

Are e-journals the life-blood of UK research institutions?

E-journals: their use, value and impact takes an in-depth look at how researchers in the UK use electronic journals, the value they bring to universities and research institutions and the contribution they make to research productivity, quality and outcomes.

Our report examines how researchers interact with journal websites and whether enhanced access to journal articles has led to greater productivity, research quality and other outcomes. It finds that researchers are savvy when it comes to using e-journals, finding the information they need quickly and efficiently, and that higher spending on e-journals is linked to higher usage and also better research outcomes.

Based on an analysis of log files from journal websites and data from libraries in ten universities and research institutions, our report starts to build a clear picture of how e-journals are shaping the information landscape – a picture that we'll add to as our research in this area continues.

Journal publishers began to provide online access to full-text scholarly articles in the late 1990s, triggering a revolution in the scholarly communications process. A very high proportion of journal articles are now available online – 96 per cent of journal titles in science, technology and medicine, and 86 per cent of titles in the arts, humanities and social sciences.

E-journals have given researchers an unprecedented level and convenience of access to knowledge in scholarly articles, but what effect have they had on how researchers seek information? Do they provide good value for money to higher education libraries and what are the wider benefits for universities and research institutions? Key findings include:



- **E-journals are a big deal:** UK research institutions rely on e-journals. Over four months, users at ten UK research institutions visited nearly 1,400 ScienceDirect journals half a million times. In one year, users at the same ten institutions visited 61 Oxford Journals online publications a quarter of a million times.
- **Information seeking is fast and direct:** Many users look for publications using search engines such as Google and Google Scholar, or gateway sites such as PubMed. They then stay on the journal site for just long enough to pick up the full article that they have already identified. Most users visit ScienceDirect for only a few minutes and view no more than a couple of pages. Once users enter a journal site they tend to browse rather than use the site's own search facility. Advanced search functions are rarely used at all. 24-hour access to e-journals is important to researchers. almost a quarter of ScienceDirect use occurs

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UK world-class research put at risk by economic challenges

The recent dramatic fall in the value of sterling has seriously damaged university library purchasing budgets, putting scholarly books and journals at risk. The Research Information Network's (RIN) briefing, *Scholarly books and journals at risk: responding to the challenges of a changing economy* warns that if libraries are forced to make budget cuts on their journals and books subscriptions, then the UK's ability to support world class research and teaching could be put into jeopardy.

The RIN briefing note aims to inform and motivate universities, funding bodies, researchers, librarians and publishers, to work together to find creative, practical and sustainable solutions to this serious and unforeseen challenge to the vitality of the UK's research base.

University staff and students depend on good access to scholarly publications. A key function of libraries is to broker the acquisition of books and journals on behalf of universities, and libraries must ensure that their

purchasing decisions represent the best value for their institution. The current budgetary challenges could do fundamental damage to research and scholarship, and compromise universities' capacity to pursue their core business – so these challenges will affect far more than just the library. The RIN aims to bring all the key stakeholder groups together to find ways to ensure that we do not reverse the gains that have been made in access to journals over the past decade. Please email your comments to michael.jubb@rin.ac.uk

The briefing note is available at www.rin.ac.uk/scholarly-journals-books-risk

Information literacy meets Library 2.0

Godwin, Peter and Jo Parker (2008), Facet Publishing, London

Much has been written about Web 2.0 since the term came into widespread use in 2004. The '2.0' suffix has now come to mean anything new in Internet world, and, indeed, beyond it (the present economic downturn was described at the recent World Economic Forum as 'Depression 2.0'). The library community has been quick to recognise the potential of Web 2.0 for information management, but there have also been concerns about some of its implications. This book is more about the former than the latter; it's an interesting and often highly motivating attempt to engage library professionals with the potential of Web 2.0 (an endeavour loosely defined as 'Library 2.0', hence the title). It takes the form of a series of essays, mainly by practitioners, and chiefly about attempts to engage in the practical application of new technologies and services. As such, it's a very useful illustration of real-world experiences from which we can all learn as we undertake similar projects.

