

THE e-BOOK MAPPING EXERCISE
Draft Report on Phase 1

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Executive Summary

The aim of the project was to inform the Joint Information Systems Committee e-Books Working Group on the e-book needs of specific disciplines within Further Education and Higher Education. During the early stages of the project a decision was taken to conceive the study in two phases. The objectives of the first phase were to:

1. investigate the perceptions of Information and Library Services (ILS) staff about e-books
2. explore attitudes to e-books within institutions
3. investigate the types of e-books required for individual disciplines
4. examine collection management issues associated with the format
5. investigate licensing and pricing of e-books.
6. develop a relationship with members of the FE and HE communities such that a subsequent e-mail questionnaire could be administered and collected with a high response rate
7. introduce the community to e-books (the concept, the technology, the capabilities, examples) as supplied by a range of e-book publishers in particular subject areas and as reference tools.

The methodology centred on a qualitative study, and combined introductory talks and product demonstrations, with focus groups in FE and the HE disciplines: business and management, engineering, and health and medicine. The instrument for the focus groups was sent to all participants in advance of each meeting.

Whilst there is little incidence of provision of e-books in either the HE and FE education sectors, positive attitudes towards the format on the part of ILS staff and, to a lesser extent, students and academic staff were reported across all disciplines. However, it is evident that considerable promotion of the format will be necessary to ensure widespread awareness and use, especially among academic staff. A number of the perceived advantages of e-books were seen as a panacea to some of the fundamental challenges in managing print book collections – most notably the problems associated with space, security, and updating. Added value features, the facilitation of remote and multiple access, and integration into Virtual Learning Environments constitute the other perceived primary advantages of the format. The reported positive attitudes of staff and users together with the perceived advantages suggest that there is considerable potential in the FE and HE sectors for the development of e-book collections. Although an array of potential problems associated with e-books was identified, these are primarily problems associated with all e-formats and not solely the e-book.

Conclusions reached on the preferred mode of delivery indicate that online dominates, and despite some local problems, PDF remains the preferred format. To date, there are few e-book readers in use in HE and FE, although there is some evidence of a growing interest in this field. With respect to the preferred types 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, 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. Furthermore, given the critical role that academic staff play in the selection process, it is essential that they be regularly apprised of developments in e-book publishing. Finally, ILS staff should 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 re-affirmed the importance of the role which the e-Books Working Group is playing in negotiating acceptable group licences.

The single recommendation of this report is that the proposed second phase be implemented by the Working Group, and that it embraces both a qualitative study of certain other subject fields, together with a quantitative investigation of the specific needs of users and ILS with regard to titles and publishers of e-books.

1. Introduction

1.1 Genesis of Project

The study was commissioned by the Joint Information Systems Committee (JISC) e-Book Working Group as the first of a number of studies to facilitate the uptake of e-books by the further and higher education (FE and HE) communities. The purpose of the Working Group is to provide leadership in establishing a strategy for the development of e-books for the benefit of the academic community, and it was felt that it would be advantageous to determine the wishes of the communities.

The study was undertaken by Chris Armstrong (Information Automation Limited) and Ray Lonsdale (Department of Information Studies, University of Wales, Aberystwyth) in conjunction with Louise Edwards, the JISC Collection Manager for e-books. The project began in April 2002 and reported in April 2003.

1.2 Aims and Objectives

The aim of the project was to inform the Working Group on the e-book needs of specific disciplines within FE and HE. During initial discussions on the project team and with the Chair of the Group, a decision was taken to conceive the study in two phases.

The first phase was designed to determine current views on, and approaches to the collection of, e-books in a specific number of subject areas or disciplines, and in FE and HE. At the same time it was felt that the team could use the survey to introduce a range of products to the community. This would:

- provide a good introduction for the survey work and focus groups; and
- widen the experience of e-books within the community.

Thus the objectives of the first phase were to:

1. investigate the perceptions of Information and Library Services (ILS) staff about e-books
2. explore attitudes to e-books within institutions
3. investigate the types of e-books required for individual disciplines
4. examine collection management issues associated with the format
5. investigate licensing and pricing of e-books.
6. develop a relationship with members of the FE and HE communities such that a subsequent e-mail questionnaire could be administered and collected with a high response rate
7. introduce the community to e-books (the concept, the technology, the capabilities, examples) as supplied by a range of e-book publishers in particular subject areas, and as reference tools.

The second phase had two objectives. The first was to continue the qualitative study and investigate a range of other disciplines. The second objective was to undertake a quantitative study, which would drill down to the greater detail of user needs in terms of publishers and titles for all the subject areas covered in both phases.

2. Methodology

2.1 Survey population

The initial selection of disciplines was formulated so as to include some subject areas that were common to both FE and HE. The disciplines selected were:

- business and management
- engineering
- health and medicine

The disciplines represent fields where there was a known base of e-book publishing and where feedback from the communities suggested need. They were also selected as representing important teaching areas within the sectors. It was felt that FE could best be accommodated by cross-disciplinary meetings.

Thus, Phase 1 of the project comprised ten focus groups with librarians from both FE and HE, and also included some Learning Resource Centre managers. The focus groups that were undertaken were organised with the aid of subject representatives of the disciplines and FE. The groups are shown in Table 1.

Group	Place	Number of groups	Number of individuals	Number of institutions
Business & Management	Birmingham	2	24	21
Engineering	London	2	31	25*
Health and Medicine	London	1	10**	10
FE/HE (cross-discipline)	Cranfield	3	20	16
FE (cross-discipline)	Newtown	2	9 ⁺	7
Totals		10	94	69[†]

Table 1: Phase 1 Focus Group

* Includes 7 non-academic, special libraries

** Includes BL, BMA and CILIP representatives

⁺ Includes RSC Wales representative

[†] Total allows for institutions that attended on more than one day

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. The Engineering Groups were organised in conjunction with the Aslib Engineering Group and this accounts for the presence of seven librarians from special, rather than educational, libraries. Similarly, the Health and Medicine group was attended by representatives from the British Library, CILIP and the British Medical Association. 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 day/meeting. A full list of participating organisations is given in Appendix 2. The list is arranged alphabetically, and the numbering system used against quotations of transcribed material in the body of the report was created to ensure anonymity and does not reflect the list order.

2.2 Data Collection

The methodology for the first phase reported here centred on a qualitative study and combined introductory talks and product demonstrations, with focus groups in which issues were explored in some depth. An interview schedule was devised, scrutinised by members of the e-Book Working Group and revised accordingly. The methodology was piloted at the UC&R/CoFHE conference in Bath in April 2002. The instrument can be found in Appendix 1. An abbreviated version of the instrument was sent to all participants in advance of the meeting so that they had a clear understanding of the areas to be discussed. The focus groups, which were moderated by the authors, 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 combined sets of annotations was undertaken.

