

**The acceptance of E-Journals in Higher Education:  
policy & use at the University of Leicester, with  
reference to the CORSALL Report**

**by Selina Lock, Evelyn Cornell and Anne Colling**

University of Leicester, University Library, PO Box 248, University Road,  
Leicester, LE1 9QD. Tel: 0116 252 2055; Fax: 0116 252 2066;  
E-mail: stl5@le.ac.uk; ec37@le.ac.uk; ac49@le.ac.uk

**Abstract:** The policy of the University of Leicester on the use of e-journals is described, along with some of the factors which influence both policy and use. Selected results of the CORSALL (Collaboration in Research Support by Academic Libraries in Leicestershire) Survey of Researchers are discussed and possible directions for the future are suggested.

## **1. Brief Description of the University of Leicester**

In December 1999 a total of 16,929 students were registered at the University of Leicester, including 1,129 research postgraduates and 4,830 distance learners. We are currently the largest provider of taught postgraduate courses in the UK [11]. In 2000 the Leicester Warwick Medical School was established, with an annual intake of 303 students (due to rise to 403 by September 2003) [14]. The profile of our student body suggests there are many who would benefit from easy access to e-journals – especially if these can be made available to our distance learners and research postgraduates who tend to work off-campus.

## **2. University Policy**

At the University of Leicester it is currently believed that both print and electronic versions of journals should be stocked where possible. The University has also recognised that the funding of periodicals is an important issue and set up a working party to investigate. The working party on the Future Funding of Periodicals recently completed their report and passed it onto the Planning Advisory Committee for comment. The working party noted that e-journals are widely used within parts of the University, that they will become increasingly popular, but that they do not provide an answer to cost issues while most publishers still insist that they come as part of a print package. The

University Library is currently awaiting feedback from the report on the future funding of periodicals.

### **3. Library Policy**

Operational decisions within the University Library regarding e-journals are made by the Electronic Journals Information Group (EJIG), which reports to the Library's Policy and Management Group (PMG). EJIG comprises members from various sections in the Library, as it is recognised that e-journals involve issues that affect many areas of Library work, from acquisitions to information services. Their main recommendation is that we maximise access to the e-journals we are entitled to from print plus electronic deals, e-journal bundle deals and free publications. This is done by having multiple access points which are via the catalogue, publishers/service provider web pages and subject web pages. If an e-journal bundle deal is being looked at, then EJIG assesses the package along with the Information Librarians and their recommendations regarding the deal are put to the Library's PMG. The Library supports many of the deals available through bodies such as CHEST and NESLI and is also not against consortium deals as demonstrated by the Ovid Biomedical Journal deal [9], in which it participated, and which included many universities and hospitals in the Midlands.

## **4. Factors Influencing Library Policy**

### **4.1 Cataloguing Issues**

It is one thing to enter into e-journal package deals, it is quite another to ensure that we actually have access to the titles to which we are entitled. Much time is spent by staff checking subscription lists and ensuring that the title is actually available. Originally catalogue links were made to the service provider main search pages, but this policy was changed when both *ingentaJournals* and *SwetsnetNavigator* undertook to provide stable URLs to individual titles. Both catalogue records and subject web pages now lead readers to specific title contents pages whenever possible.

Similarly catalogue records used to give details of dates available electronically, but these have now been altered to give a simplified form of words which should overcome the need to edit records regularly when changes are made by the service providers. Further changes to the catalogue have been made by the addition of Library of Congress Subject Headings to periodical records in order to improve retrieval and the inclusion of electronic only periodicals.

We also spend time trying to establish which free e-journals are available in each subject area. Fosmire and Young [12] found that 'even the typical research institution provides access to only about one-third of the top twenty-five titles.' We try to ensure that as many free titles as possible are identified and links created, where appropriate.

## **4.2 Suppliers**

The choice of service providers and interfaces available is large and Library decisions, as Cox states, might be “influenced by existing relationships, for example with a particular subscription agent” [10]. For example, at Leicester many of the e-journals have been made available through Swetsnet*Navigator* partly because the local consortium subscription agent is Swets Blackwell and partly because Swetsnet*Navigator* was the preferred delivery method for the NESLI deals. The choice of service provider may change in the future if the consortium subscription agent changes or the NESLI replacement requires it. The Library also makes use of ingentaJournals which allows users to have more than one access route to many journals. As already mentioned the major provider in terms of medical journals is Ovid Biomed and many smaller providers are used where appropriate.

## **4.3 Cost and Content of Journals**

At the University of Leicester e-journals are bought out of two different funds. Individual titles can be bought out of the library funds allocated to each department and those journals are chosen by the department. Alternatively, bundle packages are bought from the central electronic resources budget and chosen by EJIG and the Information Librarians. This could lead to some departments having greater electronic access to journals depending on their serial subscription decisions.

