CHAPTER 4

ELECTRONIC JOURNALS
TYPES AND USEFULNESS
ELECTRONIC JOURNALS: TYPES AND USEFULNESS

E-journals are in the eye of the particular storm that has hit scholarly communication with the growth of the Internet. There are several things going on at the same time as the transition from one format to another. The web opens up all kinds of possibilities for fundamental changes in the ways that information and research results are shared, and momentum is building for the development of alternatives to traditional journals. At the risk of oversimplification, librarians find themselves operating in parallel universes (with varying of success.) in responding to their patrons current demands while at the same time they position themselves and their libraries for a very different kind of future and, in some cases, acting as change agents to hasten the arrival of that future.

To understand electronic journals means not only to know their features and characteristics, but also the economic and political environment in which they reside and all the participants in the scholarly information chain from author to reader.

THE SCOPE AND VARIATIONS OF ELECTRONIC JOURNALS

Depending on the library and the purposes and users, it may use a more restrictive definition for electronic journals. Libraries provide electronic access to articles from journals in a variety of ways, some of which stretch or diminish the concept of “journal,” and this book explores every access angle. However, it is important to maintain a distinction between “electronic journals” and “articles from electronic journals” when it makes a difference to users.

An electronic journal might be available only in electronic format, or it may be an electronic replica of a journal that is available in print. It might have the same title, publisher, editor, and ISSN as a print journal but have some different features from the print journal. It might have less content or more content or the same content in another format.
4.1 INCOMPLETE OR DIVERGENT CONTENT

A digitized facsimile of a recognized print journal will be easy to define as an electronic journal. It is more difficult to characterize those that are similar but not identical to a print journal. Libraries have different standards for what is presented to users as full text, standards that can (and do) change as libraries expand or refine their electronic journal offerings.

What some publishers call an electronic journal is often just a promotional web page with excerpts from or information about a print journal with the same title. These publishers may not have plans to offer the full content of their publications via the web; rather, they are using the web exposure to attract subscribers for their print product. Some publishers will offer most of a journal's articles online at no cost to readers, reserving for print only enough feature articles to maintain or expand their subscriber base. Others will consider their "electronic journal" a supplement or enhancement to the print journal that is intended for their print subscribers.

4.2 Journals in Full-text Databases

Most of the bibliographic/full-text aggregator databases with which you are familiar- E. B. S. C. O. host, first search, info Trace, proquest, lexis-Nexis, and Wilson Select databases, among others- at first were not designed to deliver intact journals. Their original (and, in most cases, enduring) purpose was to deliver citations and articles in response to a search query, usually to undergraduate students or public library patrons, and they were built and maintained accordingly.

As a consequence of new experiences with electronic journals, end users and librarians have demanded, and in most cases have received, more comprehensiveness in full-text aggregator databases:

- More complete coverage, including book reviews and editorials
- Image representation
- Ability to link from a library's online catalog or web pages to the tables of contents of contents of journals within the database
- Ability to link from bibliographic citations in the databases to the full text of articles outside the database, licensed from other sources
• Ability to link directly to full-text articles in the database from other bibliographic databases.

The advent of electronic journals has affected full-text databases in other ways. Now they have more alternatives for providing access to their journals, including their own websites, a few publishers no longer wish to have their articles delivered through an aggregator’s database. And some other publishers have instituted an embargo on recent issues in order to prevent the erosion of their library subscriber base (for their print or their own online subscriptions). Librarians accustomed to licensing or purchasing aggregations of articles and abstracts with a search engine expect the content to change as the database vendors’ contracts with publishers change— but in times of tight budgets, some libraries have begun to cancel their print subscriptions for journals within aggregator databases, as publishers have long feared they would.

4.3 Abstracting journals online

Closely related to virtual journals, abstracting, or “synoptic,” journals, with summaries articles rather than the articles themselves, can be considered either access tools or actual journals, depending on how they are presented. A library may include it on a list of online journals, or on a list of indexes, along with similar abstracting journals such as communication abstracts. Most online synoptic journals that originated as print publications look more like indexes than bibliographic databases, designed more for browsing than for searching.

4.3.1 NEW SERIAL FORMS AND EXPERIMENTS

The internet has changed the nature of scholarly communication. Listservs, e-mail, and web pages have significantly improved the opportunities for scholars to share their data, information, opinions, and research. The internet has also helped relax formality that has long characterized academic discourse.

Somewhere between the formality of published, refereed journals and the informality of listserv discussions, new varieties of electronic-only journals have found a niche some are posted on web pages; others are e-mailed to subscribers. Some of them are simply edited compilations of listserv postings
or e-mail messages sent to the editor, which are redistributed by e-mail or posted on the web at regular or irregular intervals whether these meet the official definition of an electronic journal will depend on how they are edited and distributed. But whether they meet a library’s criteria for inclusion on a subject list or in the online catalog will depend on the library itself – defined criteria.

