

# **Establishing a national strategy for the provision and use of e-books in UK academic libraries**

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## **Introduction**

Probably the most significant recent manifestation of electronic publishing is the arrival of the e-book. However, while there can be no doubt that the format is established within academic publishing, there remains considerable uncertainty on the part of the university library community in the UK as to the place of this medium in their collections, and its use in learning, teaching and research. The literature suggested that there is a range of fundamental issues to be addressed before e-books become a fully established resource. Hillesund (2001) observed 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 fulfil?" 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." The issues surrounding these questions have also been articulated and addressed in the context of academic library provision in the UK (Lonsdale and Armstrong, 2001).

This paper reports on the foundation of an e-Book Working Group, which has formulated a national strategy to facilitate the provision of e-books to the academic communities in the UK. The remit, activities and impact of this group are discussed. The paper draws upon a range of research projects into the publishing of e-books and their provision by university libraries that have been undertaken by the authors.

## **The establishment of an infrastructure for electronic resources in tertiary education**

In the late 1980s, British universities were discovering an urgent need for microcomputers and, more particularly, networking to support their research and teaching. It was apparent that a unified approach to establishing networking across the sector would achieve a more efficient infrastructure. To achieve these ends, the Higher Education Funding Councils established the Joint Information Systems Committee (JISC) in 1993, with a remit "to stimulate and enable the cost effective exploitation of information systems and to provide a high quality national network infrastructure for the UK higher education: and research councils communities" (Joint Information Systems Committee, 1994). The role of the JISC is now described as being to provide:

"vision and leadership, and funding the network infrastructure, Information and Communications Technology (ICT) and information services, development projects and high quality materials for education. Its central role ensures that the uptake of new technologies and methods is cost-effective, comprehensive and well focused" (Joint Information Systems Committee, 2002).

Aside from its responsibility for providing a network infrastructure, a major remit of the JISC is to facilitate the creation and provision of a wide array of electronic resources for higher, and more recently, further education (HE and FE). The JISC has established a number of initiatives, which have led to the establishment of major e-collections. The eLib Programme (Pinfield et al, 1998) gave rise to significant resources, including a number of gateways, for example SOSIG and OMNI respectively serving the needs of social scientists and health professionals. Following the completion of eLib in the late

nineties, the gateways were brought together and expanded as the Resource Discovery Network (RDN) (Dempsey, 2000). In 1999, another initiative, originally known as the Distributed National Electronic Resource (DNER), offers a managed environment for accessing quality-assured information resources on the Internet. A collection of information resources and services of particular value to the FE and HE communities has been established, together with an underlying information environment that will allow users to End, access, use and disseminate quality information resources (Joint Information Services Committee, 1999).

The JISC is also tasked to ensure that electronic resources are promoted and used widely throughout academic institutions. To this end a Monitoring and Evaluation Framework was established in 1999. This comprises a longitudinal study of the provision and use of electronic information services within colleges and universities, one element of which - the JISC Usage Surveys: Trends in Electronic Information Services (JUSTEIS) - is directed in part by the authors, while another is undertaken by colleagues at the University of Northumbria in Newcastle (Rowley, 2002). JUSTEIS was conceived as a series of annual studies and comprises two strands:

- A survey of students, academic staff and information and library services (ILS) staff to discover what electronic information services they use;
- A survey of ILS Web sites to determinate electronic resources that are made available to those user groups.

In the order of 20 academic institutions have been surveyed during each cycle which approaches a total of nearly 1,500 students surveyed over the last three years, as well as a number of academic and ILS staff. The methodology for the first strand was both qualitative and quantitative, and involved the use of face-to-face interviews and questionnaires to collect data. Data for the second strand were acquired from an analysis of e-resources on individual ILS Web sites. A detailed account of the methodology and results are offered in the reports of individual cycles and in an article (Armstrong, et al, 2001). The establishment of this monitoring and evaluation framework is one example of the many research projects that the JISC has commissioned in furtherance of its aims, and the data are used to inform some discussion in this paper.

### **Early research into e-books in UK**

One manifestation of the eLib project was the first investigation into the publishing and provision of electronic scholarly monographs and textbooks in the UK, conducted by the authors in 1997 (Armstrong & Lonsdale, 1998). It explored several interrelated areas:

- the provision, management structures, costing mechanisms, authoring and editorial responsibilities of scholarly monographs and textbook e-publishing.
- the issues associated with the characteristics of e-monographs, the nature of the narrative content., added value components, subject orientation., rights issues and quality control.
- the implications of electronic monograph publishing for those involved in collection management, including an analysis of bibliographic access and delivery.
- the provision of electronic monographs in British university Libraries, and was conceived as the precursor for a further in-depth study.