The cost of e-journals is still high, in terms of subscriptions and staff time, and therefore the Library is limited by its funds. Many of the package or bundle deals are unaffordable, for example the Library subscribed to the IDEAL library while it was subsidised by the Higher Education Funding Council for England but could no longer afford to subscribe once funding was withdrawn. This led to issues with users who lost current access to journals they had been using and therefore the Library does not now subscribe to any package deals unless funding can be sustained for the foreseeable future.

#### **4.4 Access & Licenses**

IP address only access is still a barrier to buying some e-journals as the University of Leicester has a large number of distance learners who require off-campus access. Even if the University installs a proxy server, licence issues may still present a barrier to off-campus access. Tables of licence agreements have been set up on the CWIS [22] to try to ensure that legal obligations are met in the use of e-journals. Consortium buying could solve some of the cost issues, although licensing is still the biggest barrier to local consortium buying [2].

### **5. The CORSALL Project**

The Collaboration in Research Support by Academic Libraries in Leicestershire (CORSALL) project was set up to look at ways in which Loughborough University, the University of Leicester and De Montfort University could collaborate in the services they provide to researchers.

One aspect of the project was a survey of researchers at the institutions, conducted in the year 2000, which partly looked at their use and satisfaction with electronic resources, and any barriers to their use [3]. This project has allowed the University of Leicester to gain a good understanding of the acceptance and use of e-journals by their research staff.

### **5.1 User Acceptance of E-Journals**

The CORSALL report suggests that the acceptance and use of e-journals among the 299 University of Leicester researchers who responded to the survey is quite high, as seen in Table 1 [4].

[Table 1]

The Table above shows that 62% of the Leicester respondents used e-journals more than once a month. As can be seen, only 18% said that they had never used an e-journal, compared to the 54% of science researchers surveyed in British Universities who had never or rarely used an e-journal in 1996 [13].

This agrees with staff observations that e-journals are a frequent topic for enquiries and that departments often enquire about e-journal subscriptions.

The acceptance and use of e-journals also seems to vary depending on the subject area, as out of the Leicester non-users 41% were from the arts and 34% from the social sciences [5]. This may reflect the e-journal

provision available at Leicester which has many more science journals available electronically than for other disciplines.

So, it can be seen that the acceptance of e-journals among researchers is growing, but what about undergraduates? The first results from the Justeis project [1] show that the use of e-journals among students is still low and staff at the Library agree that this seems to be the case.

## **6. User Knowledge & Expectations**

One factor that can affect the user acceptance and use of e-journals is the amount of knowledge users possess regarding the electronic environment and what they expect to be able to do and access using e-journals.

McDonald states that “the development of the web has increased user expectation and proven to our users that information is only a click away” [17] and this certainly seems to be the case with some of the users at Leicester. Common misconceptions noted amongst staff and students are that if the Library takes a journal in print then they will have electronic access to it; that e-journals are free; that the Library can cancel its print subscription if it has an electronic version and that e-journals are always found at the publishers’ site or that they can get every journal through a service provider site. These high user expectations can lead to disappointment, as in most cases an e-journal is not just one click away, and possibly contribute to the barriers to use.

## 7. Barriers to Use

The SuperJournal Project found that the main barriers to e-journal use were the limited number of relevant journals available and the ease of access, including slow downloading and technical problems [20]. This was echoed in the CORSALL report which found that the main barriers to use were that researchers did not know what was available, that there was not much relevant material, that they were inconvenient to use, that there was a lack of adequate equipment and a lack of training, as shown in Table 2 [6].

[Table 2]

### 7.1 Not sure what is available

The most prominent barrier to use was the confusion over what e-journals the Library subscribes to, even though they were noted on the catalogue. This may be due to people not noticing the e-journal information on a typical catalogue record for a journal, which at the time of the survey looked like this:

[Table 3]

The users may also have been confused by the fact that the e-journal page on the Library web site at the time did not list the e-journals available by subject, as many seem to expect, but listed the service providers and publishers with which the Library has package deals. This could lead to them being unsure what they could access via those sites. Subject based lists of e-journals have since been made available and further work on web-based access is ongoing. This has resulted in the

Library receiving positive feedback from departments and some of them link their CWIS pages directly to the Library e-journal subject pages. During training with staff and students in the academic departments it has also been noticed that many of them did not realise that the e-journals were listed on the catalogue. The SuperJournal project found that for the awareness and promotion of e-journals “that the listing of electronic journals on the library web site is the most successful technique overall” [20]. Therefore, it is hoped that the recently added subject listings for e-journals on the Library web pages will help ease the confusion over availability. Subject pages [16] show the date range available, service provider and whether or not the title is available off-campus (an important criterion for our many distance learners). In addition to this, images are used to show the need of **Athens** usernames and passwords or some other password. Links to a page of relevant Passwords are also available to on-campus users and we have established a system whereby off-campus users can contact us to obtain passwords.

