**Aberystwyth University**

*Virtually there?: E-books in UK academic libraries*
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# Article

# Virtually there?
# E-books in UK
# academic libraries

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## Keywords

Books, Information technology, Bibliographies, Publishing industry, Higher education, Academic libraries

## Abstract

This article presents the results from a recent survey into the provision of electronic books within academic libraries in the UK. Where relevant the results are supplemented by data from two other surveys concerned with e-book provision and electronic information services undertaken by the authors. Incidence of provision of e-books from individual publishers and through aggregators is reported. Reasons for non-provision and attitudes towards the medium are discussed, and issues concerned with bibliographical access are explored. The article concludes with a discussion of the role and influence of the E-book Working Group set up by the UK body responsible for networking and electronic resources in higher and further education: the Joint Information Services Committee (JISC).

## Electronic access

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## 1. Introduction

Electronic publishing, scholarly electronic publishing, delivering content, e-journals and now also e-books have become increasingly a part of the literature in both the library/information science and publishing arenas. The Association of Learned and Professional Society Publishers (ALPSP) commissioned a report on *Authors and Electronic Publishing* (Swan and Brown, 2002); another report on *Securing Authenticity of Scholarly Paternity and Integrity* is in preparation (Watkinson, 2002); there was a conference for publishers in June 2002 on "Delivering content to universities and colleges"; the PELICAN project on pricing models for e-books has delivered a final report (PELICAN, 2002); and the Joint Information Services Committee (JISC) has various working groups on delivering content in higher education (HE) and further education (FE), including one for e-books. *Online Publishing News* reported in January 2002 that according to a new report from IDC (Maclachlan, 2002) the value of the e-book market will increase from US$9 million in 2000 to US$414 million in 2004 (*Online Publishing News*, 2002). IDC suggests that a number of factors will contribute to this growth, including the increasing ease with which people purchase books over the Internet, the availability of e-book readers and the standardisation of presentation formats. The IDC forecast is perhaps over-optimistic in the light of the bursting of the dot.com bubble. The author of a news feature in *Information World Review* was more pessimistic in May 2002 and reported that "the industry still faces a number of serious challenges" (Poynder, 2002). Indeed, UKOLN, a national centre for digital information management, are advising public libraries to wait until e-book technology improves and that only free software and e-books are exploited (Garrod, 2002). Poynder suggests that technology and the content (both "just not there yet"), digital rights management (DRM), pricing, and standards are all problems. The idea of e-lending is beginning to be taken on board by DRM companies, although as Poynder (2002) points out, this need not equate to a library-centric universe.

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## 2. Aims and objectives of this paper

Since a first report (Lonsdale and Armstrong, 1998), the authors have maintained a regular watching brief in the area of electronic books, monographs and textbooks and have continued their research in this area. The authors are, *inter alia*, also examining the uptake of e-books within the public library sector and the transmission of those information skills pertaining to electronic resources from the secondary to the tertiary sectors. This research is not reported on in this article.

This article updates a previous communication on the subject (Armstrong and Lonsdale, 2000), using data from an ongoing study of e-book provision in academic libraries in the UK supplemented, where relevant, with data from two other research projects. In the USA, Snowhill (2001) concluded that, "The role of e-books in academic libraries is still not clear and there is considerable development of standards, technologies and pricing models needed to make the market for e-books viable and sustainable". As was indicated at the beginning of this article, the same is true in the UK, and indeed much work is being undertaken, often through the offices of the JISC. At the same time, commercial, institutional and peer pressures are pushing libraries onwards, down the e-book route. Hillesund (2001) suggests that we should be asking such questions as "What were the scientific and technological premises for the development of e-books? What purposes are e-books meant to fulfill?" If there is no understood logic or pedagogy for their acceptance and use in one or other sector is it any surprise that library take-up is slow?

Our article sets out to describe the incidence of the provision of e-books by publishers and the three aggregators, netLibrary, ebrary and Questia, which were selected for the study as being the largest and most-established companies. Brief details of the services offered by these companies are given later. The research seeks to illuminate the statistics, exploring reasons for non-provision, issues associated with bibliographical access, and the perceptions of librarians regarding the potential of e-books. The article concludes with a discussion of the role of the JISC E-books Working Group in developing e-book provision within academia.