4.3.2 THE (R) EVOLUTION OF ELECTRONIC JOURNALS

While the web is generally celebrated for enabling the free flow of information, expensive scholarly information system still relies on intermediaries- publishers and libraries. The interaction of these two groups has defined many of the developments of electronic journals.

4.3.3 PRE-WEB FORMATS

The first electronic journals, developed in the 1980s, were e-mailed to subscribers or made available through FTP in strictly plaintext format. The community of internet users was small, and these early specialized journals did not have many readers. As the serials crisis worsened in the early 1990s, anticipation grew for the potential of the internet to transform the scholarly communication system. Gopher technology, soon supplanted by the worldwide, web, inspired the imaginations of librarians and scholars who envisioned a place for grass-roots publishing without commercial intermediaries. Some of the early experiments in gopher-based and web-based publication were promising and exciting. But the new journals had little impact on scholarship. Not enough users were connected, and for those who were, the web browsers and modems and desktop computers of the time had many limitations.

4.3.4 E-JOURNALS ON THE WEB

The advent of the web, along with the development of scanning technology and adobe’s portable document format (PDF) protocol, allowed the publishers with some capital to begin offering an electronic version of their journals to libraries. Most of the major publishers were at least
beginning to develop their web based publishing strategies in the mid-1990s. All efforts were considered experimental until there were suddenly enough publishers with enough journals available through the web that some libraries felt they could offer a critical mass to attract the interest of their users.

To help satisfy the early need for a critical mass of journals, academic press (at the time an independent publisher, now an Elsevier imprint) provided a marketing model that other publishers have since adopted: the consortial package plan. As participants in consortia that acquired electronic access to collectively held subscriptions, many libraries had their first taster of electronic access to journals not previously affordable in print.

Publishers began to realize that they had to provide incentives for early adopters to hasten the major shift to online access. The costs to access journals through platforms such as ECO were adjusted downward more than once. Some publishers offered free some important individual journals were made available without charge.

Three year licenses for the “Big Deal” option, provided attractive price caps and other inducements for libraries to make an commitment to what was still somewhat of an experiment. New access to hundreds of formerly unaffordable journals attracted many medium-sized and smaller libraries.

In the present and near future, librarians will continue to work primarily with electronic journals that look and act like print journals, with some minor differences, and will continue to face major challenges in providing access to them. As electronic journals mature, they offer new kinds of opportunities and challenges.

**4.4 FEATURES AND CHARACTERISTICS OF ELECTRONIC JOURNALS**

Electronic journals are still in a shakedown period. Each new medium begins by imitating its predecessor, so despite the dramatic differences between the printing press and the Web, the typical electronic journal of the present still looks very much like a print journal transported to a computer screen. However, some publishers, both established and emerging, are beginning to take advantage of option made possible by the Web.
Sophisticated features become commonplace as readers are courted with technological bells and whistles by some publishers who never give up on the concept of providing researchers with a home base revolving around their own journals:

4.4.1 WEB PRESENTATION

Most commercial and society publishers use the portable document format (PDF) to “publish” their journals on the Web. Despite the fact that the pre-publication process for journals is now largely electronic, publishers of some print journals find it more economical to scan the printed pages than to convert from one electronic format (suitable for print production) to another (suitable for the Web). Software enhancements now allow more publishers to convert other electronic formats to PDF, but electronic production is still an add-on print production in most cases.

Journals with no print ancestor or close print relative, are generally produced in or converted to a Web-oriented format, such as hypertext markup language (HTML), standards general markup language (SGML), or extensible markup language (XML) to better take advantage of the Web environment. Simple HTML is now considered by many to be too limited for serious Web-based publication and is being abandoned for more sophisticated markup languages, but for the sake of this discussion, all versions of Web markup language will be referred to as HTML:

Some publishers offer both PDF and HTML versions of their articles, some use dynamic PDF, and some use HTML supplementation to PDF articles. There are information professionals who are familiar with the innovations of some of the electronic only journals and who understand the potential of Web-based delivery who have been disappointed by the continued dominance of the PDF approach with its inherent limitations.
### Comparison of HTML and PDF

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<thead>
<tr>
<th>HTML (SGML, XML) advantages</th>
<th>PDF advantages</th>
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<tr>
<td>• More option for linking, searching, and supplementing the text</td>
<td>• Stable, manageable and cost-effective system for publishers</td>
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<tr>
<td>• Loads quickly</td>
<td>• Familiar look for users</td>
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<td>• Inexpensive production tools</td>
<td>• Standardization for libraries who are building interfaces</td>
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<td>• Easy to index and mine</td>
<td>• Easy conversion of “legacy print”</td>
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<td>• Easy to meet ADA accessibility guidelines</td>
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<table>
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<tr>
<th>HTML disadvantages</th>
<th>PDF disadvantages</th>
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<tr>
<td>• Generally more labor intensive to produce</td>
<td>• Requires readers to have the Adobe Acrobat Reader plug-in (but so do a great many other documents on the Web)</td>
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<tr>
<td>• Troublesome to print fragmented documents</td>
<td>• Large files, slow to load—an annoyance to those using electronic journals through a low-bandwidth connection</td>
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<td>• Requires a separate production process from that for a print journals</td>
<td>• Does not make optimal use of the shape of a computer screen</td>
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<td>• Display may change with different browsers and screen resolutions</td>
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### 4.4.2 SEARCH ABILITY

“Search ability” is a frequently mentioned advantage of electronic journals over their print counterparts. The effectiveness and value of searching an online journal in its native environment depends quite a bit on the provider’s site.