The results of the research revealed a nascent e-book publishing industry in which there was great uncertainty on the part of publishers about the market, and negligible provision within the academic library sector (Armstrong & Lonsdale, 2000). The study also indicated that there was a body of opinion in the literature that suggested that for electronic publishing, in general, to succeed, a synergy would have to be effected between the various 'actors' involved in the electronic publishing process. Oakley, Kueter & O'Hea, (1997) identify the actors as comprising the authors, publishers and information providers. Carbo (1997), Scovill (1995 appendix E) and Müller (1997) also supported the notion of partnerships between these actors, but rightly extended this to include users of information services. With reference specifically to electronic

monographs, similar sentiments were expressed at the establishment of the [US] Committee on Institutional Cooperation (Creth, 1997 2) and by the Australian Vice Chancellor's Committee (AVCC, 1996).

Within the UK, the e-book study demonstrated a high degree of interest in the format and a recognition, particularly amongst publishers, of the need to create a means which would ensure the kind of synergy achieved in North America and Australia. Indeed, the report recommended the establishment of a mechanism to harness this interest, and to ensure a national strategy was in place to facilitate the future development and provision of e-books. The research also recommended that a national committee be established, representing the different players publishers, library and information professionals, computing and information technologists - to ensure that:

- the field of electronic monograph publishing in the UK is given due cognisance as a dimension of electronic publishing and that it continues to develop in a structured and synergistic way
- all parties concerned with production, distribution and use of electronic monographs share research and expertise.

The publication of the report and its recommendations coincided with the DNER initiative, whereby the JISC formulated collection development strategies for eight formats including e-journals, images, moving pictures and sound, geospatial materials. and, significantly, e-books. In 2000, advisory working groups were established for each discrete format, responsible for strategic development within their collecting areas. The composition and remit of the working group responsible for e-books reflect in a number of ways the recommendation (9.2.1.1) of our 1997 study (Armstrong & Lonsdale, 1998 60).

### **The composition and remit of the e-Books Working Group**

Publishers, representatives of the Publishers Association, academics researching in the field of e-books, college and university librarians and representatives from significant institutions such as the British Library were invited to join the Group in order to map as wide a territory as possible. In furtherance of its remit to develop "high-quality materials", the JISC has also appointed a collection development officer to negotiate favourable licences that may be taken up by academic libraries for e-books. In addition to this primary responsibility for which the collection development officer acts as a formal link between the Group and the JISC, the officer also participates fully in the realisation of the Group's terms of reference, which can be summarised as follows:

- to monitor the e-book industry world-wide and influence its development for the benefit of FE and HE 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 whilst maintaining a realistic view of new technology;
- to take a balanced view of the role of e-books and understand how they can be integrated effectively into learning and research;
- to define and establish strategies to ensure efficient bibliographic control of e-books.

In furtherance of its objectives, responsibilities are delegated to individual Group members, and the schedule of meetings is designed to accommodate regular demonstrations of new e-book initiatives by members of the publishing industry. The

Group has the power to commission research to inform its decisions on the shaping of a national strategy, and this paper will make reference to several of the studies that are currently being undertaken.

### **Stimulating the publishing and use of e-books**

Implicit in the terms of reference is the fundamental aim of creating a critical mass of e-book material relevant to the academic community and, to this end, a written collection development plan for 2002/3 has been formulated (Armstrong, Edwards & Lonsdale, 2002). Facilitating access to e-books in academic libraries through licensing initiatives will stimulate both use and, as a natural corollary, production. An overview of the e-book industry, which also covered the main issues on e-book acquisition, was produced by the Group (Woodward and Edwards, 2001). It indicated clearly that the role of the Group is to ensure that the communities are able to select from an e-book collection that meets the needs of UK HE and FE, with economic models that give individual institutions maximum flexibility. The critical success factors included availability and quality of content, pricing models and distribution.

The National Electronic Site Licensing Initiative (NESLI) evaluation (Richardson et al, 2000) highlighted the need for clarity in the roles and responsibilities of the main players in the distribution chain, not least that of the managing agent: JISC. Consequently JISC's collection managers form direct relationships with the publishers in order to licence access to material through them. By the end of 2002, the Working Group and the e-book collection manager had either licensed or begun discussions with over fifteen separate publishers. Publishers range from Oxford University Press (for Oxford Reference Online) to xrefer.com. For e-books, aggregators have also been approached with the view to influencing the shape of collections around UK needs, and there have been meetings with aggregators such as Ebrary and Knovel. Before a licence is negotiated there is an e-mail debate with the community to ascertain the wishes of librarians and academics. The Group is also considering other stakeholders in the distribution chain to facilitate access to content, for example, library suppliers and Managed/Virtual Learning Environment vendors. A further possibility is the development of a delivery platform for e-books within the UK education community itself or to form a partnership with an e-distribution company to host and deliver material.