The contributors bring a wide range of experience and expertise, and the format of many (16) short chapters, focusing on many different technologies, issues, and projects make it easy to read and never dull. It starts with a punch ('It's time to stop boring our users with conducted tours...and endless demonstrations') and then takes us on a journey through the world of Library 2.0 in a structured way that begins with an overview, takes in educational issues, looks at practical examples and concludes with the future in a way that makes the many essays fit together into a coherent whole. Brian Kelly, a prime mover in this world, gives a very good introduction to the concepts and the tools, as does Sheila Webber for the pedagogical implications. The contributors also cover a very wide range of technologies and concepts, including blogs, RSS feeds, Wikipedia, tagging, Flickr and YouTube. Indeed, it goes beyond what I would normally define as Web 2.0, taking in digital gaming too. This might cause concern amongst purists, but given that definitions in this area are already vague and subject to debate, it is understandable that gaming as an innovative and 'bleeding edge' way of engaging users with libraries is seen as legitimate for inclusion.

It is very interesting to see how Web 2.0 is being thought about and used in the context of information literacy, with some very good illustrations of this from a number of contributors, some of whom freely admit that they are not entirely sure of their direction, or their results. This is a lesson in itself; the perfectionist attitude that sometimes prevails in the library community, and the sense in which we can feel challenged by information providers we distrust (e.g. Wikipedia) or concepts that go against professional practice (e.g. social tagging) can result in a perception of Web 2.0 as threat rather than opportunity. It is excellent to see librarians being prepared to approach these things with open minds, and try them out with the 'always beta' mindset encouraged by Web 2.0 supporters. Information literacy isn't always highly visible throughout – the chapter on public libraries is more to do with promoting and marketing the library service – but most of the material is highly relevant to the title.

I would have liked to see some discussion on issues which seem to me to be quite important. There are no references to accessibility, for example, and very little mention of copyright-related matters, but this is a minor niggle, as such topics are addressed thoroughly elsewhere. To some extent, this is a book that will date quite rapidly, as technologies change and behaviours evolve (a surprisingly full and precise description of the hardware used in one example is unlikely to be useful to readers for very long). However, the point repeated throughout is that the concepts are valid beyond the specific tools, and that we are very unlikely ever to see a return to the static approach of 'Web 1.0'. Social networking and interactivity are now hugely important aspects of the Web, which for information

professionals has significant implications. It's also good to see that the authors have created an accompanying blog, to provide updates beyond the print publication, which is a simple but valuable example of putting the concept into practice!

I heartily endorse the theme, which is that Web 2.0 is not simply hype, and that significant change is occurring which has real implications for librarians in general and information literacy in particular. We need to exercise caution in one sense, and bear in mind the costs associated with investing time and effort in tools which, although 'free', are subject to uncertainty and lack of sustainability, but this should not prevent us from 'great excitement' and the 'can-do mentality' associated with Web 2.0. The book emphasises the fact that it's fun, and this shines through in the practical experiences it relates. Well worth reading for anyone considering a similar endeavour, or wondering if they should.

Simon Bains, Head of Digital Library, University of Edinburgh and member of the RIN's Library and Information Services Consultative Group.

Creating catalogues: bibliographic records in a networked world

Creating catalogues: bibliographic records in a networked world examines how bibliographic records for content held by UK academic and research libraries are created, distributed and used, and how these processes could be improved for the benefit of publishers, libraries and researchers.

Bibliographic records are crucial to researchers, enabling them to find and gain access to relevant books, journals and journal articles. Bibliographic information is also essential to libraries, which rely on the data to fulfil their mission of supporting research, learning and teaching.

A bibliographic record is not a static entity. It is likely to be adapted and enhanced as it moves from the publisher or author into the hands of intermediaries, libraries and end users, with each group contributing different motivations, models and formats. There is a growing awareness that traditional bibliographic processes involve a substantial amount of duplicated effort, information gaps and missed opportunities.

Developments in digital technology have already brought many changes to the processes through which records are created, shared, used and modified, and collaborative web-based services may have the potential to address some of the issues within the current system.

In this report we examine the bibliographic process for printed and electronic books, scholarly journals and journal articles. Our findings highlight a need for all those involved in creating, distributing and using bibliographic records to work together to develop more efficient systems and services, such as a shared catalogue for the whole UK higher education sector and new standards for data on electronic publications.