Once an article is on the screen, its text is almost always searchable with one of the following options:

- The browser’s “find” function
- The search function in Acrobat reader.
• A search tool provided by the publisher or the host site.
• A web search engine if journal articles are freely available at a web site.

Searching for subjects or authors within a journal or group of journals is sometimes made possible by the publisher or the hosting service. Publishers expect readers to browse through the table of contents of a featured current issue. However, a one journal site usually a way to search the table of contents of all issues of a journal by subject or author.

Most information providers are quite willing to facilitate the interconnection of their resources. Journal publishers realize the value of database links for their readers and for themselves. The availability of links to their articles from multiple sources translates into broader name recognition, higher usage statistics, more citations, and a higher impact factor. Likewise, database vendors realize the attraction of products that allow libraries to maximize the use of their e-journals.

• Linking between electronic resources owned or licensed by a single entity should be strongly encouraged and widely permitted.
• Full-text publishers, information aggregators, and abstracting services should pro-actively engage in collaborative efforts to link their resources as long as a secure information environment is in place.
• Information purchasers and users should expect and request broad-based linking capabilities from their information and technology providers in order to maximize the return on their investment in those resources.

Linking practices have come a long way in a very short period of time; however, the more effortless it becomes for users to glide from resource to resource the more work there is behind the scenes for all the information entities, including libraries.

4.6 INTERACTIVITY AND CUSTOMIZATION

Most of the larger e-journal sites encourage their visitors to become registered users and take advantage of targeted features and the ability to customize interactions. After creating a log in, users can often choose their
favorite journals, save search criteria and results, re-execute searches, download citations into bibliographic management systems, and organize saved content in “My Folder” (Highwire), a “Filing Cabinet”. In some cases, users can save (and edit) their own notes and annotations to the articles they save at a publisher’s site.

4.4.7 Current Awareness Service:

Academic and research libraries have long sponsored mediated or unmediated current awareness services to help their users keep up-to-date with journal literature in their areas of interest. Alerts can work quite well for electronic journals, and in many cases researchers will establish and maintain their own CAS through a publisher’s or e-journals provider’s site from publisher’s site, a user might select several journals to track. Profile-based alerting services based on keyword or authors are also freely available through many e-journal sites.

Someone who is interested in knowing about the publication of new articles in journals from several publishers may find it too bothersome to register for a multitude of CAS from different sources. For that reason, libraries may still wish to subsidize a subscription-based service that covers most major journals.

Although free CAS services on publishers’ sites are limited to a smaller number of journals, they do offer some advantages to commercial CAS services. A user who has institutional access to a site will have access to the articles linked from targeted current-awareness messages. The publishers will usually not issue an announcement about new content until the content is available in some form.

4.4.8 Current period:

A fairly recent practice in aggregator databases in the use by publishers of an current period for their journals (generally expensive academic journals), effectively keeping their most current content out of the database. Current periods generally range from six months to two years. The publishers’ motive is to discourage libraries from canceling their print (or direct online) subscriptions, thus maintaining an important revenue stream. The per-article payments they receive from database providers for each use of current
articles does not outweigh the loss of library subscriptions. Database providers that are also subscription agents have their own incentives to adopt practices that will discourage the cancellation of individual subscriptions.

4.5 LONG-TERM ACCESS: ARCHIVING ISSUES

A few short years ago, many librarians were unwilling to invest heavily in electronic journals because the “archiving problem” had not been solved. The lack of a solid plan to guarantee the availability of electronic journals “in perpetuity” was seen as the biggest obstacle to the acceptance of the new format, and it was a considered rash to drop print subscriptions in favor of more ephemeral electronic-only access to import journals. The archiving problem is not much closer to a solution, and still causes a great deal of concern, but circumstances have nudged librarians to overlook the severity of this problem in yielding to an inevitable shift to electronic formats:

- The overwhelming majority of users have voted loudly with their keyboards and mice: when electronic access is a possibility, print is no longer acceptable.
- Economic uncertainties can make it difficult for libraries to continue paying a surcharge for content in two formats.
- Major publishers have flipped their pricing models to favor electronic-only subscriptions.
- Libraries are running out of shelf space for current and bound journals.