2.3 Evaluation of Methodology

There can be no question that the full-day meetings, which began with demonstrations and an introduction to e-books and ended with the focus groups themselves, were a success. The meetings achieved two of the project objectives in that they introduced over ninety individuals from 69 institutions to e-books and, at the same time, developed a rapport between, on the one hand, the organisers and moderators, and on the other the research subjects. Following the introductions everyone was willing to engage with the moderators and take an active part in discussions.

It was felt that the best way to record what took place was to take sound recordings; however, in order that the flow of conversation should not be interrupted artificially by individuals repeatedly identifying their organisation, the focus groups were also recorded by note takers. At the transcription stage, speakers were identified with the help of these notes. This approach was also deemed successful as the debate was always free-flowing, and frequently lively.

Recording and transcription, however, were not without their problems, and one entire session failed to record audibly and has only been analysed from the notes. The notes thus served as a useful failsafe device. The work of transcribing the tapes was lengthy and delayed the reporting stage by a short period.

It should also be noted here that the survey results were qualitative rather than quantitative as required by the original objectives. As has been stated above, the second phase of the project will respond to this need.

3. Results

The results will be presented under a series of headings, which correspond broadly to the order in which issues were discussed in the focus groups.

Many of the questions were generic in nature and there is no reason to cross tabulate these by discipline. 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.

In every focus group a formal introduction to the discussion preceded the questions themselves. This enabled the moderator to explain why the information was being collected and to assure participants that no comments would be attributed to either individuals or organisations.

3.1 Challenges in managing conventional book collections

The first issue to be addressed was designed to place the rest of the session in context and explored challenges that faced the groups in managing their conventional book collections. Given the focus of the day, however, it was inevitable that e-books were often discussed from the start. The following challenges are presented in the order in which they were discussed.

3.1.1 Space

Space and budgetary concerns were the most important issues across all groups. Two librarians made the same plaintive response “We haven’t got any space left” – a sentiment that referred to storage of book material as well as to current stock. It seemed clear to all that e-books could offer a partial answer to storage issues:

And certainly in terms of space. I mean we have no space left. We do a constant pruning of our book stock and unless we can go over to this in some areas we’re going to have problems. [39]

And the other [perspective] is about out-of-print books and how long XXX keep out of print books for, because of space and cataloguing and so on. There are some areas ...and some reference books that have been out of print for many years... [3]

3.1.2 Budgetary and economic issues

Budgetary and economic issues both loomed large. The connection with saving space was mentioned – “And of course it saves space and space costs money” – but constraints on book purchase were evident throughout. The economic model for purchasing or licensing e-books was covered later in the session and is discussed below, but one comment captured the general mood:

At the moment it’s a struggle to buy the simplest textbook, let alone think about a wonderful online resource that costs about 1k a year. Forget it, basically. [6]

Even the pricing model for conventional books is not entirely acceptable:

New editions, having to keep updating, particularly with the law section, having to update every year, expensive books. [53]

Ones that come out in new editions every year [are] hugely expensive and obviously I realise that’s where publishers take the money, but often we need to get new editions but

it's only the odd chapter that's got to be changed just now, it would be very attractive to have that available [electronically]. [12]

Several groups raised the issue of the way in which budgets are managed:

And our budget is split before we start, so the resources librarian has the budget for books and I have the money for electronic resources, and mine is not accounted for to the different academic areas. I basically buy what I want. [49]

This issue, however, perhaps has greater relevance for the discussion of the provision of e-books and is elucidated further in Section 3.3.5.1 below. Staffing levels – another aspect of financial considerations – were mentioned in several cases:

It's a big thing, not just in terms of actually buying the materials, it's also employing staff and then caring for materials, and issuing them and returning them and viewing that takes time, and it comes down to money. [16]

3.1.3 Security, theft and damage of stock

Security, theft and damage of stock, are also problems which centre on the physical book stock and, as one of the quotations (below) shows, people are looking to electronic resources to solve this problem, too:

And also things like theft and non-return. Sometimes there's a whole set of textbooks. No matter what we do to secure them a book is just not returned at the end of the year. [48]

We have a lot of problems with vandalism, with chapters ripped out and electronic information is a way of solving that. [60]

3.1.4 Currency of collections

Currency – the need to keep updating books – was also mentioned regularly by groups as a significant challenge. Budgets have to accommodate new editions as well as new titles in those areas, such as medicine and law, where change is constant and current practice has to be available to students:

New editions, having to keep updating, particularly with the law section, having to update expensive books every year. [53]

It's definitely around currency of stock, I mean some subjects don't matter so much but others you could update it with every new edition that came out every year or every 18 months. ... Anything that legislation applies to really. Computing books. [48]

3.1.5 Access

Several manifestations were discerned of another significant problem in managing the book collection, access. The first concerns the issue of opening hours and is reflected in the following two responses:

At XXX, we have recently extended our opening hours and we've had some of the largest numbers actually coming but it's been to the central library because a number of study places have closed down and we're really cramped for space in departments. So we've actually seen more people coming to the central library. [23]

The ... libraries at the University of XXX operate a 24 x 7 access policy to library collection, but we're only staffed Monday to Friday 9 – 7, but therefore that's creating rather a problem for us in terms of actually hanging onto the stock and we have rather a lot of material that goes missing, probably much more than those libraries where access is only related to staff hours. [15]

A second manifestation of access concerns the issue of services to part-time and distance-learning students. Concern was strongly articulated within the education sector, but with a parallel need felt amongst the special librarians present in one group:

I think one of the key issues for our institution is really access for part-time students. The UK full-time higher education market is saturated with supply, but demand is falling because of grants, so therefore we are looking at part-time students like a lot of institutions and its providing access for those student when they are very often at work during the week. A lot of places have set up distance learning support units that provide services for part-time students and have spent money investing in that [32]

Our major problem at XXX has been access because we have x,000 members, right across the UK and abroad. We have a postal loans service, but obviously that means that access isn't immediate and people want it right now, not in a few days time. So access is definitely our major problem. [12]

All of the text books being out on loan and the students still wanting them, and no access for distance learners, or distance learners are forced to find their own services locally. [43]

3.1.6 Lack of multiple copies

Access was mentioned by several groups in the context of facilitating access to individual titles, in particular, titles of text books. Short-term loan collections and texts on reading lists are notoriously difficult to manage and often the subject of much complaint when numbers of students want the same title at the same time:

Well our major problems at XXX are basically students who all rush down together for the same book and we've only got four copies on the shelf. At this time of year we've got a lot of reservations going in for the key text books. They've all got their reading lists and all desperate to get them out. [49]

Heavy use of certain texts I think possibly for a short time of the year, so you may have 200 students wanting one book, of which you can't get 200. [45]

Well, for us just increasing student numbers overall, that has created a real challenge. We have a short loan collection which every year brings out more complaints than just about any other aspect of the service. We've got what we think is a pretty reasonable formula for buying multiple copies. It is never enough and there is never enough access at those peak times in the academic year. [61]

3.2 Advantages of e-Books

One of the fundamental objectives of the study was to ascertain the perceptions of ILS staff and users about e-books. The first aspect that the study explored concerned the perceived advantages of the format. Having elicited the challenges of managing print collections, it is intriguing to note that participants across all disciplines and sectors identified four advantages which they believed might offer potential solutions to some of the challenges cited in sections 3.1, namely: space, the facility of updating, security and access. With respect to the first three of these, the quotations below exemplify the views of participants.