## **7.2 Not much relevant material**

One of the core user requirements for e-journals identified by the SuperJournal project was that they required a critical mass of journals available in their subject area [20]. From the user’s perspective this is obviously not yet available at Leicester in many subjects, and is probably influenced by the fact that there seem to be more e-journals available in the sciences than in the arts, humanities and social sciences. Users being unsure of what is available may also contribute to the problem, as they

may have access to more journals than they realise. The growth in e-journals has been huge. The 1<sup>st</sup> edition (July 1991) of the *Directory of Electronic Journals, Newsletters and Academic Discussion Lists* [19] included 27 e-journal titles. Swetsnet*Navigator* now offers access to 5,489 titles from 162 publishers [21], and there are still other titles available from other service providers. There are now few subject areas that are NOT covered by e-journals.

### **7.3 Inconvenient to Use**

Although e-journals in theory offer faster and easier access to journals it is not always the case in reality, as shown by the results in Table 2 where 15% of Leicester researchers found them inconvenient to use. There are many factors that could contribute to this attitude, including

- Users not understanding how to access the journals
- Articles being slow to download
- Needing the latest version of Adobe Acrobat to download many PDFs
- Breaks in access due to subscription renewal problems and technical work
- Trying to access the journal through an incorrect route
- Dislike of reading from a screen

A particular problem experienced by the University of Leicester in the last year is 'blank screen syndrome' where clicking on a full text link to an article has resulted in a blank screen being displayed. This has led to much frustration for users who have found the article they want and that

they should have access to, only to find it cannot be displayed. From a user's perspective the full potential of ease of access for e-journals has not yet been realised, for example, Mangano states in his article about trying to use e-journals instead of print that 'a journal consultation which 2 weeks before (in print) would have taken 3 minutes, ended up taking over 20 (electronically). Is this progress?' [18].

#### **7.4 Lack of adequate equipment**

A perennial problem in many universities is that not all researchers may have their own computer, or one that is linked to the University network, or one with the right software on that computer. This means that it is more time-consuming to access e-journals, due to the need to use an open access computer lab.

#### **7.5 Lack of training**

The CORSALL report also noted that many researchers felt they lacked the necessary training to utilise electronic sources of information and recommended that the Library should 'review the current provision of training and information available on electronic resources, in consultation with researchers' [7]. The Library does presently offer one to one or group training sessions on electronic information if a department wishes to receive such assistance, however, a major factor in the take-up of this service is the number of demands that most lecturers have on their time, leaving little for training purposes.

## **8 Future Issues/Conclusions**

Although there are still many issues surrounding the use of e-journals in Higher Education the experience at Leicester suggests that usage is growing continually with only 18% of the researchers surveyed by the CORSALL report having never used an e-journal [8]. There are still barriers to the use of e-journals but many of them are ones that libraries can tackle immediately by trying to educate their users regarding e-journals. For example, at Leicester e-journal holdings could be made clearer, perhaps with the use of a subject listing generated by the catalogue, or in the meantime using more publicity to advertise availability. Scripts have been devised which will enable subject catalogue searches of e-journals to be carried out at the click of a button and it is intended to use these on subject web pages, once subject headings have been added to catalogue records.

Keeping duplicate records (web pages and catalogue records) can be very time consuming and it may be possible to set up a process that will automatically create subject web pages from OPAC records. This has been done by the Research Library at Los Alamos National Laboratory [15], however it will still be necessary to ensure a system is in place that enables new e-journals to be found.

The lack of material in some subject areas may partly be down to publishers but the Information Librarians at Leicester can advise their Departments on what is or could be available to them electronically.

Some of the issues surrounding ease of access depend on publishers and movement in technology. However, by using direct links where possible and promoting routes of access via the Library pages or catalogue, some of the problems surrounding service providers versus publisher sites may be avoided. The perceived lack of training and information can be rectified by better publicity and marketing methods for training events and tailoring events to fit in better with researchers. Information Librarians are holding various discussions with their departments to try to ensure that staff and students receive relevant training and e-journals are handled in such a way that encourages their continued acceptance and use throughout the University of Leicester.