1.6 BENEFITS AND DRAWBACKS OF ELECTRONIC JOURNALS

Electronic access to journals brings many benefits to users, libraries, and publishers. During the transition period, the eventual economic benefits cannot yet be known, but we have already seen that early-adopter libraries have more journals at less cost in the electronic environment. As with print journals, there are indirect and hidden costs with electronic journals as well as long-term costs and benefits that are difficult to estimate. And there is more potential for users aggravation as well as user joy. During the transition to electronic publications, some publishers have grown rapidly while others have ceased to exist. Some libraries have managed a graceful integration of
electronic resources and service while others have been devastated by problems arising from the transition to electronic formats.

4.6.1 BENEFITS TO USERS

Electronic journals benefit users as they-

- Are available to authorized users anytime, anywhere;
- Interact with other electronic resources;
- Save users’ time through desktop access;
- Provide enhancements, supplements, and search ability unavailable in the print environment;
- Are often on the Web weeks before they are available in print format;
- Can be read by more than one person at a time;
- Are generally suitable for adaptive technologies for visual impairment;
- And do not lost or stolen or vandalized.

4.6.2 BENEFITS TO LIBRARIES

Electronic journals offer libraries-

- Superior resource delivery for distance education;
- Improved service to homebound users;
- Potentially accurate usage statistics to help with collection development decisions;
- Some cost savings, or more titles for the same cost;
- Reduced shelving and processing costs (long term);
- Reduced staffing for claims or replacement of missing issues;
- Reduced binding costs;
- Public relations opportunities;
- Satisfied users; and
- More access by more people to more research information.

4.6.3 DRAWBACKS OF ELECTRONIC FORMATS-

Electronic journals do have a downside:

- Coverage is not always as complete as in the print version,
- Authentication issues drain institutional resources and user good will.
- Long-term preservation is not assured.
• Some e-journals are less control over access to electronic journals than over access to print journals.
• Users’ desktop technology does not always keep up with e-journal technology.
• Technical difficulties sometimes render them temporarily unavailable.
• Managing e-journals requires new or reallocated resources,
• The stability of the suffer (as in the demise of the vendor Faxon).

4.7.2 THE ELECTRONIC-PUBLISHING ENVIRONMENT

Electronic publishing includes all the parties that have participated traditionally in print publication (sometimes transformed to play major new roles) plus a host of other affiliated organizations and business. Roles of participants in the electronic publishing environment can be indistinct and can change quickly in response to the marketplace.

Journal publishers have several options for making their content available online through libraries or directly to readers. Some publishers want to make their journals available in as many places as possible to increase name recognition and usage. Whereas others want to retain control over the present anon of their journals. A few publishers do not provide access themselves, but rely on aggregators or hosting services to do so. Registration and authentication of licensed users is a major new process in the Web environment at the provider end as well as the library end.

4.7.3 Subscription Agents

Serials subscription agents have been dramatically affected by the transition to electronic publication. As most of us know, some from painful first-hand experience, one of the largest and oldest subscription agents, Rowe Com (formely Faxon) declared bankruptcy at the expense of many libraries and publishers before being acquired by EBSCO. The business climate is difficult, with reduced operating margins, as a result of decreased publishers’ discounts and, in the case of electronic journals, additional costs related to the increased complexity of subscription management (activation, licensing, etc.). with publisher packages and consortial arrangements, subscription agents are often left out of the process altogether. The few agencies that have weathered the changes are providing new services to libraries and publishers, including
e-journal hosting. EBSCO, in particular, has always been diversified, selling fishing lures as well as databases.\textsuperscript{7}

4.8 E-journals Management Services

To help libraries manage their e-journal aggregations, new services have sprung up to provide various levels of support that might include:

- Customized Web lists; or complete Web pages with holdings information, for all e-journals a library subscribes to through aggregators, publisher packagers, or as individual titles;
- MARC records for a library’s e-journals;
- A customized database providing journal title access or articles level access to a library’s e-journals.

Prices of these services also vary, with some companies offering something for every budget, some offering simple services, and some offering deluxe services and products. On this list you will see an established company that has developed new niches, new companies, and an entrepreneurial library and library consortium.

- TDNet: a new company “integrating a diversity of access modes to electronic journals, on one unified a coherent site.”
- Serials Solutions: “founded by a librarian” to “deliver tools and services that help librarians and their patrons get the most out of their electronic journals” (now owned by Pro Quest).
- Journal Finder: a product of the University of North Carolina, Greensboro.

4.8.0 ECONOMICS AND POLITICS OF ELECTRONIC PUBLISHING

Librarians, scholars, and publishers are witnessing and participating in a major transition from print-based to electronic-based scholarly communication, and quite possibly there will soon be a noticeable shift from journal-based to article-based services. In the print environment, the most efficient and cost-effective publication model is to periodically gather and process enough articles to comprise an issue at manageable, acceptable
intervals, usually four times a year. There is tradition to hold articles for cumulation in an electronic journal. Science is not well served by unnecessary and artificial delays in the dissemination of research results.