3.2.1 Access

With regard to access, two dimensions were delineated, remote and concurrent access.

3.2.1.1 Remote access

There was a strong belief that e-books would offer a solution to serving remote users, especially for institutions with significant numbers of distance learning and part-time students:

As I say, the majority of our members actually don't access in person and that's the majority of our membership access remotely, but we always get adverse comments about the time it takes to post a book, if they need it immediately sort of 2 or 3 days and so abroad, and there is heavy use of the library service, nurses in the armed forces, nurses working in middle east, etc where often their only access is XXX and they don't want to wait for books even to go by air mail so speed and remote access has to be the major advantage. [12]

Continue to provide 24 x 7 access with access to all material in the knowledge that it wasn't going to be XXX from the shelf and it couldn't be physically taken out. [15]

We've already touched on some earlier on, XXX was saying distance learning, things like access from anywhere, etc [31]

I think it has to be a particular advantage to the part-time and distance learning. [30]

I think it is accessibility 24x7 on and off campus and multiple users [46]

3.2.1.2 Concurrent access to texts

Participants across the disciplines also felt that, given appropriate licensing models, concurrent access to heavily used titles might be significantly enhanced:

Concurrent usage is the attraction for us, in that members don't have to wait until there's a book available [12]

I think the up side is the technology which you can have more than one user looking at the same item. [46]

3.2.2 Space

*We haven't got any space left. [62]
So the e-book holds a potential panacea or solution to this?
They do not take up any space. [62]*

Conserve space and book shelves, no more dusting, waste of transport, no shipping charges. [unattributed]

Space saving. [12]

3.2.3 Updating

The issue of readily updated material is one that I think in the health care sector it's very important. [7]

3.2.4 Security

You can't steal e-books, write on them or hide them. [34]

3.2.5 Added value features

Another primary advantage was the array of added value features offered by e-books, perhaps the raison d'être of the medium. A range of different elements was identified by

participants as revealed in the following quotations, and these were perceived as a strong recommendation for the format:

Obviously there's things like animations and so on, it makes it much more dynamic to the user. [31]

The functionality as well, such as searching, highlighting, adding notes, although we do scribble on textbooks, it is not encouraged, but the fact that they can do that electronically is really good and the integration with VLEs and other electronic resources. [29]

I would expect an electronic book to have things like hyperlinks... I would just think that's a given, and I think a lot of the users would. So I think there are definitely advantages which need to be used. [13]

Yes, and I think the other issue is about linking to the actual evidence that you've got, statements that can actually follow citations through, and things like that. [7]

And things like evidence based information ... I don't know if you've seen that at all, because it has a very concise summary of what you should do if you're a junior doctor at 2 in the morning; and then there are two different layers behind that that give you more of the rationale of their links. [13]

... the search facility rather than looking at the index, just type things in, and get more specific things or immediate results out. [31]

An important caveat expressed by some individuals, especially those within the FE sector, was the need to ensure that added value features must be relevant to the needs and abilities of particular groups of users, thus raising pertinent pedagogical issues for e-book authors and publishers and important implications for information literacy training:

I'm a bit worried. I've got a very mixed background academically and vocationally, and what I've seen is people who are very highly educated or people who are very poorly educated, they're a bit uncritical about anything electronic. And they're being conned almost into believing that if it's on a screen it's more accurate and more up to date than anything else. [47]

I think you could get quite a lot of students who do get lost. It depends on the student, [27]

That bring us back to user education which I'm funding ... [23]

You're right, but it's not specific to e-books, it's a common experience I think that in universities students are overwhelmed by the sheer variety and volume of information that's available. [18]

Several participants from the special libraries sector in the Engineering focus group also echoed this opinion:

Hm, they don't necessarily want all the bells and whistles, they want it to come through quickly, they don't want animations unnecessarily, not trying to understand something in a very specific piece of information. [21]

3.2.6 Portability

There was a small response from groups, especially Business and Management, which recognised the advantage of portability and the potential of downloading texts onto handhelds:

I think portability is a potential plus in terms of downloading to a Palm Pilot for example. That is here and now and it is perfectly do-able to read a book, if you like reading a book on Palm Pilot, to do so. It is not particularly sophisticated, but it does work for students who are, certainly MBAs, on the move all the time, it would have a lot of advantages perhaps. [36]

Whilst it would appear that the incidence of use in HE and FE is rare, there is growing evidence that some institutions have been investigating the potential of handhelds and have distributed them to students as part of a trial (Dearnley and McKnight, 2001).

3.2.7 Integration into Virtual Learning Environments

Respondents from all sectors and disciplines, but from FE in particular, perceived the educational potential of linking e-texts to Virtual Learning Environments (VLEs), with the concomitant advantages for academic staff of creating a synergy between the text and the curriculum, learning methods and assessment procedures:

There are other advantages in as far as I can see that people would link them in very closely to the teaching methods of the business school. In our case, I believe 50% of lecturers have everything we can do on Blackboard, and I think they have a link straight in. [33]

I think from my experience some academic staff much prefer to be able to design and develop a platform themselves for the questions and exercises, rather than off the shelf relating to the text, with it tailored immediately to their cohort and make it individual. [32]

Incidentally, this advantage was also recognised by some of the publishers who participated in discussions:

That is something that we offer, and we say to an academic "if you want to we'll turn this into a PDF file or an HTML file and you can make it as interactive as you want to"; and there is one academic who I know is doing that, but that is certainly an option. [Publisher X response]

3.2.8 Tailoring texts

The value of tailoring the text of e-books to the individual needs of students was also recognised. One dimension of this concerns the advantages of purchasing and licensing chapters or parts of a monograph related to the particular curricula requirements:

I think bites of learning: the XXX finds that most nurses don't have time to see a module through from beginning to finish and it is this sort of needing the information right on time and therefore if things are written for the web that are short, to the point, that would be absolutely ideal, rather than a 2,000 page text book. The idea of chapters and commissioning chapters is attractive. [12]

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

Yes, we will monitor access and use through the VLE. We've segmented the e-book material by chapter. [5]

Another is the great potential the e-book offers for students with special needs, in particular specific learning difficulties:

And if you can pull out small blocks of information as opposed to presenting a whole book to a student, if you have got a problems with, I don't know, reading or your level of basic skills, having smaller chunks of text specifically aimed at what they're doing is a lot better surely than having the whole book which is quite scary to try and cope with. [52]

This is an issue which some publishers (e.g. OUP) at both the focus groups and during the presentation of these findings know to be of critical import (as also evidenced by the e-Book Working Group presentation from TechDis), and one which is likely to motivate ILS and academic staff to promote the use of e-books.