### References

- [1] C. Armstrong, Low ICT use by students, *The Library Association Record*, **103** (6), 2001 pp. 258-9.
- [2] Ian Bloor, CORSALL, collaboration in research support by academic libraries in Leicestershire, final report. Leicester: De Montfort University, 2001, p. 14. Also available at  
<<http://www.le.ac.uk/li/libservices/corsall/corsall.htm>>.
- [3] *ibid*, pp. 8-17.
- [4] *ibid*, p. 14, table 7.
- [5] *ibid*, pp. 14-15.
- [6] *ibid*, p. 15, Table 8.
- [7] *ibid*, p. 17.
- [8] *ibid*, p. 14.
- [9] J. Cahoon and R. Marriott, Delivery of Medline over the Internet with full text electronic journals; regional and local implementation issues, *Library Review*, **48** (3), 1999, pp.148-151.
- [10] A. Cox, P. Godwin, and R. Yates, Towards a checklist for choosing electronic aggregation services, *VINE*, **110**, 1999, pp. 38-42.
- [11] FT 100 League Table, *Financial Times*, 7 April 2001, p. 2.
- [12] Michael Fosmire, and Elizabeth Young, Free Scholarly Electronic Journals: What Access Do College and University Libraries Provide? *College and Research Libraries*, **61** (6), November 2000, pp 500-508, p. 507.

- [13] S. Gomes and J. Meadows, Perceptions of electronic journals in British Universities, *Journal of Scholarly Publishing*, April 1998, pp. 174-181.
- [14] Growth of Medical School, *Bulletin*, University of Leicester, May 2001, p. 2.
- [15] Frances L. Knudson [et al.], Creating Electronic Journal Web pages from OPAC Records, *Issues in Science and Technology Librarianship* Summer 1997 available online at <<http://www.library.ucsb.edu/istl/97-summer/article2.html>> Accessed 5/6/01.
- [16] Selina Lock, A-Z of Electronic Journals in Biological Sciences, <[http://www.le.ac.uk/li/sources/subject3/boil/a\\_bejournals.htm](http://www.le.ac.uk/li/sources/subject3/boil/a_bejournals.htm)> Accessed: 11/05/01.
- [17] J. McDonald, and J. Ghaphery, Do we have this in Full-text? Providing access to content in full-text aggregated databases, *Against the Grain*, April 2000, pp. 28-30.
- [18] Michelangelo Mangano, Electronic journals: a user's experience, *High Energy Physics Libraries Webzine*, **2**, 2000. <<http://library.cern.ch/HEPLW/2/papers/2/>> Accessed 14/05/01.
- [19] Dru W. Mogge, ed., *Directory of Electronic Journals, Newsletters and Academic Discussion Lists*, Foreword. 13<sup>th</sup> January 1998 <<http://db.arl.org/foreword.html>> Accessed: 11/05/01.
- [20] Summary of SuperJournal Findings: Readers, draft 26<sup>th</sup> April 1999, <<http://www.superjournal.ac.uk/sj/findread.htm>> Accessed: 11/05/01.
- [21] SwetsnetNavigator : The Journals. <<http://www.swetsnetnavigator.nl/>> Accessed 5/6/01.

[22] University of Leicester. Summary table of electronic journal licences.

Created: Tuesday, May 15, 2001.

< <http://www.le.ac.uk/li/sources/ejournal/licences.html> >

**Table1: Use of E-journals**

<i>&gt; 3 times per week</i>	<i>2-3 times per week</i>	<i>&gt;once per month</i>	<i>&lt; once per month</i>	<i>Never</i>
18%	18%	26%	20%	18%

**Table 2: Barriers to E-Journal use**

	<i>No. Respondents</i>	<i>%</i>
<i>Not sure what is available</i>	106	35
<i>Not much relevant material</i>	48	16
<i>Inconvenient to use</i>	45	15
<i>Lack of Adequate equipment</i>	24	8

**Table 3: Catalogue Record**

key:	<b>03057364</b>
ISSN:	<b>03057364</b>
Title:	<b>Annals of botany.</b>
Publication info:	<b>London : Academic Press.</b>
Indexes:	<b>Indexes to volumes 1-50, 1887-1936; new series 1-25, 1937-1961.</b>
Note:	<b>Electronic version for 1996-1999 available at <a href="http://www.bids.ac.uk">http://www.bids.ac.uk</a></b>
Print holdings:	<b>Main:PER 570 A5948. New series 45- 84, 1980-1999.</b>
Print holdings:	<b>Main:STACK PER 570 A5948. 1-50, 1887-1936; New series 1-44, 1937-1979.</b>
Subject:	<b>Biological sciences--Periodicals</b>
Electronic access:	<b>For access via ingentaJournals click here</b>