Some believe that an entirely new kind of Web-based system might render both publishers and librarians obsolete in their role of providing access to journals. Eliminating incendiaries is one possible scenario of this revolution. But that we are seeing up to this point is the appearance of new intermediaries between information and its consumers, and between publishers and libraries. Libraries have straddled multiple realities before, in the migration of their card catalogs to online catalogs, in changing from print indexes to mediated online searching, then to CD-ROM databases and finally to Web-based databases.

Commercial publishers bring their electronic journals to a somewhat adversarial library market. The situation that come to be known as the “crisis in scholarly communication” has not put libraries in a good financial position to add new products, and librarians blame excessive publisher profit making for causing the crisis in the first place. Both libraries and publishers stand to gain from a shift to electronic publication, but the transition period, during which it is necessary to provide both print and electronic versions of journals, is difficult for both groups. The length and the success of the transition period will be determined by the amount of cooperation, openness, and mutual experimentation between publishers and libraries in the establishment of a new equilibrium.

The Internet, of course, is a revolutionary change agent on the scale of the printing press and the industrial revolution—changing our individual users and our society in fundamental ways. The entire scholarly communication system is under review, and its functionality is under attack at a time in which technology opens the door for alternatives.

4.8.1 THE SCHOLARLY PUBLICATION CRISIS

Electronic publication has not solved the scholarly publication crisis that has plagued libraries for decades. Some libraries have access to more journals than they had in print through bundled subscriptions, but these deals are hard to maintain without budget increases. The fact remains that both
before and after the advent of electronic journals, library budgets haven’t been able to keep up with increases in the cost and volume of scholarly publications.

4.8.1.1 Price Increases and Added Costs

In general, the larger publishers add a surcharge for online access to print subscriptions, so unless a library opts for online-only access, its budget must absorb the additional cost. Sometimes intermediaries impose access costs for their services. To satisfy the needs of their users, libraries invest heavily in technology, staffing, and outside services to help them disaggregate and re-aggregate e-journals to create local searching, browsing, and linking systems. Savings from discontinuing print subscriptions are yet to become significant for most libraries.

4.9 THE OPEN-ACCESS MOVEMENT

A variety of reform initiatives have come to be known collectively as the open-access (OA) movement. In addition to the public appeal of universal access, other attractions are-

- Possible cost savings for libraries (though the shift from subscription funding to other types can still affect the library, directly or indirectly);
- The end of authentication concerns (and costs) for both publishers and libraries;
- More opportunities to integrate and aggregate journal literature and to deploy effective linking and search and retrieval systems across databases;
- The ability to study and analyze the combined published.

4.9.1 E-print Repositories

Several discipline-based and institutional repositories are maintained and made available to authors to enable easy self-archiving of their journal articles and other scholarly works. There are more 182 repositories.

The dedication, the talent, and the high level of cooperation among the information professionals who manage these repositories indicate that this network of literature could become very valuable to information seekers as
well as information scientists. Unfortunately, articles from some major journals are missing because their publishers are unwilling to place them there.

Largely to avert a possible threat to their livelihood, many commercial publishers have begun to allow unrestricted access to some of their journals in ways that will further the wide distribution of research results without undermining their profits significantly:

- Some publishers offer free access to at least one new online-only journal, sometimes a digest of articles that appear in their other journals.
- Many publishers participate in initiatives to make e-journals freely available (or at an affordable subscription price to institutions in developing countries that would otherwise not be able to subscribe to them).
- Some publishers provide unrestricted access to their current issue or most of the articles in the current issue while requiring a subscription to all previous issues.
- Some publishers have established hybrid open-access journals. These allow authors who have the financial support or the conviction to pay the publication charges to ensure that their articles are freely available to readers who do not subscribe to the journal, which is otherwise restricted to subscribers.
- A growing number of publishers open their archives to the world through Highwire Press or PubMed Central or on their own sites while continuing to restrict the access to newer issues to their subscribers.

4.9.2 BUDEET COASTRAINT

The person who negotiates the prices the library will pay for electronic journals and databases is frequently the same person who negotiates the terms of license agreements on behalf of the library in fact, pricing details and terms are often included in the license agreement, in the body or as an appendix.

The results of pricing discussions may well influence selection decisions in most cases, e-journal pricing is much less straight-forward than
the pricing of print subscriptions. Most publishers distribute a price list that applies to electronic journals, but you will find that these prices aren’t necessarily firm. Journals can be sold in bundles or in pieces (with current years and back issues sold separately, or with payment required for individual articles). The definition of “site” for a site license, the number of concurrent users, or the size of your university or city or company might affect your cost. Multiyear agreements might guarantee a cap on price increases, and consortial discounts can result in significant savings for individual libraries.

Library considerations, in addition to budgetary constraints, include the cost of access, which might be paid separately from content fees, to a third party. A library that for online-only access can factor shelf-space savings into the overall savings, as well as savings for binding. Both publishers and libraries have short-term and long-term strategies to help with the transition to electronic journals, and a pricing model that works for both parties during one stage may not work at another stage of the transition.