## 3. A definition of an e-book

Before moving into the body of the article, we feel that it is important to establish the precise definition of "e-book" on which our research is predicated. To date, the term e-book has not been used completely unambiguously in the literature.

In some cases an e-book requires a specific piece of hardware – a "reader" – to allow users to read it while in others the e-book can be read on a PC; some writers have used the term e-book to mean the combined text-plus-reader. Texts may be born-digital or may be the result of the digitisation of an original paper-based text, and possibly the term "e-book" does not refer to both. Some commentators use the term to imply a complete text while others use it to describe partial texts, chapters or built books (such as the McGraw-Hill PRIMIS system that allows academics to select chapters from several books in order to create a local teaching text) or even print-on-demand books. There is no consensus over the difference (or unity) between an e-book and a digital book. We feel that there is no absolute, recognised answer to any of these questions. Even Lynch (2001) in his seminal article in *FirstMonday* only focussed on the delivery vehicle, the e-book reader, and on a future in which the e-book concept is significantly less important than that of the personal e-library. Hillesund (2001) points out that frequently the term e-book is used in a narrow sense as text to be read on a portable e-book reader: Microsoft uses it in this way. There has been also some near-philosophical discussion on the definition of an e-book on the virtual colloquium, text-e (see www.text-e.org/): no resolution was reached.

Within the context of the research reported on here, we use the term e-book to mean: any piece of electronic text regardless of size or composition (a digital object), but excluding journal publications, made available electronically (or optically) for any device (handheld or desk-bound) that includes a screen.

While our earlier research suggested monographs and textbooks, this general discussion is not limited to scholarly publications. Our definition also makes no reference to some aspects of e-books that may be important in larger debates, for example, digitised vs born-digital; parallel published vs

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born-digital; content vs form; linear text vs hypertext; straight text vs value-added text – all will affect the perceptions, importance and ability to reach a critical mass that renders e-books (generically) successful.

## 4. Research projects and methodologies

The data used in this article are taken from three discrete but inter-related research projects undertaken by the authors during 2001/2002.

### 4.1 An investigation into the impact of electronic book publishing on higher education libraries in the UK (IMPACT)

The principle study (IMPACT) comprised an e-mail survey within the higher education sector which was originally undertaken in 2000/2001 (Lonsdale and Armstrong, 2001) and updated in 2002. This research was conceived to continue the work of the first national investigation into e-book provision within British academic libraries (MODELS) which was undertaken in 1997/1998 by the authors and funded by the JISC (Lonsdale and Armstrong, 1998). The purpose of IMPACT was to discover the degree to which e-books had been accepted by the library and information services (LIS). In particular, the study scrutinised the perceptions and use of netLibrary, ebrary (now, although not at the time of the survey, also targeting libraries with ebrarian) and Questia. It also explored issues such as how e-books are discovered and what problems surround their adoption. The e-mail survey, which was designed to elicit both qualitative and quantitative data, was complemented by a series of interviews with bodies and organisations concerned with issues of bibliographical access to e-books.

The 2000/2001 survey used the Society of College, National and University Libraries (SCONUL) electronic mailing list to distribute a questionnaire to all higher education libraries in the UK. The advantages in this approach are the ease of administration and the low cost of the survey. The disadvantages are the inability to direct the questionnaire to an appropriate individual and the difficulty in formatting an e-mail so that the questionnaire is easily understood and answered irrespective of the software client on which it is read. However, in repeating a very similar survey in early 2002,

it was decided to use the same approach as, by using an additional two mailing lists, the population could be extended to include the further education sector. The questionnaire was also redesigned specifically for e-mail delivery using a very narrow format (in order to avoid continuation lines interfering with clarity) and response lines identified by a typographical prompt.

The questionnaire was piloted in two institutions and minor changes made to the layout. It was then sent to three mailing lists that had been identified as covering further and higher education: SCONUL, CoFHE (the Colleges of Further and Higher Education group of the UK's Chartered Institute of Library and Information Professionals) and MEG-LIB (a mailing list for mixed economy colleges). The questionnaire was first sent out in late February 2002 and resent as a reminder with an extended return date a month later.