3.2.9 Other advantages

The advantages listed above were cited by significant numbers of participants in the focus groups.

Several other advantages were cited by single individuals, and whilst these perceptions cannot be said to be indicative of a wide range of participants they have been included for the sake of completeness:

- Capitalises on student enthusiasm for modern media; the prestige factor of new media
- Can reduce the amount of photocopying for class handouts
- Can borrow e-book versions of reference books which would not normally be allowed out on loan
- Technical processing costs are less.

3.3 Problems associated with e-Books

The perceptions of ILS staff and users of the problems associated with e-books were explored. A mass of specific problems was identified, and these have been categorised and grouped under nine generic headings. A tenth category, Bibliographical Control, was also identified, however, since an objective of the study was to investigate collection management issues, this is discussed later under Section 3.7, below.

Table 2 delineates issues that were raised (bold lines are the generic headings; where more specific issues are mentioned these follow, and the 'Indicative Weighting' includes them).

3.3.1 Hardware and software

Predominant are the problems associated with hardware and software, many of which reflect general concerns which participants experience with e-resources, namely standards, technical systems failure, proliferation of hardware types in the library, obsolescence and accessibility:

On a similar issue to the IT one, we have plenty of IT, I've got a nice new learning centre, but we haven't got network printing so there might be 100 PCs only 10 of which you can actually print off. [58]

	Indicative Weighting
1. Hardware/software problems	23
Standards, accessibility, interoperability	
Theft/loss of equipment on loan and from library	
Technical system failures	
Hardware and software obsolescence	
Access problems for remote users	
Integrity of texts	
Proliferation of hardware types in the library	
Difficulties in handling and running CD-ROMs	
Difficulties associated with circulation management of handhelds	
Lack of hardware/connections at home	
2. Printing/copying	20
Printing by users: paper waste and cost	
Limitations on printing due to licensing restrictions	
Copyright/royalties	
Users do not want to print; it takes too much time	
3. Physical use problems	16
Pressure on hardware resources; not enough hardware	
Not as pleasurable to read as print	
Legibility on screen/resolution	
Small screens; not enough text visible at one time	
Physically tiring [eyestrain, weight of readers]	
Use problems for visually impaired/disabled readers	
4. Interface problems: non-intuitive	12
Navigation within text difficult	
IT skill level needed is too high for some users	
Software is non-intuitive	
Plug-ins are difficult for users	
Linking	
5. Management	10
Cost	
Simultaneous access by several users	
Regional OPAC leads users to think they have access to e-books only available at one institution	
General collection management problems	
Connection charges for remote users of online resources	
Loaned laptops damaged	
6. Availability of texts	9
Archiving: Loss of access to entire set/backfile when you stop paying	
Much of what is wanted is not available	
US bias in choice of texts	
7. Authentication problems	7
8. Students need information literacy support	4
Plagiarism by users	
Users too uncritically accepting of electronic media	
9. Technophobia in users	3
Staff technophobia	

Table 2: Problems identified for e-book provision and use

3.3.2 Printing and copying

A major issue identified by participants across the disciplines and sectors is the users' preference to read and work on text in hardcopy, a corollary of the problems of physical

use of e-books discussed in the next section. This has the inevitable cost implications of printing and photocopying for both the user and the institution:

We have recently introduced printing charges, and I think we may be a bit behind other institutions possibly already charge for printing, but that is a bone of student contention and therefore, printing, having to print out from an e-book I think would be yet a further one [30]

The other thing I find amazing is the fact that with e-journals every time someone reads an article it's almost inevitable that they'll print a copy. The amount of printing is incredible that's logged through our system. [33]

Do students get charged for printing?

Oh yes, they get charged for everything. [33]

I think there's still a lot of reluctance to charge people ...and so as a library...which provides 24 x 7 but doesn't actually charge for printing I can imagine we may rethink that very quickly - whether to provide access to e-books on our computers and they will just start printing them off during the night and taking them away to read. [15]

I must say that we also don't charge our users for printing and, with XXX postgraduates, we would be very worried. [13]

I guess the other way of looking at the costs is that you like to persuade and take advice for this value material and then the student wanting this material will not read it on the screen and will have to pay for printing out; it's a 200 page book, it's 4 pence a sheet, it's an extra £8 [62]

3.3.3 Physical use

The difficulties associated with using the electronic format were uppermost in the minds of participants. A large range of issues was identified. One cluster concerned the physiological constraints:

I think it is physically exhausting, especially to the eyes, to read a lot of text on the screen. [1]

Yes, I downloaded books onto Palm and it [reading] is not an enjoyable experience. [3]

... people read more slowly on the screen. It's not so easy to do, and also you need very good resolution from the point of view ... I mean there's a very nice photograph of the seaside there which looked great on the screen, but if you've got tables and things they have to be very clear and still people will be reading more slowly. [13]

Another difficulty which surfaced in several guises, was that of a reluctance on the part of the user to move away from paper-and-print:

... people like to actually physically handle the books and ... the lack of intimacy and the reduced enjoyment of the reading experience [2]

Speaking personally, I have no wish to read huge amounts of text on the screen, so if it's interesting I'll print it [62]

You can't flick through the material in the same way you can when they're electronic. [2]

I basically just print off e-books. I'd rather read in a comfy chair or in bed. I spend enough time already on a computer. [5]

I see one huge problem with it. I do research with a number of books open at the same time so that I can cross-reference ; I can't do that on screen. [3]

I agree with you on that. I've even tried having help on one screen and using another screen, and it's still not the same as somehow being able to flick back and forth. [2]

3.3.4 Non-intuitive interface problems

Of equal concern are interface problems with non-intuitive software. The most prevalent issues cited were difficulties of navigating within the text of e-books; the IT skills levels demanded by certain e-books were too high for certain users, and the suggestion that plug-ins prove difficult for users:

There's still this business of what you're going to actually get, the interface that you're actually going to get, just knowing how it's going to work and whether it's going to be worth it. Some of them are very disappointing [27]

3.3.5 Management issues

Two dimensions relating to the management of e-books were identified. The first relates to issues of cost.

