Introduction

Electronic journals are both a blessing and a curse for libraries. To be meaningful in the current information environment — to meet users’ ever-increasing demands — libraries must acquire as many appropriate full text resources as possible, as quickly as possible, and make them easy to use. This Digest provides tips for acquiring and providing access to electronic journals through a library’s Web site and online catalog. We encourage readers to consult some of the Web sites and other resources we listed for detailed advice on licensing and technical matters, such as user authentication.

Staff enthusiasm is crucial for maintaining the momentum to solve workflow problems and overcome technical obstacles in managing e-journals. The positive attitude of library staff also helps users adjust to online library services. It is easy to get excited on behalf of users about access to e-journals, which

1. Are available day or night, anywhere, to multiple concurrent users
2. Support distance education and web-based instruction
3. Allow the library to reach remote and disabled researchers
4. Can be searched, browsed, and interlinked with other publications and bibliographic databases
5. Are generally more current than print publications
6. Provide opportunities for enrichment and augmentation not possible in the print environment.

The benefits to libraries, while numerous, are less immediate. Space requirements and staff time will be saved when print journals are no longer needed, and e-journals can provide a great deal more direct access to quality information. Public relations opportunities are enormous.

Plunge in! Libraries can no longer afford to hold back. It is expensive for journal publishers and libraries to maintain two formats. When e-journals become ubiquitous, publishers and libraries will be able to devote their resources to producing and providing access to online-only journals. That day is coming, and libraries can help shorten the painful transition period.

You will need a flexible staff and organizational structure. Electronic journals impact areas of the library that have had little involvement with the management of print serials, and new demands on staff will require you to redefine positions and re-prioritize work. In order to better manage e-journals at the University of Nevada, Reno, the Serials Department no longer checks in or binds most print journals. They represent a dwindling proportion of our periodicals and are much less heavily used than our e-journals.

Acquisitions

If your library’s static or shrinking budget has kept you from exploring options for e-journals, you might be surprised to find that you can provide access to hundreds if not thousands of e-journals without spending any extra money by compiling URLs of journals already available. If you have discretionary funds or you can redirect funds from other kinds of materials (such as microforms) you could provide 10,000 or more e-journals, especially if your library belongs to a consortium.

Any library can present links to free e-journals, many of which have been established as online-only publications. You might be surprised at their quality and abundance. To find them, visit the Web sites of libraries that have already compiled lists. The University of Nevada, Reno Library provides access to 267 free e-journals. The Google search “Free Electronic Journals” or “Free Online Journals” can help you find other library lists.

Aggregator databases were designed for the subject-oriented search and retrieval of articles from multiple sources. But thanks to pressure from libraries, many of them now include cover-to-cover, full-text coverage of journals, providing table-of-content access through stable URLs. If you subscribe to full text databases from EBSCO, ProQuest and other vendors, you can make direct links to journals in the databases, bypassing the search interface. Note that, in some cases, a publisher embargo blocks access to recent issues.

Back issues of many high quality Science/Technology/Medical (STM) journals are freely available on the Web. Highwire Press currently hosts 439,369 free full-text articles from around 200 journals. Other initiatives derive revenue from authors instead of readers. BioMed Central is one such source of over 120 freely available current biomedical journals.

Some publishers give free or very inexpensive online access to their print subscribers. Your serials agent (EBSCO, Faxon, Swets, and so on) can send you a list of your subscriptions that include free online access. You could also use OCLC’s Electronic Collections Online (ECO) “Publisher and Journal Info” list to identify publishers that provide free online access with print subscriptions through ECO, whether or not you plan to provide access to them through the ECO database.

Several publishers provide packages of all their electronic journals at a reasonable cost. Unlike print subscriptions, the cost for online licenses can vary a great deal from library to library. Publishers often tailor the price to an institution’s budget, based on anticipated or real use. A common model uses the library’s print subscriptions to derive a price for a publisher’s complete online package. So if your library has been through major journal cancellations or has a very small budget, you might be able to gain electronic access to hundreds or thousands of journals for a small fraction of their list price. In negotiating with publishers, explain your library’s finances.

Many library consortia sprang to life in the late 1990s. Most publishers like to negotiate with one person on behalf of many libraries, and through offering dramatic group discounts, they can get their journals into more libraries than ever before. A larger customer base does not multiply production costs as it does for print journals. More visibility and higher citation rates ultimately increase the value of a publisher’s journals, so sometimes small libraries will be granted access to a large package through a consortium at practically no additional cost. If you do not participate in a consortial buying club, consider affiliating with one in a neighboring state. Sometimes an ad hoc consortium will form to obtain a discount from one publisher.

One final option to consider is to pass e-journal costs on to users through a “pay-per-view” service provided by vendors such as ingenta, First Search, or EBSCO; or to activate and subsidize a mediated or unmediated article-delivery feature using a deposit account.

Access

In the online world, as in the print world, library users approach journals in three distinct ways. They are looking for (1) articles on a certain subject, regardless of the sources, (2) articles already identified, or (3)
the entire contents of specific journals (usually recent issues).