4.9.3 Customized pricing and Tiring

Print subscriptions are generally the same price. Electronic subscriptions are often priced in anticipation of their value to the institution and what the institution can afford. “tiered” or “banded” pricing gives publishers a chance to recoup their costs by expanding their markets- by basing the price on the usefulness of their journals for each market segment. Some indicators of the library’s interest in or ability to pay for new electronic journals are the

- Number and character of current or recent print subscriptions,
- Library’s materials budget,
- Number of potential users
- Type of library
- E-journal(s)

4.9.4 Easy Customization through library consortia

Electronic journals have been responsible for the formation and expansion of numerous library consortia. Consortial deals benefit publishers through savings in marketing expenses and the time it takes to negotiate a license with each individual library. One sales representative can represent hundreds of titles to one representative of a consortium consisting of dozens
of libraries, on behalf of tens of thousands of users. Large consortia contracts also give vendors a way to dominate a regional market in some cases, as in a statewide contract for full-text databases.

A consortia deal usually gives libraries electronic access to journals held in other participant libraries and often gives all the libraries access to all of the publisher's journals. These deals sometimes fall apart during negotiations and during renewals. Large libraries that may have been willing to subsidize smaller libraries in the consortium may not be able to be as generous when their economic situations change. Some publishers see the big deal with big consortia as an interim strategy.

4.10 WORKING WITH CONSORTIA

As has been demonstrated, library consortia can help publishers expand their markets for electronic journals and at the same time make it possible for libraries to have hundreds or thousands more journals than they could otherwise afford. If you library belongs to a consortium, you have probably been approached to participate in consortial agreements. If the consortium has an organized, discriminating, and participatory approach to collection development, there is a good chance you will be interested in at least some of their proposals. Those who are responsible for electronic journal selection will establish the library's level of interest in a proposal, but things can quickly become complicated for the prospective participants, especially if some of them are undecided.

Some library consortia have centralized funding from a national, state or provincial legislature, or government or private grant. They may also have professional staff who will handle the substantial amount of work it takes to complete a successful consortial agreement. A given library may have little choice or minimal involvement in a statewide license for a full-text database. The less a library's own funds will be used, the smaller its role will be in the negotiation process. The opposite is just as true.

Commonly, a library that has decided to order a package of electronic journals or a full-text database discovers that there is an attractive consortial discount discount and seeks out potential consortial partners that might also be interested in the same product. If the participating libraries will be on their
own to negotiate a license agreement. Even in some formal consortia, a “sponsor” library with the strongest interest might take the lead in brokering a deal.

Various pricing models have evolved to increase the market share for publishers and lower the price for consortia. When a license agreement clearly benefits both the publisher and the consortium, its elements tend to be adopted by other publishers, so agreements are becoming somewhat more standardized.4

4.10.1 Advantages of the Consortium Approach

A consortial license provides a stable market for the publisher. As it builds an electronic-delivery infrastructure, the publisher reaps certain benefits:

• Guaranteed retention of subscriptions that might otherwise be canceled.
• Potential buy-in income from new customers.
• Additional surcharge income without much additional expense to the publisher.
• One point of contact; one license negotiation; one payment.
• Increased use of journals that are otherwise not accessible to some of the users (resulting in more citations that lead to more demand and more use).

4.10.2 TYPICAL PRICING AGREEMENT FOR CONSORTIAL ACCESS TO JOURNALS

This simplified hypothetical license agreement between Publisher and Consortium includes many conditions that are typical to consortial agreements, though details will vary:

1. Publisher produces 50 journals in both print and electronic format.
2. There is a 15% surcharge to receive both the print and electronic versions.
3. A consortium can pool its subscriptions and all participants will gain electronic access to the titles held by any of the participants.
4. Subscription costs are based on the price of the previous year’s subscriptions (“base-year titles”).
5. The three-year license requires each participating library to maintain its current subscriptions in electronic format.

6. Nonparticipating members can be added at the beginning of each subscription year for the remainder of the license period, but their surcharge will be based on their subscriptions during the base year.

7. One invoice will be issued to the consortium; one list of IP addresses will be submitted.

8. If some of the libraries are willing to give up print subscriptions to duplicated titles, electronic access to journals of equal value can be substituted for the consortium.

There are several advantages in a deal like this for the libraries:

• Electronic access to their own subscriptions at a reasonable cost.
• Free access to additional titles.
• Very low-cost access to titles of lesser interest.
• Guaranteed control over price increases.
• The option to choose electronic access without penalty for dropping print subscriptions.
• Joint access to a pool of resources that can be used to develop value-added services.
• The chance to offer a “level playing field” to all researchers in a state, province, or country, regardless of their institutional affiliations.

4.10.3 Lumps-Sum Fee

In other kinds of consortial agreements there is a lump-sum fee for a package, no matter who participates, so if some of the members opt out the others have to pay more, which then might cause some of them to drop out. A new price scheme has to be calculated each time a library decides to be in on or out of the deal. Thus, an attractive proposal might become less so. Some publishers will demand a certain level of participation.