3.3.5.1 Cost

The general financial implications of developing and maintaining electronic collections are a cause for concern:

At the moment it's struggle to buy the simplest textbook, let alone think about a wonderful online resource that cost about 1k a year. Forget it, basically. [6]

Specific worries were also expressed about the costs of licensing, and this was voiced most strongly by representatives of those institutions serving very large memberships, particularly in Health and Engineering:

...because the size of our membership, the costs then can be prohibitive, and although electronic access would be our preferred means of providing a remote service the cost suddenly become XXX prohibitive. [12]

... and why should we have to keep paying every year for something we bought? [19]

3.3.5.2 Collection management

A range of issues associated with managing collections of e-books was cited. ILS staff recognise the new and difficult challenges associated with selection, evaluation and acquisition as well as the concomitant staff training implications:

Collection management becomes much more complex when you are having to monitor both the print and electronic environments. [63]

Further consideration of these issues is made in Section 3.7, below.

3.3.6 Availability of texts

To a lesser degree, participants have reservations about the availability of e-books. Concern was expressed about ownership of e-book titles beyond the licensing period, and archiving:

For us there would also be a question about archiving and long term access. ... with research monographs we do expect to have a permanent copy which we own. So I can't see an e-books model working for that type of material, not yet. [61]

There was also the archiving issue of that too, so lots of things are out of date the minute they get published but you will get people who might want to see an earlier edition of something and from the library point of view, it depends whether you actually ... if you stop subscribing to a new book will you still be able to access the version you had before, and even if you've got the right to do that, will your software and hardware align to do it? [13]

I think archiving is a major problem, particularly if you're looking to buy research books. ... if you're buying access to a research monograph then you might only buy one copy and if you buy that as an e-copy then how do you access it in the future? I think it is a major problem. [32]

A number of participants were equally concerned about the limited array of current titles on offer and the problem of bias, especially North American bias. If an institution decides to embrace e-books while limited acceptable titles are available, this affects that institution's collection development policy and thus the pedagogical decisions that underlie the teaching.

3.3.7 Authentication

With respect to authentication, a particular challenge is the need to ensure that access to e-books for *all* users is easily facilitated, and the matter of Athens authentication was raised repeatedly:

I mean the OPAC is available to everybody outside the organisation. If you've got a direct link in there to your e-books it means everybody can be using it and you'd need authentication to use it. [52]

We'd also want to see it linked to Athens authentication or something, for off-campus users. [61]

3.3.8 Information Literacy

The results of the JISC-funded JUSTEIS project which has investigated the provision and use of e-resources by students and academic staff in HE and FE over the past four years have revealed a fundamental ignorance of many types of e-resources and a low incidence of use (Armstrong *et al*, 2002). The findings have also underlined the lack of information skills on the part of many student users. It is surprising that a comparatively low weighting was accorded to problems associated with the use and exploitation of e-books. Some concern was expressed, as the following quotation suggests, and there are, therefore, important ramifications for information literacy programmes within the HE and FE sectors:

I think you could get quite a lot of students who do get lost. It depends on the student, I mean even with electronic journals you find students who can't actually make up a sensible reference because they get straight to the article in a journal, and they don't know what the journal is, what the issue or [volume] is and you have to show them how to work back to that. [27]

3.3.9 Technophobia

The 1998 study of e-book provision in the UK undertaken by the authors revealed that for both the ILS staff and e-book publishers surveyed, technophobia was a central concern, militating against the development of the format (Armstrong & Lonsdale, 1998). Five years on, it is interesting to note that as an issue it is relegated to the lowest position in the table, suggesting that for the participants in this study technophobia is no longer a major consideration:

Suppliers increase technophobia by competing on added features [3]

3.3.10 Conclusion

Whilst it was the intention of this study to identify the problems that pertain specifically to e-books, and certainly, a number of the issues cited above are specific, the overall

conclusion is that the problems listed are essentially generic in that they embrace the broader matters relating to the whole spectrum of electronic resources.

3.4 Significance and Status of e-Books

In addition to investigating the advantages and constraints associated with e-books, the study sought to explore the perceptions of ILS staff and users about their significance and status within the different institutions.

3.4.1 Incidence of provision

During each focus group participants were asked to indicate if their institution currently offered e-books. Approximately one-third (33) of the participants offered e-books although for many of the institutions that indicated that they did have e-book holdings, the actual number of titles was very low, in some cases only one title. There was a suggestion that the institutions holding the largest collections of e-books were in the fields of Health and Engineering. Six further institutions indicated that they were investigating the acquisition of e-books or negotiating with suppliers.

The issue of preferred format is discussed in detail later (Section 3.5), however, another aspect of provision is the fact that more institutions currently offer e-books on CD-ROMs rather than via the Web. Given the history of e-book publishing, this finding is to be expected, and interestingly mirrors the findings of recent research into the provision of e-books within the UK public library sector where the predominant format is also CD-ROM. (Dearnley & McKnight, 2002).

3.4.2 Use

Although e-books are little used amongst the various institutions represented, and there is but a slight demand for this format, there is a strong sense that use will increase, especially in the light of experience with e-journals:

I think from the evidence of e-journals people now ... it's been so successful certainly in science and technology, and management as well, that people assume that we should offer e-books in the same way and can't really understand why we're not. [38]

I think if you look at how quickly e-journals have developed and the usage of them has expanded massively I'm sure with everyone, in a pretty short space of time really, and I'm sure the same thing would happen. [32]

3.4.3 User attitudes

Whilst librarians detected enthusiasm among users, there was an equal number that believed that user attitudes are not positive, and that attitudes would need to be changed if usage is to increase:

I don't think they understand them. I think there is some confusion between e-books and what online learning is all about as well. [2]

... yes, libraries are perceived as being about physical things. [4]

I asked all the students last year what they thought of e-books thinking that they come in and use the Internet, etc, etc and surprisingly they were a bit wary about it, this was before they'd had experience of it, but I was just interested to find out that if we put money into e-books as opposed to paper books, you know, how they'd feel about that and there wasn't the overwhelming support I thought there would be. [31]

One potential stimulus to accepting the format is the move towards virtual and managed learning environments and Web-based courses:

There are certain correlations with web based learning in general ... and I think that people have discovered that ... it's starting being a substitute for an academically traditionally taught course, ... web courses are a supplement to them, and perhaps that's [students] thinking about e-books as well. [18]

In several groups there was a strong sense that it was the library staff who were not only positively disposed towards e-books but who were actively creating an awareness amongst the various user groups. Indeed, it was felt that ILS staff had a major role to play in disseminating an awareness as to the nature and value of e-books:

I don't think [engineering research library users] have any knowledge of experience of one. I don't think they've come into contact with them at all. I mean we've not been asked for them by our by their clientele at all. It's something that the library staff are developing or pushing. [25]

I think probably library staff can see potential more than academics and students. We can see the potential of solving problems like short term collections and access via e-books whereby you have some ... certainly the students who are - quite a lot of them are middle aged and technophobic and you'd have problems actually conveying to them that this was a good step. [44]

3.4.3.1 Attitude of non-academic library staff

Whilst the focus of this study was academic libraries, one discipline surveyed, Engineering, included representatives of research libraries in their focus group. The responses from these special libraries on the issues of provision and use correlate well with those of academic librarians.