Libraries need to support all these approaches by providing easy access to journal contents. In doing so, libraries must intelligently choose their e-journal access approaches, depending on the user needs and the available resources of staff and time.

**Web Pages and Web-Based Online Catalog**

Access to e-journals is generally provided through Web pages and/or Web-based online catalogs. A Web page of e-journal titles, which can be created with minimal Web authoring skills, is the most basic and simple way to provide access. It is a first step in connecting your users to your e-journal collection. Incorporating e-journals into the online catalog requires cataloging expertise. However, it has advantages over Web pages such as connecting with print (or other formats) and providing comprehensive bibliographic access to all resources. It is common for libraries to adopt both means to provide multiple types of access to all their titles.

**Database Approach**

If your library decides to provide access through both Web pages and the online catalog, you need to think about your database approach.

The two-database approach is used when the Web pages and the catalog entries are maintained separately. Apart from maintaining the catalog entries, libraries must decide a suitable mechanism for generating the Web pages. Some libraries maintain an HTML file in a Web design program, such as FrontPage or DreamWeaver. Some libraries store their e-journal data in a spreadsheet program such as Excel or a database program such as Access and convert them into Web pages. Examples are the sites for the University of Nevada Reno and the Oklahoma State University. Some other libraries use a relational database to generate sophisticated Web-based interactive access. Examples are the sites for the University of North Carolina at Greensboro and the Massachusetts Institute of Technology.

The one-database approach is used when a library populates its Web pages and online catalog from one central database. It is only natural for libraries to choose the online catalog as the central database for this project. After all, adequately cataloged e-journal entries offer full spectrum of access points, and libraries are known to have cataloging expertise. In this model, e-journal data is extracted from the online catalog to generate Web pages on the fly. Examples are the sites of Los Alamos National Laboratory and Miami University. A variant version of the one-database approach is to use Excel or Access to generate both Web pages and batches of brief MARC records. Most catalogers would not approve of this as a way to populate a catalog, but it is a fast way to put records there. It would definitely eliminate the single-record possibility, which will be discussed below, but it may be considered as a good first attempt.

Many libraries that started early in providing access to e-journals began with the two-database approach. Some of them have now switched or are switching to the one-database approach. The main reasons are: (1) to cut down the staff time needed for Web page maintenance; (2) to provide consistent information across multiple access points; and (3) to increase the accuracy and timeliness of the data. A library still at an early stage of providing e-journal access should seriously consider using the one-database approach.

**Levels of Access**

The most basic form of Web page access is an alphabetical list of titles with links. To enhance access, libraries may add coverage dates, publishers, usage restrictions, subject groupings, title and subject search engines, and other information deemed useful for the user community.

As for the online catalog, full cataloging is common for “stable” e-journals such as publishers’ titles while minimal cataloging may be considered for less “stable” titles, such as the ones available via full-text databases, if they are included in the catalog at all. When a library owns the print counterpart of an e-journal title, there is yet another decision to make. Will the “single-record” or “separate-record” approach be used? When the “single-record” approach is used, e-journal data and link are added to the bibliographic record for the print version. When the “separate-record” approach is used, the e-journal title receives its own bibliographic record. A library should decide which approach to use according to local needs.

**OpenURL**

The emerging OpenURL standard provides an exciting opportunity for libraries to bring electronic resources closer to the users. With the OpenURL, libraries can connect reference citations in index databases to a variety of services available for the particular citations. Those services may include one or more full-text sources, searching the library catalog, searching a regional or national database, initiating an interlibrary loan (ILL) request, asking a librarian, or searching for related information on the author(s) and journals. A library needs to have a local OpenURL resolver and a selection of OpenURL-enabled resources before providing this type of context-sensitive reference linking service. This extremely valuable access service option is definitely worth librarians’ attention.

**Outsourcing**

There is always the option of outsourcing. Available products include A-Z lists for full-text database titles, including holdings and regular updates, MARC records ready for batch loads, title and subject search engines on Web pages, and other e-journal management related services. TDNet, Serials Solutions, and EBSCO host Electronic Journals Service are just a few companies among many available outsourcing services.

**Related Web Sites**

Highwire Press highwire.stanford.edu
Hunt, Steve. Remote User Authentication in Libraries. library.smc.edu/rpa.htm
Massachusetts Institute of Technology. Vera: Virtual Electronic Resource Access river.mit.edu/mitlibweb/FMPro?-db=RS_Items.fp5&-lay=webbformal-go_search.htm&findany
Miami University. Electronic Journals. www.lib.muohio.edu/research/ejournals
OCLC Electronic Collections Online. Publisher and Journal Info. Participating Publishers.
www2.oclc.org/oclc/secco/frames/frames_pub.asp
University of Nevada, Reno. Electronic Journals. www.library.unr.edu/online/ejournals.asp
University of North Carolina at Greensboro. Journal Finder. journalfinder.uncg.edu/ungc

**Further Resources**


**The Authors**

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