessarily correspond with that of publishers.

Given the discontent voiced over the number and nature of the licence approaches, the idea of a model licence was raised.

I've just got a feeling that lots of publishers in the field are going to have all these different agreements and different set ups and... there's so much to put together. It's a pity we can't have a more general [licence]. {58}

That is a tricky one because in terms of what we're all doing I think there are competitive issues that come into play there. I don't know that the Publishers Association is driving anything that's going to result in a nice easy agreement. In terms of working through JISC... is JISC prepared to take a leading role in establishing a model? {61}

At that time, the JISC e-Books Working Group had been considering the development of a national model licence to act as a template for licensing resources to the academic

communities. The responses from this study were subsequently used to inform the creation of the model licence which is currently available.

The advantages of purchasing hard copy books through consortia were raised by several participants and one issue which was mooted in several groups concerned the potential advantages of extending the use of consortia to the acquisition of e-books:

I think if we did buy e-books it would be as a kind of region wide consortium rather than as an individual library. So we would want to see some kind of package that was available for on line consortium basis. {11}

This is precisely what has been facilitated by the development of the e-Books Working Group and the national strategy which has facilitated purchase of e-books using the JISC as a national consortium. This has afforded academic libraries considerable economic benefits. [45]

11. Collection development policy

The study has revealed that there are many complex collection management issues surrounding the selection, acquisition, and promotion of e-books, and ideally these issues need to be addressed within the collection development policies (CDP) of an institution.

There is an international acknowledgement within both the literature and the profession of the need to ensure that not only are collection development policies created, but that they address fully the new demands of electronic resources. Anecdotal evidence suggests that academic libraries in the UK are at an early stage in developing CDPs, and many of these would appear not to embrace e-resources, so it was no surprise to discover that there is little evidence to suggest that librarians have included e-books within their collection development policy. Only one institution surveyed has developed a CDP for e-books; three others were considering doing so.

12. Conclusion

This paper has offered insights into the issues surrounding the collection management of electronic books within academic libraries in the UK, and it is intended as a contribution to the scant literature on the subject and as a catalyst to further debate.

With respect to developing collections of e-books, all disciplines indicate that undergraduate textbooks together with reference books would constitute the primary purchasing areas. In addition, engineering and health identified academic monographs, and FE and engineering mentioned certain forms of grey literature including conference proceedings, standards, and research/professional reports.

Many issues surrounding collection management of e-books were identified in the research, the most central of which are the lack of bibliographical control and the need to offset the ignorance of selection sources and services, which exists currently. Given the

critical role that academic staff normally play in the selection process, it is essential that they be regularly apprised of developments in e-book publishing. Finally, ILS staff should consider the most effective ways by which to facilitate easy access to e-book collections throughout the institution.

There was marked concern about the proliferation of existing licensing and costing models. Costs were seen as being high, particularly in the light of the added costs associated with the regular local printing, which is demanded by the format. Participants across all disciplines reaffirmed the importance of the role which the e-Books Working Group is playing in negotiating a model licence in the UK.

While it can be argued that further research is required into these and other aspects of collection management, a critical area which has thus far escaped consideration, and which would help to inform collection management activity, is that of the use of e-books. It is felt that internationally there should be greater focus on user studies and that academic libraries would benefit from this research.

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