3.4.4 Conclusion

The positive attitudes towards e-books reported by the participants reinforces the perceived advantages of the format cited above, and together these findings suggest that the academic communities of both HE and FE are positively disposed towards the medium, and there is clearly a large potential market for publishers.

3.5 Preferred formats

Confirming the findings of our 1998 study (Armstrong & Lonsdale, 1998), is the overwhelming preference amongst all disciplines for the online format, at the expense of CD-ROM. Although CD-ROM is the most prevalent format in collections at the present time, it was recognised universally to be a dying breed:

...it was agreed that the CD is generally out of date and the use has declined. [Moderator summary: 47, 52, 53, 54, 55, 56, 57]

CD-ROMs are dead, a dead issue. [36]

A view echoed by at least one publisher:

I will do hardly any more CD products. They're a dying breed. [Publisher]

There was ambivalence across the groups with respect to the PDF format. For some participants PDF was the preferred format for their users:

We found with our XXX we offered them they could download in PDF or HTML , PDF was by far the most popular , by far, and I think the users do like it to look like the printed journal and that's the reason. [12]

I like PDF. [49]

Such positive views were, however, matched by criticisms that focussed especially on the problems of file size and printing:

There are problems with PDF – they're large files. [4]

Quite slow to download often, slower than HTML. [52]

*About PDF performance? Do you have any preferences?
They don't seem to get on with our computers very well, they all freeze. [11]*

There's more controls on PDF I think, they can restrict your printing or copying abilities, whereas with HTML I think you more or less can just copy it. [49]

There's more controls on PDF I think, but they can restrict your printing or copying abilities [49]

Only one discipline, Management and Business suggested that students would be interested in the provision of hand-held readers, a view that correlates with the advantages of portability discussed above (Section 3.2.6).

3.6 Types of e-books required for individual disciplines

A central objective of this study was to identify the types of e-books which individual disciplines felt were most likely to be in demand, and to ascertain the preferred levels. The findings are set out in order of preference.

3.6.1 Textbooks

Unequivocally, for all disciplines in both HE and FE, textbooks constitute the priority. Regarding level, whilst all disciplines agreed that the undergraduate body is the preferred target audience, Business and Management and Engineering also identified another priority, titles which relate to taught Postgraduate courses. Within the field of Health, another significant group constituted qualified nurses and practitioners – indicative of an academic institution having to serve other communities.

A fundamental difference between the HE and FE sectors is the inability of the latter to distinguish between particular levels and user groups. It was felt that e-books would be appropriate for the whole spectrum of users in FE, from vocational courses, A-level (mentioned regularly) and International Baccalaureate to undergraduate courses (indeed, the specific issue of franchising HE courses and the implications for e-book provision was mentioned by FE participants):

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]

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.

3.6.2 Reference materials

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 titles, and suggested that it would be feasible to collect quantitative data about this format in the second phase of the study.

3.6.3 Research monographs

A smaller number of participants from Health and Engineering identified research 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.

3.6.4 Grey literature

Representatives from Engineering and FE also prioritised certain forms of grey literature, the most prevalent of which are 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 you're practising engineers require [25]

3.6.5 Out-of-print and free e-books

Several participants did mention 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 book sellers, 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, although some doubts were expressed over their quality:

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]

Yes, we have linked with about 900 free government reports in particular, straight from a catalogue, and that's very popular. We don't purchase e-books. [12]

Most free e-books are pretty atrocious. [3]

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 JISC e-Book Working Group which is being undertaken by the Oxford Text Archive.

3.6.6 Conclusion

The considerable discussion generated by the question of e-book requirements confirmed the importance of undertaking a quantitative study identifying titles and publishers within individual disciplines. Indeed, a number of groups not only supported this notion but offered to participate in the second phase.

3.7 Collection Management Issues

Participants had identified the management of e-books as constituting an area of particular concern (Section 3.3.5). Indeed, the project had, as one of its objectives, an investigation into issues surrounding collection management. Five groups of issues were identified.

3.7.1 Selection and Acquisition

3.7.1.1 Collection Development Policy

There is little evidence to suggest that librarians have embraced e-books within their collection development policy. Only one institution is presently developing a collection development policy for e-books; three others are considering doing so. This is only indicative, however, as in some focus groups the discussion did not extend to this issue.

3.7.1.2 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 earlier perceptions about the advantages of the format and preferences for types of e-books identified above.

Underlying all responses was the strongly articulated opinion that ILS staff prefer to be responsible for the selection of specific titles, rather than publishers who often licence through such devices as bundling. (see Section 3.8.2 for further discussion)

Whilst 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 is considerable concern over the ignorance which persists amongst 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]

Yes. It's a big training issue for FE [academic] staff as well because a lot of them aren't aware of these things. I had a couple of staff in yesterday doing the VDCE and they're looking to update their resources and I was talking to them about using Blackboard and online and they hadn't got a clue. They said, 'We haven't got time to do it'. [unknown]

The most economic way of providing a title is 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 that 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]

3.7.1.3 Approvals

Participants from all disciplines expressed the need to extend the concept of approvals to electronic 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]

3.7.1.4 E-book trials

Whilst several publishers indicated that free trial periods were available for e-books and the value of these was acknowledged by participants, 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 and they have ... [17]

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:

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

3.7.2 Bibliographical Access

Research into the bibliographical control of e-books has been undertaken by the authors over the past four years (Armstrong, Edwards & Lonsdale 2002). The findings of this study confirm the conclusions of our earlier investigations 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 amongst 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]

*Do you feel you have a knowledge of the bibliographical resources and tools that would allow you to access to electronic monographs, textbooks?
No, haven't got a clue. [unattributed]*

*To what extent are you aware of the range of bibliographic resources and services that provide you with the knowledge of what electronic book publishing there is?
I have no idea. [50]*

Are you aware of the major specialist sources, bibliographic sorts of services to identify the existence of electronic book titles, internationally?
No, is the short answer. [unattributed]

The process of searching for material is exacerbated by the constraints on their time that a number of participants identified:

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 participants experienced problems in discovering whether e-editions were available for printed titles.

Previous research by the authors established a chart of different general and specialist bibliographical approaches which are available (Lonsdale & Armstrong, 2001). 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 bibliographic 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 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]

The authors are conscious that following the voluntary deposit of e-materials, and the *ad hoc* inclusion of certain e-formats in the *BNB*, a private members bill to extend legislation on legal deposit has received its second reading. Whilst the issue of legal deposit of e-materials is central to this issue, 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.

