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Introduction
As academia progresses towards the 21st century, increases in student numbers, distance learning, changes in copyright licensing and lack of funding means that academic institutions have to look more closely at the use of electronic resources in order to meet these challenges. The “wired campus” and “virtual university” mean more users looking for electronic resources and increased pressure on libraries to provide these services. The development of electronic journals in the early 1990s and the onset of electronic publishing appeared to be a solution to the problem. Journals could be stored electronically thereby saving space, the risk of lose, theft or damage is lessened and costs where significantly reduced. Electronic journals have become an increasingly important part of academic library collections, however they have not proved to be the panacea the profession hoped for. Electronic journal usage has created a new set of issues such as archiving, copyright, cataloguing, site licensing, remote access, hardware requirements and journal design. There are many stakeholders involved in the selection of electronic journals within academic libraries from librarians, to users and publishers. This paper attempts to raise awareness of some of the issues which will have to be considered if scholarly electronic journal publishing is to develop over the next decade. The content and ideas presented in the paper are derived from research undertaken in the area for a student Masters dissertation.

Access to electronic journals: projects
IT has been predicted that electronic journals will have a deep impact on both the serials market and academia in the next decade. (Ketcham-Van Orsdel & Born:1998). Governments, publishers, academics and libraries throughout the world have realised that electronic publishing is and will continue to have an effect on how scholarly journals are published and accessed. Therefore providing access to electronic journals is crucial if academic libraries are to be able to support their users into the next century. Several projects concerning all the parties above have been undertaken in order to determine the best methods of providing access to electronic journals. Government funded projects in the UK are generally managed through the Electronic Libraries Programme (E-lib) as a result of the recommendations in the Follett Report (Follett:1993). Many of these projects such as Super Journal and Open Journal are directly concerned with research into electronic journals. (SuperJournal:1996). SuperJournal identified the issues involving academic requirements and usage of electronic journals. The Open Journals Project (Open Journal:1998) was concerned with developing a framework for electronic journal publishing which allowed maximum interaction with the journals. This was achieved by adding hypertext links from the journal to citations and other links mentioned within the article. Thus these two projects established the functionality and requirements of electronic journals. EEVL, ADAM, SOSIG and OMNI are jointly funded by E-lib, independent funding bodies
and the EU. These projects provide subject specific gateways to a variety of internet sources such as electronic journals and library catalogues.

Projects such as Blackwells Electronic Journal Navigator, JSTOR, IDEAL, SwetsNet and Project Muse involve collaboration with electronic journal publishers in the UK and USA. These projects highlight the concerns publishers have over electronic journal provision and attempt to produce methods of addressing them.

Electronic journal projects such as the ones mentioned above illustrate that there is a common aim among all the stakeholders of the electronic journal industry - authors, publishers, libraries and users to provide access to electronic journals. All of these actors have different requirements and expectations of electronic journals. Publishers are recognising the commercial gains which can be derived from electronic journals, but are concerned with copyright and royalty payments. Authors in the academic field wish their work to be as widely read as possible and are keen to publish in peer reviewed paper or electronic journals. Libraries have to find ways of providing access while keeping costs to a minimum. Users want to be able to have access to high quality resources on-demand and are often oblivious to the lengths libraries have to go to provide an electronic journal service.

Electronic journal access & selection
A case study of the Andersonian Library University of Strathclyde was undertaken in order to investigate how an academic library developed and currently provides an electronic journal service. The Andersonian Library started providing access to electronic journals in 1996. Glasgow University library also began to provide a similar service at this time and both libraries worked together. Users are able to access the service via the library catalogue, thus there is parallel web and catalogue access. The service was implemented smoothly due to the support of BUBL who provided assistance and electronic journal records for those journals not covered by the pilot site licence initiative (non subscription titles are only accessible via the web pages). This paper cannot provide a detailed discussion of the service and users should refer to Joint et al (1997) for a more detailed account.

However the service does highlight some of the issues which will have to be addressed if electronic journal are to progress into the 21st century. Statistics indicate that of the total monthly accesses to the library web pages at least 12,000 are to electronic journals. Publishers should therefore be reassured that users are interested in electronic journals.

Copyright and payment is viewed as the major problem as most users prefer to download or print material, and this is often not allowed under current copyright legislation. At present there is little libraries can do to change copyright regulations apart from informing users of the regulations and enforcing them. Hopefully these problems can be solved through forthcoming agreements such as NESLI.

Design, searching and user interface are unique to individual journals and some journals have better features than others. As journals develop these issues should be overcome.

The future for academic libraries and electronic journals and resources would appear to be assured, however there are major issues which have to considered for the future.

Conclusion: the future
Unless the problems of providing access to electronic journals is addressed there is the real possibility of a serials crisis. If journal prices continue to rise libraries will be unable to afford
subscriptions and users will turn to other resources. This raises an issue of quality. Users know
that when they access journals via library web pages the quality is assured as the journal provi-
der is likely to be a respected STM publisher. If prices continue to rise and libraries are forced
to cancel subscriptions users will by-pass traditional publishers and go to “independent” sources
where quality cannot be assured. One way to solve this is for publishers to charge more realistic
prices for electronic journals by basing costs on production processes, although this could
result in libraries cancelling subscriptions to paper journals. This is a very sensitive issue and
one which requires a great deal of thought as there are many factors which have to be conside-
red, such as infrastructure development, price and software. The benefits of this to the academic
community would include a more varied service as at present due to the high costs of serials
and concerns over copyright the choice of electronic journals is limited.

The pricing and costs of electronic journals is problematic. In the UK value added tax (VAT)
of 17.5% is charged on electronic products. Therefore an additional cost is added before the
journals have been created and distributed. However publishers are tending to offer electronic
journals free if the library takes the printed version.

The future for guaranteed access to scholarly electronic journals is via collaboration between
academic libraries in order to share networked resources. The GAELS project (Glasgow Allied
Electronically with Strathclyde) is aiming to do this in the field of engineering. (GAELS:1999).
Studies so far indicate that there is a seventy percent duplication in engineering resources at
both universities. By networking resources, duplication is avoided, access is provided to a
variety of users and most importantly money is saved to develop additional services.

Also as electronic journals and resources become even more accepted and used, it is likely that
different pricing and publishing models will be applied which will suit all the stakeholders.
This will have to happen if electronic journals are to develop.

Although solutions to all the problems associated with electronic journal production and ac-
cess have not been solved they are at least be recognised and addressed. Hopefully this will
lead to development of services which are profitable to publishers. while providing libraries,
authors and users with what they really want from electronic journal services.

References
HEFCE, SHEFC, HEFCW, & DENI.
The Open Journals Project (1998) <http://journals.ecs.soton.ac.uk/>
EEVL  <http://www.eevl.ac.uk>
ADAM <http://adam.ac.uk.adam>
SOSIG <http://sosig.ac.uk>
OMNI <http://omni.ac.uk/>
Blackwell’s Electronic Journal Navigator <http://navigator.blackwell.co.uk>
JSTOR <http://www.jstor.ac.uk>
IDEAL <http://www.janet.idealibrary.com/>
SwetsNet <http://www.swetsnet.nl>
Project Muse <http://calliope.jhu.edu/muse.html>


GAELS (1999) <http://gaels.lib.gla.ac.uk>