An additional disadvantage of the e-mail methodology is that there is no record of the number of questionnaires distributed and thus no accurate means of determining the return rate. According to the UK Higher Education and Research Libraries site (see www.ex.ac.uk/library/uklibs.html) there are 164 HE institutions (HEI). From these figures the return rate for 2000/2001 can be calculated at approximately 39 per cent while for 2002 the survey achieved an overall 29.3 per cent for HE. While recognising that this return rate is low, the quantitative data are at least indicative, and enhance the fundamentally qualitative nature of the survey.

Returned questionnaires were printed for archiving, and data were entered into an Excel spreadsheet for analysis.

### 4.2 JISC user surveys: trends in electronic information services (JUSTEIS)

Since 1998, ongoing research being conducted, in part by the authors, at the Department of Information and Library Studies, University of Wales, Aberystwyth on behalf of the JISC is examining the provision and uptake of all electronic information resources and services in the aforementioned sectors. The JISC user surveys: trends in electronic information services (JUSTEIS) comprises two strands:

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(1) a survey of students, academic staff and LIS staff to discover what electronic information services (EIS) they use; and

(2) a survey of LIS Web sites to determine the electronic resources that are offered to those user groups.

The data used in this article come from the second survey of Cycle 3 (2001-2002) which comprises an investigation of 28 HE Web sites to analyse content. A random number generator was used to select institutions from a list of all HEI. Where the selected institution had been examined in a previous cycle, a new random number and site were chosen. This process was continued until a suitably stratified sample had been obtained. A detailed account of the methodology and results can be found in the project report of the third cycle (Armstrong *et al.*, 2002).

### 4.3 Subject mapping project

Further research, so far only at the piloting stage, is being undertaken to map the prospective take up of e-books in a number of discrete subject disciplines. This work, the subject mapping project, on behalf of the JISC E-books Working Group, seeks to explore still further through focus groups the issues surrounding the provision of content via e-books to the higher and further education communities. One pilot focus group session was conducted during the joint CoFHE/ University College and Research Group (UC&R) Conference in April 2002. The group comprised librarians from 16 higher and further education institutions and the transcripts contribute some data to this article.

## 5. Incidence of provision

Table I shows the percentages of HEI offering access to e-books over the last four years together with the formats held (each respondent was asked to indicate all formats in which she/he held e-books). These figures specifically exclude provision through aggregators. For the purpose of clarity, the relevant project name is shown in parentheses within the caption of the subsequent tables.

Table I indicates that the take up of e-books over the period remains low. The 2002 figure is not significantly lower than in the previous survey and the decrease is probably accounted

**Table I** Provision of e-book formats in HEI (MODELS, 1998; IMPACT, 2001 and 2002)

|  | 1998 | 2001 | 2002 |
| --- | --- | --- | --- |
|  | *n* = 74 | *n* = 64 | *n* = 48 |
| **Institutions offering non-aggregator e-books** | 51% | 56% | 48% |
| **The above institutions offering non-aggregator e-books are providing them in the formats:** | | | |
| **Format** | *n* = 38 | *n* = 36 | *n* = 23 |
| Diskette | 24% | 25% | 9% |
| CD-ROM | 68% | 72% | 61% |
| WWW | 76% | 75% | 74% |

for by chance rather than, for example, a move to aggregator-based access (see below). There are a number of factors that may well account for the apparent inertia which are explored in this article. With respect to format, it is interesting to note, although hardly surprising, that diskettes and CD-ROMs are increasingly secondary to Web-accessed e-books.

Of the 23 respondents to the 2002 IMPACT survey who provide any externally-published electronic monographs or text books other than through netLibrary, Questia or ebrary, 74 per cent are offering Web-based e-books; of these, 70.6 per cent provide direct access via the OPAC and 64.7 per cent provide access via the LIS Web site. Only two respondents were aware of any academic staff within their own institution who were currently publishing e-books internally and making them available directly to students; both were making these available through the OPAC and one also through the Web site.

To put these figures in a broader context of EIS provision, we can refer to some of the data from the JUSTEIS project, the latest cycle of which will report that 57.1 per cent of HE Web sites examined linked to at least one individual e-book (one site to as many as 268), and 50 per cent linked to one or more text archive or e-book aggregator. Table II supports the findings relating to individual

**Table II** Incidence of e-book provision (JUSTIES, 2001/2)

| EIS | Institutional Web sites offering access to e-books *n* = 28 (%) |
| --- | --- |
| **Individual e-books** | 57.1 |
| **Text archives** | 50.0 |
| **E-book aggregators** | 3.57 |

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e-book access shown in Table I. Discussion regarding incidence of e-book aggregators follows.