In furtherance of its aims, the e-Book Working Group is also commissioning a number of studies. As part of the move towards creating a critical mass of e-books for the academic sector, a major project has been underway since early 2002 to map the e-book requirements within a range of HE academic disciplines and in FE. This Subject Mapping exercise is designed to tailor the provision of titles to the needs of individual disciplines, and to collect data about the perceptions which ILS staff and their users hold about the format, and the collection management issues which e-books present. The approach has been identical for each subject area and for the cross-discipline FE groups, and has used focus groups that follow a half-day introductory seminar and demonstration. This combined approach has allowed a considerable degree of promotion of the format; and has enabled the group leaders to engage with participants, resulting in very successful discussions later in the day. The study has begun to establish:

- the acceptance of e-books by academic and ILS staff;
- the degree to which they have been assimilated into the library for each discipline;
- metrics including the most useful types of e-book (textbook, monograph, reference), level (undergraduate, postgraduate, research), and format (PDF, Word, etc); and
- issues associated with access, acquisition and promotion.

The study will report in March 2003, and a second stage of the project is scheduled and will follow a pattern established by another JISC Working Group – e-journals. This

investigation will determine the titles and publishers most in demand for each discipline using an e-mail questionnaire distributed to ILS staff in university libraries.

A second study will define the business and market context for a national collections strategy in electronic textbooks. It will produce a broad analysis of the market and of the industry, and identify barriers to uptake and ways of overcoming these, particularly with regard to business models and access. The study will build on earlier work on licensing, such as the PELICAN project (Hardy, Oppenheim & Rubbert, 2001). The report will shape the acquisitions policy of the Working Group for e-textbooks and the role the Group should adopt in relation to partnership building for the successful take-up of e-textbooks within the academic sector.

Finally, an investigation is being undertaken by the Arts and Humanities Data Service (AHDS) into the publishing of free e-books and their potential use within the HE/post-16 community. The study, which concentrates on e-books that are freely available with the minimum of intellectual property rights constraints, will report in March 2003, and is examining the following key issues:

- the extent to which existing freely available e-books can be repurposed, converted to other delivery formats, and assimilated into other activities or collections
- the possible users, uses, and usability of free e-books, paying particular attention to customisation.

### **Bibliographical access**

The issue of bibliographical access, which constitutes one of the Group's objectives, was initially identified as a matter of considerable import in the 1997 study (Armstrong & Lonsdale, 1998 61 section 9.2.2.2). The report concluded that the bibliographical control of e-books within the U K was sparse and fragmentary, and with the absence of legal deposit for this format, users must have recourse to a diffuse range of bibliographical sources to trace titles.

Since the publication of the report, the authors had noted an apparent lack of concern in the ILS and publishing professions about this issue. There was also a lamentable paucity of published documentation on this subject, which was, and is, attributed to:

"the relative newness of the format, the piecemeal or serendipitous discovery of electronic texts, and the comparatively low take-up of e-books within HE and FE collections. ... More fundamentally, ILS lack of writing about bibliographical issues reflects a disregard for this aspect of collection development." (Lonsdale & Armstrong, 2002)

It seemed logical to explore this field further as a part of two follow-up studies undertaken between 2000 and 2002 (Lonsdale & Armstrong, 2001; Armstrong, Edwards & Lonsdale, 2002). The purpose of the research was to investigate the degree to which e-books had been accepted by library and information services within universities and explored issues of bibliographical access and the problems surrounding the acquisition of e-books.

Both studies used an e-mail questionnaire distributed to all FE and HE libraries in the UK. In each case, e-mail discussion lists were used for distribution and the questionnaire was designed specifically for this form of delivery. A detailed discussion of the methodology is offered in Armstrong, Edwards & Lonsdale (2002).

The research identified a range of difficulties experienced by ILS staff when locating and selecting e-book titles, including five responses which reflect the fundamental problem of an absence of systematic bibliographical control, itself a manifestation of the lack of legal deposit in the UK for this format:

- 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 institution
- e-books are not on the 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 Books in Print for e-books
- Not yet listed in bibliographical sources as alternatives to print, so time consuming to identify on a title-by-title basis

The questionnaire sought to identify the means by which libraries identified e-book titles (Table 1). The data reveal a considerable diversity of approaches with publishers' information sources (advertising, Web sites, catalogues) predominating. Intriguingly, mailing lists are a potentially important source for identifying new publications, a finding later confirmed by anecdotal evidence from the Subject Mapping Focus Groups. The importance of peer recommendations, particularly in discrete subject fields was also confirmed. Significantly, the research identified the importance of different forms of serendipity, such as information gleaned fortuitously at conferences and exhibitions and the academic grapevine, indeed, combined with mailing lists, peer recommendations are as significant as publisher's sources.