A number of recommendations are made which all underpin the major conclusion that all those involved in creating, distributing and using bibliographic data must work together to find creative, practical and sustainable ways to increase the efficiency of current systems, and to exploit the opportunities for developing new services. The report can be downloaded from the link below or printed copies are available via catherine.gray@rin.ac.uk www.rin.ac.uk/creating-catalogues

Paying fees for open access publishing: a strategic response is needed

The response by universities and authors to the development of open access publishing, and the arrangements of paying the fees charged by publishers, remains haphazard in the UK. The RIN and Universities UK (UUK) have published new detailed and practical guidance, *Paying for open access publication charges*, aimed at all those involved in this process – funders, publishers and authors, as well as higher education institutions.

Open access publishing has become an increasingly significant part of the research world over the last few years. But research funders' requirements that the outputs of research should rapidly be made freely available to all readers have not been matched by consistent and readily-understandable arrangements that enable researchers to pay the fees required by publishers to ensure their work is made widely available.

Only a very small number of higher education institutions currently have any clear arrangements in place. This RIN and UUK guidance calls for a strategic response in the UK – at both institutional and national levels – to the opportunities as well as the challenges posed by open access publishing, and for good communication between all the parties involved. The guidance offers specific advice to ensure that funders' requirements for research to be published open access are met. It builds on experience to date, and provides practical advice on establishing a strategic and coordinated approach to the payment of publication fees.

Summary of the key advice:

- **Advice for higher education institutions:** institutions should designate a single person at senior level to coordinate their activities and take the lead in ensuring arrangements for paying for publication fees are developed by the institution and effective (including the provision of dedicated budgets)
- **Advice for funders:** all funders should clarify how they will provide financial support for researchers in meeting their open access policies in general, and the payment of open access publication fees in particular.
- **Advice for publishers:** publishers should be transparent about their business models; give clear advice to authors on their journal's requirements on open access and the fees charges; and alert authors to the relevant funders' policies on the use of grant income to pay open access publication fees.
- **Advice for authors:** should consider their options for publishing in open access journals; familiarise themselves

with funders' policies on open access and the arrangements within their own institutions on meeting the cost of publishers' publication fees.

The guidance is available at www.rin.ac.uk/openaccess-payment-fees



Universal access for researchers to e-journals in Scotland

The Scottish Higher Education Digital Library (SHEDL) was launched in January this year. All current journals published by Cambridge University Press, Springer, and the American Chemical Society are now available online to researchers, staff and students in all Scottish higher education institutions.

Research pools' bringing together researchers in particular fields from different institutions have been a feature of Scottish higher education in recent years, and the excellent outcome from the recent RAE have endorsed this strategy.

As the members of each pool may not have access to the same set of scholarly journals and other information resources, this has been a major stimulus towards the establishment of SHEDL, the concept of which is to provide equivalence of access to a wider range of journals for all researchers, regardless of institutional affiliation.

The development of this pioneering initiative has been led by SCURL, the Scottish Confederation of Research and University Libraries JISC Collections has taken responsibility for the

negotiations with publishers, and further negotiations to expand SHEDL should take place with additional publishers later this year.

There is a growing interest in SHEDL and in the possibility of extending this model of universal HE journals access beyond Scotland to other parts of the UK. For more information contact Gillian Anderson, Chair of the SHEDL Steering Group email Gillian.Anderson@uhi.ac.uk or Tony Kidd, Vice Chair T.Kidd@lib.gla.ac.uk.

<http://scurl.ac.uk>



■ UKRR Phase 2 launched

The UK Research Reserve (UKRR) programme was launched on 19 February. HEFCE announced in July that it would provide £9.84 million for a five year programme to build upon the success of Phase 1. The UKRR now needs the support and active cooperation of many more higher education libraries to achieve its aims and it invites all higher education libraries who support the retention of print journals for research to join. Visit www.ukrr.ac.uk for more information or contact Frances Boyle, UKRR Manager, email f.boyle@imperial.ac.uk

■ RCUK report on open access study

RCUK new report on *Open access to research outputs: final report to RCUK an independent into open access to research outputs* is a study that identifies the effects and impacts of open access on publishing models and institutional repositories in light of national and international trends, including the impact of open access on the quality and efficiency of scholarly outputs, and specifically journal articles. The report presents options for the research councils to consider and they are now discussing the issues raised in consultation with all interested parties. In response to the study, the chief executives of the research councils have agreed that over time that they will support open access, by building on their mandates on grant-holders to deposit research papers in suitable repositories within an agreed time period, and by extending their support for publishing in open access journals, including through the pay-to-publish model. www.rcuk.ac.uk/news/090422.htm