### 5.1 Sources of e-books

The IMPACT survey sought to explore the nature of incidence further by investigating the sources of e-books. With respect to non-aggregator provision, Table III lists alphabetically the publishers referred to by respondents. It is immediately clear that there is a larger array of publishers engaged in e-book activity than when our research began (1998) and no one publisher is favoured above all others. This probably reflects the varying subject areas in which HEI have decided to move forward with e-books, and it is noticeable that the publishers with the higher incidence are largely those which were exploring the medium at the time of our initial project in 1998 (e.g. Oxford University Press, Chadwyck-Healey and Wiley).

Three respondents did not delineate specific publishers, but used the term, "Various". With respect to "Other responses", two HEI offered a general statement, "Small no. of reference book publishers" and "Add-ons to paper books"

**Table III** E-book publishers (IMPACT, 2002)

| Publishers | Number of institutions citing |
| --- | --- |
| Academic | 1 |
| Blackwells | 1 |
| Chadwyck-Healey | 3 |
| CRC | 1 |
| English net Base | 1 |
| ERIC | 1 |
| Grove | 3 |
| International Ecotourism Society | 1 |
| KnowUK | 1 |
| Lippincot Williams & Wilkins | 1 |
| Macmillan | 4 |
| Manchester UP | 1 |
| McGraw-Hill | 2 |
| MIT Cognet | 1 |
| Nature | 3 |
| OECD | 1 |
| Oxford University Press | 5 |
| Routledge | 1 |
| Technical Indexes | 1 |
| Wiley | 4 |
| "Various" | 3 |
| Other responses | 3 |

and one mistook the aggregator, Knovel, for a publisher.

Three main aggregators of e-books have been offering titles in the UK for the last two years. netLibrary offers a comprehensive approach to e-books that "integrates with the time-honoured missions and methods of libraries and librarians": their pricing models reflect this statement in that a library has to purchase multiple copies if it wants more than one reader to have parallel access (see www.netlibrary.com). The company recently underwent financial difficulties and has been bought out by OCLC. At the time of the survey this was only in the process of being resolved and some understandable doubts about the future of the company may have influenced responses. netLibrary is also committed to e-textbooks through its MetaText programme.

Ebrary provides a means for libraries to give users online access to unique research capabilities by providing powerful software and high-value, copyright-protected content from more than 100 of the world's leading publishers. Ebrary originally targeted their service primarily at individuals but announced at the beginning of March 2002 the extension of their services to a library model. ebrarian enables libraries to offer their patrons multi-user access to e-books, and allows integration with their existing catalogue systems (see www.ebrary.com/).

Questia is an online library that provides access to a collection of books and journal articles in the humanities and social sciences. Every word of all of the books and journal articles in the collection can be searched or every title can be read from cover to cover. Scholarly content – selected by professional collection development librarians – is offered to high school, undergraduate and graduate students. To complement the library, Questia offers a range of search, note-taking, and writing tools (see www.questia.com).

When questioned about problems of access to e-books, 21.7 per cent of respondents providing individual e-book titles in the IMPACT survey referred to bibliographic access as a problem. It might be hypothesised that an easier route to acquisition would be through a subscription to aggregators. Dillon (2001), for example, mentions an effective mode of selection offered to the university by netLibrary. Indeed, given the aggressive marketing by the aggregators and the fact that

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together their collections constitute the largest corpora of e-book titles, it might well be supposed that acquisition through aggregators would be a more attractive option than through individual publishers. However, only seven (14.6 per cent) have thus far moved in this direction; although some 24 (50 per cent) are considering one or more of the three main contenders (see Table IV). Additionally, two respondents included another aggregator (Knovel) in their list of publishers.

Factors responsible for the low take-up of aggregators and the general lack of e-book provision are explored in the following section.