<b>Sources of information</b>	<b>Number of institutions citing</b>
Publishers advertising	11
Discussion/Mailing lists	10
Staff recommendations	4
Publisher Websites	2
CHEST/JISC mailings	2
Internet	2
Subject lists	1
Library press	1
Publisher Catalogues	1
Other library Websites	1
Conferences & exhibitions	1
Serendipity	1
Journals	1
Contacts	1
As for printed books	1

Table I : Sources of bibliographic information

A striking conclusion, which can be drawn from this table, is the scant use of the established bibliographical sources and services that are available. Another dimension of our research was to map the array of potential modes of bibliographic access to e-books, and a taxonomy of these was developed. Six principal types of bibliographical source were identified: national bibliographical listings (e.g. British National Bibliography); book trade bibliographies (e.g. Nielsen BookData); Internet book shops; specialist Internet e-book suppliers; journals; and bibliographical sources from aggregators (e.g. netLibrary). More recently, Web e-book portals have been established offering further bibliographical access. None of these sources had been identified by respondents, and ignorance of some of these specialist sources was also apparent during the Subject Mapping focus groups.

Implicit in these findings is the impact that the bibliographical deficiencies have upon the systematic development of coherent e-book collections. There is a need for much greater work to be done; and happily the significance of these deficiencies has been recognised

by the e-Book Working Group who have commissioned a more detailed study which will be conducted during the first half of 2003 by the authors.

### Marketing and promotion

A corollary to bibliographical access is the issue of facilitating access to e-books, and indeed all electronic resources, within institutions - a matter that has significant implications for both ILS and academic staff. The JUSTEIS Project has demonstrated amply that it is not enough to put resources in place and expect students and academic users to come to them. Collections of e-journals, gateways and databases were available via the national academic network, free at the point of use, to academic users well before the project began and yet, even when the need for multiple passwords was removed with the Athens service, use was minimal. By way of demonstration, Table 2 shows the percentage use for four electronic resource types by HE undergraduates over the three years of the project. In each case the students were asked about a recent search for information (a critical incident), and the responses were categorised. The figures below represent cumulated responses for both questionnaire and interview. Disappointingly, there has been little increase in use over the three years.

Resource type	Cycle 1 n=386 %	Cycle 2 n=603 %	Cycle 3 n=466 %
e-Journals	6,2	3,0	6,9
Gateways	0,5	1,0	4,1
JISC-mediated databases	10,6	7,5	~14,7
e-Books	0	0,7	0,9

Table 2: Use by undergraduates of a sample of e-resources

Both questionnaires and interviews also asked students about what had led them to use the resources that they had mentioned and what information skills training they had received. The answers to these questions, combined with qualitative analysis of the language used - where often students did not understand the difference between a database and an electronic journal, for example, suggested a very low level of awareness of e-resources.

A striking conclusion is the need for institutions to develop marketing strategies and information skills programmes embedded in the curriculum to enhance the awareness and take-up of e-resources, and the JISC has set in motion a number of initiatives to this effect. In the context of e books, it might be argued that the marketing and promotion is even more critical since there is an even greater lack of awareness and understanding by academic staff and students (and indeed ILS staff) about this relatively new format.

To stimulate institutional marketing and promotion, the e-Books Working Group is attending to this challenge through its national strategy. Promotional documentation delineating the activities of the Group has been created and targeted at academic staff, ILS staff, and publishers. The programme of workshops, which formed the structure for the Subject Mapping exercise, has offered a considerable opportunity for ILS representatives of institutions to witness presentations from publishers, aggregators and other relevant bodies in their discipline, as well as to engage in the discussions of the focus group. One consequence has been greater dissemination of developments in e-book publishing and availability amongst colleagues in their institutions.

A final manifestation of the Group's promotional strategy is the establishment of an informal network of e-book representatives across tertiary education to facilitate dialogue within the community and to disseminate news and information about e-book collections and services.

### Conclusions

The e-Book Working Group has achieved considerable success in the UK since its inception in 2000. In shaping a national strategy it has promoted awareness of the nature and benefits of e-books throughout the academic communities. A strong rapport has been established with the publishing trade and significant steps have been taken to create a critical mass of appropriate materials. Many of the fundamental issues of concern to academic librarians surrounding the licensing, acquisition and promotion of this format are being articulated and addressed, and a body of substantive research into these fields is being undertaken. Whilst recognising the positive achievements during the comparatively short life of the Group, it is nevertheless evident that many challenges remain in advancing the national strategy.

Whilst there is a significant body of writing about the publishing of e-books, there remains a paucity of documentation about the acquisition and promotion of these resources in academic libraries in other countries, and seemingly nothing on national initiatives. This paper has been conceived not only as a contribution to the literature, but also as catalyst to further debate surrounding such questions as: Are national strategies required? Have other countries established similar mechanisms to enhance the publishing of e-books? Can national strategies influence collection management policy issues within academic libraries, and do they impact positively upon the provision and use of e-books within academic libraries?

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