4.10.4 Usage

Usage patterns can be determined after a service has been in place. It might seem logical to apply the first-year’s usage statistics heavily in distributing the second-year costs, but some consortia shy away from creating any kind of disincentive for using electronic journals.
4.10.5 OTHER CONSORTIAL CONSIDERATIONS

Libraries that obtain electronic journals through consortia pay lower prices, and sometimes this is the only way to get access to a publisher’s journals. If your library does not belong to a consortium, investigate the possibilities in your geographical area.

Form a New Consortium

If there is no appropriate consortium in your area, you might consider forming one; there may be other orphan libraries nearby.

Forming a consortium is beyond the scope of this chapter, but in general, you don’t need to be elaborate. You library director will need to meet with other library directors who will agree to the idea of collaborating on electronic licensing. An informal agreement and a consortial name will satisfy some vendors. Others will require that you be a legal entity. Within a state or a metropolitan area, there may be an organization of libraries or universities that will offer you its legal umbrella for your purposes.

A new consortium without an established infrastructure requires a commitment of time from some people on behalf of others, as the above example illustrates. Negotiating license agreements, determining and implementing the cost-sharing plan, and especially communicating with the participants can take an immense amount of time.

4.11.1 DEALING DIRECTLY WITH PUBLISHERS

Subscription agents help to consolidate services, but libraries may find it easier to deal with publishers directly. Unless you have a very close relationship with your agent, someone in the library should always assume the responsibility for license review and negotiation, since it is up to the library to assure compliance with the terms of the license. In the end, it is up to you to determine if the services offered by a vendor or agent for electronic journals are worth the price. If you want to order directly from the publisher (you will
usually end up communicating with them anyway, if you want a site license), you can generally find contact information on their Web sites.

### 4.11.2 Checking Links

An online equivalent to claiming might be a process to ensure that the link to the remote server is active. For journal packages this does not confirm if something has been added to the site or if a title has been dropped. As indicated above, these kinds of checks should be made when the package comes up for renewal. If the site is stable, you may wish to depend upon user feedback to alert you to problems. You should also run some link-checking software at regular intervals.\(^{15}\)

### 4.11.3 Responsibilities of Setting Up Access

A work-flow chart for your library can help you determine who is responsible for what at the access end of the acquisition process (as well as at the selection end). It will be different for each library. See Figure 6-5 for a sample work-flow chart.

<table>
<thead>
<tr>
<th>The Relative Roles of Acquisitions Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection</td>
</tr>
<tr>
<td>E-Journal Collection continuum</td>
</tr>
<tr>
<td>Library A:</td>
</tr>
<tr>
<td>Selectors</td>
</tr>
<tr>
<td>Library B:</td>
</tr>
<tr>
<td>Selectors</td>
</tr>
</tbody>
</table>


4.11.4 EBSCO Electronic Journal Service

**EBSCO host Electronic Journals Service (EJS)**

Handled electronic journal access and management needs. EJS Enhanced offers extensive features that help with e-journal management tasks such as: tracking the registration status of e-journals, authentication assistance to facilitate both on-campus and remote access to e-journal content, automatic management to e-journal URLs and much more.

The EJS Enhanced fee covers these services for subscriptions acquired through EBSCO subscription services; to include other journals there are “Expanded Access Fees.” EJS also offers a pay-per-view option for articles in journals not included in library subscriptions. Libraries can pay for users’ articles through EJS or pass the cost along to users.16
4.11.5 CRITERIA FOR RENEWAL

4.11.5.1 Content
Check to see if there are any changes in content. This is especially important if you are subscribing to a package rather than to an individual title. Consider the following questions:

- Has the vendor or aggregator added resources, or conversely, removed some titles to which you previously had access?
- If you subscribe to multiple full-text databases, is there increasing duplication in the titles offered by aggregators?
- How many unique titles are in each package or database to which your subscribe?

Check to see how current the electronic journal is vis a vis the print version of the title. Does it come out prior to the print, which is certainly an advantage to your users, or is there a time lag before the electronic version is available? If there is a substantial delay, one of the most compelling advantages of the electronic journal—currency—is lost to users.

4.11.5.2 Pricing
Many electronic journals are available from several vendors or aggregators. Renewal time is a good time to check the options from other providers. New packages may be available at more competitive prices, or with a title mix that is more compatible with your collection. A particular vendor interface may be more intuitive and easier to navigate for your users.  

4.11.5.3 Usage
Usage statistics are now available from most e-journal publishers, although the depth, timeliness and ease of use varies a great deal. Do not be satisfied with a “default” report that lists only titles most frequently accessed, excluding titles that are seldom or never used. Look for the following information in the statistics that are provided to you:

- What is the number of sessions or log ons?
- What is the number of queries or searches done?
- What are your times of peak usage—by day, by hour?
• Are users being turned away? Do you need to purchase additional or unlimited simultaneous users?
• What is the cost per use for the title or database? A general interest resource should be relatively low in cost packaged subscriptions—except one.