## 6. Factors influencing non-provision

There was no consensus among those institutions not providing externally-published electronic monographs or text books as to why this medium was not acquired. The reasons for non-provision were given as:

- not a priority;
- no need/demand;
- no interest from academic community;
- few of our textbooks are available electronically;
- not aware of any;
- haven't yet decided how useful e-books are;
- looking for subject-based rather than general collections;
- have not found anything that is cost effective/justifiable;
- too expensive;
- no funding;
- lack of IT skills/provision;
- currently negotiating deal;
- about to consider/trial.

It is apparent that the academic library community still believes that there is little or no demand for this format. One might conjecture – in line with our original research – that the lack of demand is a consequence of an ignorance about the capabilities and

availability of the medium. Underlying nearly all of the reasons (the top eight) is the fact that adequate, appropriate or necessary e-books have not been located (either by the academic staff or the library). Only one respondent makes the point explicitly: "few of our textbooks are available electronically". It is not enough to find a selection of e-books in a subject if they are not the e-books demanded by the curriculum. That kind of critical mass has certainly not yet been achieved. Similar arguments can be seen in the discussion on aggregators.

The opinions about the aggregators given by those who were using or considering their services in the IMPACT survey are shown in Table V. It should be emphasised that not all respondents in these categories volunteered responses to the questions; and relatively fewer voiced opinions about Questia and ebrary.

Inherent in these responses is the belief that the aggregators do not yet focus on the needs of the UK higher education markets in contrast to the new initiatives of publishers such as Oxford University Press and Taylor & Francis, which offer more directly relevant content in their e-books. We understand from earlier interviews with a representative of netLibrary that the issue of focus is a matter to which netLibrary is attending.

Free-text answers were invited for the next question: why have you not subscribed? These have been categorised in Table VI.

Of particular concern to respondents are issues associated with cost and the nature of the pricing/licensing model employed, which were also a concern for individual e-book purchase as reflected in Table VI. There is a suggestion that the aggregators are not offering the right content at the right price, and that markups of at least 50 per cent make titles expensive unless they are used extensively. In the subject mapping focus group that we conducted in 2002, similar concerns were articulated by a number of librarians, echoing the sentiments expressed by Snowhill (2001). Several disparate issues emerged, for example the overall cost, but concerns with the implications of potential licensing models were prevalent:

> Problems with all models at present – they are too expensive for the student and the institution.

> With subscription, you would be able to predict the costs ahead and spread costs over a few years … Pay-per-view would be difficult to plan

**Table IV** Possible uptake for aggregators (*n* = 48) (IMPACT, 2002)

| Aggregator | Being used (%) | Considered/considering (%) |
| --- | --- | --- |
| netLibrary | 14.6 | 41.7 |
| ebrary | 0 | 29.2 |
| Questia | 0 | 10.4 |
| Knovel | 3.6 | 0 |

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**Table V** Opinions about three aggregators (IMPACT, 2002)

| View of service (by those using or considering) | NetLibrary n = 27 (%) | Questia n = 5 (%) | Ebrary n = 14 (%) |
|---|---|---|---|
| Collection of insufficient size in the subject areas examined | 40.7 | 20.0 | 21.4 |
| Material not relevant to curriculum | 44.4 | 20.0 | 14.3 |
| Subject areas excluded specific titles that academic staff needed | 63.0 | 20.0 | 21.4 |
| Shows a bias towards a North American audience | 70.4 | 40.0 | 14.3 |

**Table VI** Reasons given for not subscribing to aggregators (n = 48) (IMPACT, 2002)

| Reasons given for not subscribing | NetLibrary (%) | Questia (%) | ebrary (%) |
|---|---|---|---|
| Too expensive/pricing structure/model | 20.8 | 29.2 | 27.1 |
| Never heard of | 6.3 | 20.8 | 10.4 |
| Not much there for us | 12.5 | 14.6 | 8.3 |
| Coverage/lack of academic content | 12.5 | 14.6 | 12.5 |
| Concerns re liquidation/their future | 12.5 | – | – |
| No interest from academic community | 8.3 | 6.3 | 6.3 |
| Option not explored | 6.3 | 12.5 | 16.7 |
| Withdrew UK operation/availability | 8.3 | 0 | 0 |
| Not yet ready to venture on large scale | 6.3 | 6.3 | 6.3 |
| Just about to trial the system | 0 | 2.1 | 6.3 |
| Waiting for consortial deal | 4.2 | 0 | 4.2 |
| Would prefer other | 0 | 4.2 | 4.2 |
| Doubt re library subscription available | 0 | 4.2 | 0 |
| Lack of IT skills/provision | 4.2 | 2.1 | 2.1 |
| Not a priority | 2.1 | 2.1 | 2.1 |
| Conscious of e-books being in infancy | 2.1 | 2.1 | 2.1 |
| Problems with e-journals and thus wary | 2.1 | 2.1 | 2.1 |
| No funding | 0 | 2.1 | 2.1 |
| No demonstration | 0 | 0 | 2.1 |
| Access could not be guaranteed | 0 | 0 | 2.1 |
| Publishers could remove titles at will | 0 | 0 | 2.1 |
| Proprietary software: problem for remote users | 0 | 0 | 2.1 |