3.7.3 Modes of access

Another important dimension of collection management concerns how institutions facilitate access to e-books. Across all disciplines the predominant modes of access are from the ILS Web site/intranet and the OPAC, with approximately equal use of each. The JUSTEIS project has noted the growing influence of departmental, course and academic staff Web pages (Armstrong *et al*, 2002), 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]

A number of participants 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]

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. 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.

There also seems to be some evidence in FE of the use of reading lists – both paper and electronic as a means of facilitating access.

3.7.4 Promotion

Underlying the modes of access is the corollary 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 get 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 four years to show how influential academic staff can be in promoting awareness and effective use of e-resources. This reinforces the need to ensure that academic staff receive adequate staff development training in the area of e-book and other e-publishing, especially in the light of earlier comments about the ignorance which purportedly exists.

3.7.5 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?

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?

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

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?

Yes, we will monitor access and use through the VLE. [5]

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?

Not yet, we will. [58]

3.8 Licensing issues

A final objective of the study was to investigate the views of the participants towards licensing, and five issues associated with this subject were identified.

3.8.1 Access

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, 24x7 access, integration into MLEs and VLEs, and multi-user licences were all mentioned:

Ideally you would be able to access wherever you wanted whenever you wanted it. [45]

I think unlimited access if feasible cost wise really, unlimited would be great. [52]

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 multi-user one. [63]

Concurrent usage is the attraction for us, that members don't have to wait until there's a book available, so were not very interested in the one book one reader approach, and in fact unlimited access to the same electronic resources is what we would be looking for. [12]

Other issues that surfaced during the discussions in the focus groups also affect licences: flexible start dates for licences and archive copies of texts, for example:

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]

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]

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]

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]

Non-academic institutions (professional societies in Health and Engineering) have different issues with which to contend, principally the size of external membership which in some cases may be in the millions:

We want to provide access for our members who are all over the world, and we've got 87,000 external members and as far as I know I don't think there's a publisher that has such a license agreement that's acceptable which will allow us to provide access. [28]

Publishers also seemed willing to accommodate issues such as this in licences.

Well we do with e-journals because we have a lot of society journals so individual members there have access as part of the contract and they're set up individually and are maintained that way. So that could be done with reference and e-books as well. [Publisher]

3.8.2 Licensing models

A general, over-arching feeling amongst all groups that there are too many models and that they are too complex. There was a feeling that publishers should 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 'world-view' of librarians does not necessarily correspond with that of publishers. 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. It was too much of a risk to kind of ... as well as the concept not being known, it was too much to go and see, so I would like to try it with five or 10 books and a few hundred pounds to see if I get used to it. [46]

I think your idea of buying e-books outright versus annual license is very interesting because if we pay the annual fee it's basically we've got to treat you like a XXX college, it's an ongoing cost which raises different issues treating an e-book like a periodical. It's tricky. [46]

Yes, if it is the right model. Theoretically access to books and text books and say chapters of books, probably A's comments about 10-minute access. Well, chapters from books will be usually of interest ... it does seem to me strange that with the new technology at the moment there does seem to be imposing the old printed methods onto a new technology. [12]

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]

There was some 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. Librarians 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 that there seemed to be certain titles of which there are a multiple different deals to, and trying to choose your deal, in addition to trying to use your contact, is really annoying. [27]

It is the same with e-journals, the different options, the different consortia deals. Just for one title you have to get the institution to subscribe to a collection just to get one title. It's all the permutations. [63]

And the amount of staff time that just goes into reading the fine print of the deals and the licences. [61]

The idea of a model licence was popular:

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]

Just, not too many different licenses. ... We can't predict student behaviour. I'd really like to think in a few years we've got something like an e-model license that we know and understand even if some publishers chose to [omit] one or two clauses, because it's just a nightmare going through different prices. [61]

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]

3.8.3 Pricing models

There was some underlying suspicion amongst all groups that the electronic version should be cheaper to produce than the hard copy version and that this should be reflected in the pricing structure:

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]

Yes, sort our equivalent of 7x24 access to databases and journals, we'd expect to see a similar region-wide practice. We'd only be able to buy one or two titles ourselves probably, so it's more cost effective to buy XXX, and I'd expect to pay slightly less than for a printed book. [8]

Yes, absolutely. [13]

We're not interested in being ripped off, and I think the publishers need to be aware of that. We have limited budgets and we also have a sense of sort of natural justice about not paying through the nose, particular when we realise that we're getting something rather XXX. [12]

Yes, there's definitely some issues about what you're agreeing to, like you get a good deal one year and then sometimes then they hike it right up. [57]

The high costs seemed particularly unfair because, at the same time, costs are being passed down to the libraries or their users. As indicated above, reading from the screen is not popular so the common practice is to print texts for conventional reading at a later time. Costs are born 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:

I basically just print off e-books. I'd rather read in a comfy chair or in bed. I spend enough time already on a computer. [5]

They still want to print it out and take it away with them. [8]

... whether to provide [24x7] access to e-books on our computers and they will just start printing them off during the night and taking them away to read [15]

3.8.4 Bundling e-books and hardcopy

There was some discussion in one group only about the possibility of bundling print and electronic versions together. This obviously does not reflect the needs to save space or reduce vandalism that were mentioned earlier:

What about a combination, if we had, say we bought two hard copies of XXX and then we also wanted electronic access. Would you consider charging us less for the electronic access because we'd purchased hard copy? [unattributed]

XXX was saying about if you took two printed copies or reduced copy XXX, think about that the other way round as well, but if you've taken out a subscription for 10 simultaneous users for a book, why not give a printed copy free? [unattributed]

3.8.5 Consortia and JISC licences

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 an individual libraries. So we would want to see some kind of package that was available for on line consortium basis. [11]

The JISC licensing approach was also welcomed by at least one individual:

I feel a banding is quite a good way of doing it, being from a small FE college we don't pay a lot for these resources because we're small and we don't have a huge body of users and on that basis an unlimited license for a small college wouldn't work much more flexible than saying right you've got a 10 user license for that, you've got a 20 user license for that, that just makes for complication. The way JISC are organising it at the moment I think is fine. [50]

4. Conclusion

Reflecting on the study, the authors believe that the aim and objectives of this first phase have been attained. In spite of some minor problems with recording equipment and transcription, the methodological approaches employed were similarly successful. In particular, the structure of the day, with the valuable introductory session from the e-book publishers which acted as a critical precursor to the focus groups, was deemed to be most valuable by both participants and publishers alike.

Whilst there is little incidence of provision of e-books in both the HE and FE education sectors, positive attitudes towards the format on the part of ILS staff and, to a lesser extent, students and academic staff were reported across all disciplines. However, it is evident that considerable promotion of the format will be necessary to ensure widespread awareness and use, especially among academic staff. A number of the perceived advantages of e-books were seen as a panacea to some of the fundamental challenges in managing print book collections – most notably the problems associated with space, security, and updating. Added value features, the facilitation of remote and multiple access, and integration into VLEs constitute the other perceived primary advantages of the format. The reported positive attitudes of staff and users together with the perceived advantages suggest that there is considerable potential in the FE and HE sectors for the development of e-book collections. Although an array of potential problems associated with e-books was identified, of which hardware and software deficiencies, management, physical use, and the costs imposed by printing e-books were the most prevalent, these are primarily problems associated with all e-formats and not solely the e-book.