■ Last UK research council mandates open access

The Engineering & Physical Sciences Research Council (EPSRC) has mandated open-access publication of the research it funds. The statement says that academics should be able to choose whether they use the 'green option' (i.e. self-archiving in an online repository) or to use the .gold option. (i.e. pay-to-publish in an open-access journal). EPSRC is the last of the seven UK research councils to adopt an open-access mandate and it will publish further details of the policy later this spring. www.epsrc.ac.uk/AboutEPSRC/AccessInfo/ROAccess.htm

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outside the traditional 9-5 working day, while weekends account for around 15 per cent of use.

■ **Researchers use e-journals in different ways:** Users in research-intensive universities show the highest use of e-journals and spend the least amount of time on each visit – they're most likely to have already identified the information they need on a gateway site. How researchers use e-journal sites also varies according to subject area. Historians search for and use e-journals in very different ways from scientists. Compared, for example, with life scientists, historians are more likely to access e-journals via Google and to use menus and search facilities once they're on the journal website.

■ **Higher spending on e-journals is linked to more use and better research outcomes:** Universities and colleges spent £79.8 million on licenses for e-journals in 2006/07. Researchers and students in higher education downloaded 102 million full-text articles in that year, at an average cost of £0.80 per download. There is a strong positive correlation between universities' expenditure on e-journals and number of articles downloaded. There is a clear correlation between levels of use of e-journals and research outcomes, with more usage linked to the number of papers published, number of PhD awards and income from research grants and contracts. This link is independent of institution size.

RIN: in brief

■ Benefits of research data centres

The RIN and the Joint Information Systems Committee (JISC) are commissioning a new study to provide an analysis of the usage and impact of a number of research data centres that represent a cross-section of research disciplines in the UK. This project aims to investigate the importance, relevance and benefits of effective sharing and curation of research data for the UK research community, by examining the long-term usage and impact of data curated by established data centres. www.rin.ac.uk/data-centres

■ RIN is twittering

RIN is now on twitter and tweeting regularly about what we and others are up to. Follow us at http://twitter.com/research_inform. We have already found it useful to find who is talking about the issues we work on, and now have over 283 followers, including researchers, librarians, publishers and others who are interested in our work. Read our blog post about why you might want to consider joining in to keep up with issues of interest to you www.rin.ac.uk/twitter

■ Developing policy and guidance on digital preservation

The RIN has joined the Digital Preservation Coalition (DPC), a not-for profit membership organisation whose primary objective is to raise awareness of the importance of the preservation of digital material and the attendant strategic, cultural and technological issues. It acts as an enabling and agenda-setting body within the digital preservation world and works to meet this objective through a number of high level goals. Developing guidance and policy to help achieve these improvements will be of significant benefit to all DPC members and the wider community. www.dpconline.org

■ Upcoming RIN events

More information on RIN events taking place at www.rin.ac.uk/events-menu

- 29 May 2009 *Research in the open: how mandates work in practice* Royal Institute of British Architects, London www.rin.ac.uk/research_open_mandates_event
- 3 June 2009 *The data imperative: libraries and research data workshop*, University of Oxford www.rin.ac.uk/data-imperative
- 1 July 2009 *E-journals: their use, value and impact*, venue TBC, London

■ RIN will be out and about in 2009 – come and talk to us!

RIN will be hosting a number of stands at events around the UK during 2009, if you are planning to go to any of the following, come and see us! More information at www.rin.ac.uk/events-menu:

- *Association of Research Managers and Administrators (ARMA) conference: reviewing the future* – 2-3 June, Southampton
- *Information: interactions and impact*, 22-25 June, Aberdeen
- *UK Environmental Observation Framework: environmental data solutions*, 25 June, Ryton
- *Institutional research conference 2009*, 8-9 July, Sheffield

The reports' authors acknowledge that the findings should be seen as an initial path finding and exploratory study, as it raises many questions. We hope to spark a debate on these issues, if you have any questions, comments or feedback, do get in touch with us. We will be running an event on 1 July 2009 in London that will feed into the second phase of this study. Please email catherine.gray@rin.ac.uk for more details.

The full report and a briefing document are available at www.rin.ac.uk/use-ejournals