the budget and may involve the user in the financial interface.

The issue of licensing remains one that the profession is seeking to address through such projects as PELICAN (2002), an issue which is very much on the agenda of the JISC E-books Working Group.

If the statements "Never heard of"; "Not much there for us"; "No interest from academic community"; "Not yet ready to venture on large scale" and "Not a priority" are grouped together, this suggests that a significant proportion of the respondents (46.4 per cent) demonstrated low interest in at least one of the services. With respect to this and the reasons cited above regarding non-acquisition of e-books, the JUSTEIS project has noted that in 2000/2001 and 2001/2002, student use of e-books across the institutions surveyed has

been more or less static at 0.7 per cent of respondents. This tends to make comprehensible the librarians' views that e-books are not a priority. Conflicting with this evidence, a report on the book buying habits of students (Bennett, 2002) noted that 22 per cent of the sample (across 13 campuses) would have used e-books instead of the book they had just purchased – on one campus as many as 41 per cent felt this way. Perhaps the variation can be seen as the difference between intent and action.

## 7. Bibliographical access

Respondents were also asked how they located e-books and what (if any) problems they encountered in finding titles. Table VII

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**Table VII** Sources of bibliographic information on e-books used by respondents (IMPACT, 2002)

| Sources of information | Number of institutions citing |
|---|---|
| Publishers' advertising | 11 |
| Discussion/mailing lists | 10 |
| Staff recommendations | 4 |
| Publisher Web sites | 2 |
| CHEST/JISC mailings | 2 |
| Internet | 2 |
| Subject lists | 1 |
| Library press | 1 |
| Publisher catalogues | 1 |
| Other library Web sites | 1 |
| Conferences and exhibitions | 1 |
| Serendipity | 1 |
| Journals | 1 |
| Contacts | 1 |
| As for printed books | 1 |

shows the approaches taken and, in the variety, confirms to some extent the difficulties surrounding bibliographic access referred to later in the section and described in some depth in a previous article (Lonsdale and Armstrong, 2001). Clearly, serendipity and peer recommendations play as important a part as information obtained directly from the publisher. Even where publishers provide information, their catalogues and Web sites are far less useful than flyers and publicity brochures. Unsurprisingly, virtually no respondents referred to traditional bibliographic tools.

The IMPACT survey sought to ascertain the problems experienced by institutions when trying to find e-book titles. Of the 11 HEI which responded to this question, two did not consider there to be a problem and one noted that they did "not seek out e-books". The remainder identified the following concerns:

- There is no single (bibliographic) source.
- There is no one source for all subjects. Each provider has different strengths in different subjects and it is difficult to decide which is right for the institution.
- e-books not on bibliographic database used by those ordering books (we use BookFind-Online which does not have e-book data but believe Bowker Global Books in Print does).
- No equivalent to Global BIP for e-books.
- Not yet listed in bibliographical sources as alternatives to print, so time

consuming to identify on a title by title basis.
- Also problems when you place an order and then discover it is not available outside the USA.
- Ascertaining whether they are the same as the print-based versions.
- Quite often cannot see lists of e-books until you have joined the service.
- Subject listings would be useful from their Web sites, but you have to be a member.
- Publishers' Web sites that are not up to speed – slow, inactive links, etc.