Conclusions reached on preferred mode of delivery indicate that online dominates, and despite some local problems, PDF remains the preferred format. To date, there are few e-book readers in use in HE and FE, although there is some evidence of a growing interest in this field.

With respect to the preferred types 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, 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. Furthermore, given the critical role that academic staff play in the selection process, it is essential that they be regularly apprised of developments in e-book publishing. Finally, ILS staff should 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 re-affirmed the importance of the role which the e-Books Working Group is playing in negotiating acceptable group licences.

Responses from the participants, publishers and other individuals consulted emphasised the importance of continuing the qualitative study in the second phase, extending it to the other targeted disciplines. A further issue of the humanities versus the sciences as protagonists of e-books was also raised – but by only two individuals – and may be worthy of further consideration when the choice of disciplines is made:

I think as we know there is a big difference between the technology departments on one hand who are very keen on electronic resources and would like to pack the library with

PCs, and see printed material as the past, and humanities departments like English for example, who are much keener on printed materials and [have] a very different attitude.
[43]

Implicit in the responses of participants to the preferred e-book format is the belief that the second phase quantitative study should be undertaken, and that strategies can be put in place to collect data about prioritised publishers and titles.

It is recommended, therefore, that the proposed second phase be implemented by the Working Group, and that it embraces both a qualitative study of further disciplines, together with a quantitative investigation of the specific needs of users and ILS with regard to titles and publishers of e-books.

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Appendix 1: Focus Group Instrument

FOCUS GROUP JISC E-book Working Group

Intro. by the focus group leaders about the purpose and conduct of the focus group; following the general schedule of questions. In the interests of time we may have to move forward. Will be recording and taking notes. No individual or institution will be identified in any report or presentation.

Publishers please identify your company when speaking.

[Notes for note taker – need to note question numbers (e.g. B2) and note separate speakers by number. Also need to set up in advance list of numbers against names]

This is a preliminary set of questions (sets A-D) for you to consider in preparation for the focus group, which is designed to collect information in two areas. As a precursor to exploring issues surrounding electronic books, the first area concerns your perceptions of managing a print-on-paper book collection (A).

The second looks at the role of e-books, and either how you *currently* use e-books or how you *think you might* use them in the future (B, C & D).

A

What are the major challenges facing you in managing your book collection?

Prompts: Access. Economics. Stock maintenance. Quality of service. Marketing. Space.

B

How far would going electronic provide the answer?

1. How important / significant - in terms of likely impact on your library and on your users - do you think e-books are? ... will be?

Prompts: Are they popular? How important will they be in 5 years time?

2. How many of you currently offer e-books in your libraries

[Repeat total and names of institutions for tape!]

Prompts: Is this in your discipline?

3. Do you see any problems with e-books?

Prompts: locating titles; access; use; acceptance...

Exclude licensing and cost – deal with later

4. What are the major advantages of the format?

Prompts: added value (book marking, links, adding notes, etc); flexibility for short loan collections; pedagogic (do you see it contributing to more effective learning and teaching)

C

What are the major issues surrounding e-book acquisition and access?

1. What are the preferred formats for e-books?

Prompts: what format (PDF, etc) (Web/CD-ROM/e-book reader – link to Jornada/Palm)

2. What kinds of e-books would/do you concentrate on purchasing in your discipline?
Prompts: textbooks, reference, monographs, literary works, other
3. Would/do you only buy e-books at some levels in your discipline?
Prompts: non-graduate, undergraduate, postgraduate, research
4. What issues would you consider when selecting e-books in your discipline?
Prompts: Are they: titles where you have multiple paper copies? the most borrowed/used? expensive research monographs? Those on reading lists? Those in the short-term loan collection? Those made available through the JISC? Only those suggested by academic staff? (How do you think this will influence the relationship with faculty?)
5. Bibliographical Access - How would/do you locate e-books?
Prompts: Do you use bibliographical sources? (Trade bibs, specialist e-book suppliers, publishers, journals, serendipity)
6. Acquisition – What are the major issues concerned with the acquisition of e-books?
Prompts: Do you only buy suggested titles / titles from within known collection / titles from known suppliers/publishers? Do you have a CDP for electronic publications? ... Including e-books? Entire e-books or chapters
7. Modes of Access - How might students and staff access e-books?
Prompts: Via OPAC or web site? Both in and outside the library? On campus/remote access? When do/might students use them?
8. How would/do you evaluate e-book use? / Have you measures in place to do this?
Prompts: Usage stats?

D

How would you like to pay for/licence e-books?

Prompts: One user, one license, or unlimited user licenses? what print rights? Libraries work with publisher directly or with aggregators such as NetLib etc? Annual or lifetime cost models Different cost structures for core and supporting titles

Appendix 2: Participating organisations

University of Wales, Aberystwyth
Anglia Polytechnic University
Aston University
Bedford College
Birkbeck College, London
University of Birmingham
University of Bradford
The British Library
British Medical Association
Brunel University
Cambridge Regional College
Cambridge University
Canterbury Christ Church University College
University of Wales, Cardiff
CILIP
City University
Croydon College
De Beers Industrial Diamonds
De Montfort University
Deeside College
University of Derby
Royal College of Physicians and Surgeons Glasgow
Gloucestershire Royal Hospital
Health Promotion Library Scotland
Hertford Regional College
Hills Road Sixth Form College
Huntingdonshire Regional College
Imperial College, University of London
Institute of Structural Engineers
Institution of Civil Engineers
Institution of Electrical Engineers
Institution of Mechanical Engineers
University of Kent at Canterbury
Kings College London
Kingston University
Kingston Hospital
Lancaster University
Leeds University
Liverpool John Moores University
London School of Economics
University of London, School of Pharmacy
Luton Sixth Form College
Manchester Metropolitan University
University of Manchester Institute of Science & Technology
Newcastle upon Tyne University
Northampton College
University of Northumbria in Newcastle
Nottingham Trent University
Open University
University of Oxford
Oxford Brookes University
Pembrokeshire College
Peterborough Regional College
Coleg Powys
Queen Mary College, University of London
Royal College of Nursing

Royal Institution of Chartered Surveyors
Sheffield Hallam University
Staffordshire University
University of Surrey
Swansea College
Trinity College Dublin
W.S. Atkins
University of Warwick
West Hertfordshire College
University of Westminster
University of Wolverhampton
Wyggeston & Queen Elizabeth College
Ystrad Mynach College