The first five concerns reflect the central problem of bibliographic control, the fundamental cause of which is the lack of legal deposit for this format and the consequent absence of a national bibliography. The issue of extending legal deposit is currently being addressed through the British Library Voluntary Deposit of Electronic Publications scheme, and it is noteworthy that the British Library is "starting to discuss voluntary deposit and archiving of online publications with publishers, and working to address the difficult technical issues in preserving these for the future" (British Library, 2002). However, a regulatory impact assessment to "assess the costs and other quantifiable impacts on the publishing trade and to the legal deposit libraries of the extension of legal deposit to non-print publication" will be undertaken this year. This suggests that there will be some considerable time before change can be effected if the results of the study are favourable. Also implicit in the comments delineated above is the continuing uncertainty as to which bibliographical sources and services might include electronic resources (Lonsdale and Armstrong, 2001). The issue of bibliographical control is one which has been largely ignored although it is gratifying that the JISC E-book Working Group will act as a catalyst since this field has been included in its terms of reference (see www.jisc.ac.uk/dner/ebooks/index.html).

## 8. Attitudes towards e-books

Table I may have shown that in 2002 only 48 per cent of respondents offer access to individual e-books (Table IV also demonstrates very limited take up through

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aggregators), and a variety of reasons for non-provision were documented. By comparison, the responses given during the subject mapping pilot focus group session revealed very positive attitudes towards e-books. The 17 academic librarians interviewed were asked to talk about the three key challenges facing them in managing their current book collection and then to reflect on the extent to which "going electronic" might provide answers. Table VIII, which is derived from a slide used during the eContent 2002 conference, offers a summary view of the responses (Edwards, 2002).

E-books were seen as offering better or easier access for users – there would be no need to come to the library, for example and (some) library stock would be made available to more users over a wider area. As one user said, this could tackle the multi-site question and could be very important to help distance or part-time students. E-books could allow access to those unable to acquire print copies and they could improve circulation, but only if the user licence reflected the real demand. Questions raised included the thought that seamless access from the catalogue for multiple users would be necessary. One speaker wondered if users would still want physical copies. Two voiced concerns that with reference material, people want a quick answer and not to "have to log in and load up the Internet", and that authentication issues may be more trouble than they are worth. However, the Authenticated Networked Guided Environment for Learning (ANGEL) project is addressing current methods for end-user authentication and management of access to licensed resources (MacColl, 2001).

It will thus "offer institutions greater choice, by enabling staff to use a wider variety of learning environment packages, resources and services that can be queried and managed via the ANGEL server" (see www.angel.ac.uk).

A number of positive administrative and management advantages, and no disadvantages, were voiced. It was felt that e-books would eliminate handling and provide instant issue/return and at the same time would free up staff time from shelving and ease pressures on physical space. As no physical storage space is needed, there is no need to re-shelve. If content becomes out of date, it can be removed easily but there would also be less need to edit stock and no need to classify. An e-book cannot be damaged: the problems of vandalism, missing and hidden books would be solved. Ironically, e-books were seen as a panacea for problems of book storage, unlike the responses from academic libraries in North America reported by Snowhill (2001).

The quality of the stock and/or the service was also seen as important. Current information might be accessed by users sooner, and there would be the potential to extend access to a wider range of material on individual subjects, including out-of-print books. Equally e-books can be easily updated and in respect of pedagogy and the curriculum, there is the ability to add and withdraw titles to suit changing subject content. As managed and virtual learning environments (MLEs and VLEs) become more important, e-books mean that libraries can easily offer a variety of access routes to materials in order to support a range of learning styles. However, it was emphasised that e-books must be relevant.

**Table VIII** Impact of e-books on collection management issues

|  | **Current problems (paper-based books)** | **Impact of e-books** |
|---|---|---|
| **Access** | High demand materials<br>Distance learners | Easier<br>Cost to end-user? |
| **Costs** | Value for money<br>Keeping current | Affordability for library and end user |
| **Administration** | Routine tasks<br>Protecting stock | Much easier! |
| **Quality of stock** | Currency<br>Relevance | Aid to currency and updating |
| **Space** |  | Big help! |
| **Marketing** |  |  |
| **Source:** Edwards (2002) |  |  |

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Our original report (Lonsdale and Armstrong, 1998) recommended that, in line with developments in North America and Australia, it was critical that a mechanism for establishing and overseeing a national strategy for e-book development be established to address issues such as the creation of a critical mass, access and promotion. The data reported above suggests that no critical mass has been reached, but a significant development which may influence these and other factors, has been the establishment of the JISC E-books Working Group in 2001.

## 9. National initiatives and facilitating access

The JISC E-books Working Group is responsible for strategic development within one of the eight major collecting areas identified by the JISC. Group membership comprises key stakeholders involved in the e-book publishing chain, including publishers, academic staff and librarians. Its terms of reference can be summarised as follows:

- to monitor the e-book industry worldwide and influence its development for the benefit of further and higher education in the UK;
- to secure cost-effective access to a comprehensive and relevant collection of electronic books for universities and colleges;
- to achieve sustainable economic models for electronic books;
- to assess the impact of new hardware and software, emerging e-book standards and digital rights;
- to encourage the option of electronic publication for authors while maintaining a realistic view of new technology;
- to define and establish strategies to ensure efficient bibliographic control of e-books;
- to take a balanced view of the role of e-books and understand how they can be integrated effectively into learning and research.

An overview of the e-book industry and an outline of the main issues on e-book acquisition was produced by the group in September 2001 (Woodward and Edwards, 2001). It concluded that critical success factors included availability of content, quality of content, pricing models and distribution. A collection development plan for 2002/2003 will focus on the acquisition of content in three main areas: to create a portfolio of major reference works for both higher and further education, to offer collections of major monographs, and to agree with leading UK publishers on suitable models for the provision of textbook material.

Reference works lend themselves readily to the electronic medium and the group has already started an interesting programme of offers to the community. At the same time, it is evident that many UK academic publishers are working on innovative projects to develop monograph and textbook collections shaped around UK requirements. The group is determined to build effective relationships with these publishers in moulding content and designing appropriate economic models. Electronic textbooks are by far the greatest challenge because, although the library market is crucial to textbook publishers' income, student purchase still represents a far greater share than purchase by libraries (Mintel, 2002). A number of projects between publishers and the JISC will seek to market test a range of economic models to assess their suitability for the UK academic sector. Distribution of e-books is another intriguing facet of the publishing chain and the group is considering closely both publisher-direct options and delivery of e-books via aggregators and library suppliers.

Marketing of e-books is an essential element of any e-book strategy. This article has referred to the subject mapping exercise which will involve librarians, academics and publishers. The group has also established a network of e-book representatives across HE, which is now being extended to include FE librarians. Members of the group have also been highly active in presenting and talking to academic librarians around the UK. There is undoubtedly a strong interest in e-books from librarians but they are waiting for the right products to enter the marketplace.

## 10. Conclusion

The data from the present surveys suggests that no significant change has occurred in the

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provision of e-books by British university libraries over the past three years. Web-based e-books now clearly predominate and although aggregators such as netLibrary are penetrating the North American markets, there is little evidence of this in the UK due, in part, to the strong North American orientation of their collections. Meanwhile, an encouraging number of publishers in the UK are beginning to address the need for e-book content of relevance to the HE and FE markets. While there is an increase in e-book publishing activity through independent publishers, and through aggregators, there is still not the critical mass to generate take-up by libraries. Factors accounting for non-provision include a lack of perceived demand, an ignorance as to the potential qualities of the medium, issues surrounding licensing and economic models, and problems associated with bibliographic access. Bibliographical control of e-books remains a stumbling block with librarians having to resort to a diffuse array of bibliographic approaches.

In comparison with perceptions of academic librarians reported in our earlier research, where librarians are *au fait* with the medium, they appear to hold a more positive view of the potential of e-books – in particular relating to stock maintenance and administrative tasks, and the enhancement of collections. Even librarians who are enthusiastic about the medium may not be able to allocate funding as book budgets are frequently controlled or heavily influenced by faculty. This suggests that a stronger partnership between librarians, academic staff (who may not be fully cognisant of the value of e-books) and, given the potential contribution of e-books to VLEs, learning technologists would be beneficial. A major national initiative is the establishment of the JISC E-book Working Group, which, given its remit, has the potential to increase the critical mass, to address issues such as licensing, and to focus debate on matters concerned with bibliographical control. Unequivocally the E-book Working Group is already creating a much greater cognisance of the nature and value of e-books among librarians and academic staff within higher and further education.

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