### 4.11.5.4 Free Online Access with Print Subscriptions

Obviously, if your access to an e-journal is made possible by your print subscription, you will lose that access if you cancel the print version. Or so it seems. But if you let the publisher know that you prefer the online version, you may be able to arrange for online-only access for the price of your print subscription, or less if they are ready to experiment with new pricing models. A publisher that does not have a system for managing online-only subscriptions may agree to discontinue sending print issues although you are a subscriber. If not, you can choose not to process or shelve the print issues. Your online access will be as secure as your print subscription has been.

### 4.11.5.5 OTHER CONSIDERATIONS

Despite the duplications of content in print and electronic formats, there are situations in which you will not want to cancel the print version. Each library will have its own considerations, based on its users’ needs and its mission, so you will want to develop your own policy. Your exceptions might include some of the following:

• The journal regularly contains articles that are too long to print.
• The print version contains large-sized supplementary materials that cannot be viewed, or cannot be viewed easily, online.
• Accreditation of a program requires the print subscription.
• Access to the online journal is provided through unstable channels.
• Issues are monographic and cataloged under separate titles for better access.
• Collection-sharing agreements with other institutions preclude cancellation.
• The electronic version is not equivalent to the print versions.
• The print version continues to receive heavy use, despite the availability of the e-version.

### 4.11 THE CATALOG AND THE HOME PAGE (AND MORE)

When electronic journals were new, librarians debated whether they should provide access to them through the library’s catalog or Web pages. Through
experience, we have learned that the correct answer is “both.” Different kinds of users will look in different places, and each source has its advantages and disadvantages.

Libraries have found that many users prefer to use Web lists in order to “get a feel” for the library’s e-journal collection, but for those who are tracking down a particular article in a particular journal, the catalog can provide through and accurate information about the journal in all its formats and locations. The biggest challenge for most libraries is to provide a system for both kinds of access without double the work.

In addition to providing searching and browsing access through your catalog and your Website, you will also want to ensure that your users can connect with articles in your electronic journals through links from your non-full-text databases, their course syllabi and assignment Web pages, and your library’s course reserves system. It’s a tall order.

**Population Two Databases**

Until their backlog of e-journals is cataloged, libraries often initiate a short-term process that may last a long time- producing web lists from a separate database or spreadsheet. This usually means obtaining e-journal metadata from publishers’ or vendors’ sites or purchasing custom lists from a third party, such as serials solutions. Most outside e-journal management services will supply libraries with frequently-updated web ready lists of the titles in their collections of licensed journals with links to individual journals within each package or full-text database.

These same lists can be used to semi-automate the creation of brief e-journal records for the catalog, but not every library will accept a batch method of populating its catalog. Any such “quick-and dirty” process can undermine the quality and integrity of the catalog, so some libraries will opt instead to catalog each title individually. In these libraries, web pages can generally be updated more quickly than catalog.

**4.12 USER-CENTERED ACCESS**

Users’ information and research needs remain fundamentally unchanged by new developments in online delivery systems, although their expectations and
behavior in satisfying those needs may have changed radically in every discipline, the development of a body of research or theory is documented through sanctioned means, usually articles in peer-reviewed journals, and current e-journals simply deliver those articles in a different format. These needs remain unchanged:

- Faculty and other researchers who submit manuscripts to journals that will legitimate and disseminate the results of their work still need to conduct describe a literature review that demonstrates their knowledge of prior related research.
- Funding agencies still require that proposals include a bibliography.
- High school and undergraduate college students still need facts and quotations from authoritative sources and other kinds of substantiation for their own opinions and assertions. Even if they are assigned to develop a PowerPoint presentation, multimedia project, or web site rather than writing a “term paper,” they are nonetheless still required to gather and synthesize information from other sources.
- Graduate students still do exhaustive literature searches for their these and dissertations.
- Physicians, attorneys, accountants, dieticians, and other professional practices in their fields.
- Consumers still need accurate and timely information about products.

Libraries still have an enormous role to play in connecting people with the information resources they require. What has changed is the way users expect to find and obtain information. Expectations of the amount of time and effort it should take to do an information search or a literature review and to obtain the article(s) are much different from what they were only a few years ago as a result of other experiences with the Web. Users basically expect immediate gratification.

The library no longer has a monopoly on scholarly, quality, authoritative information resources. We may have large, pure, and comprehensive online collections, and we may be able to provide our users with free online access to commercially produced, commercially compiled resources, but we have competition:
• Other groups and individuals have been busy developing alternatives to commercial resources;
• The Internet enables scholars, researchers, and practitioners to share information among themselves in ways that decrease their need for libraries;
• The open Web houses plenty of factual and authoritative information for students, researchers, professionals, and consumers who know how to find it; and
• Options for obtaining targeted resources using micro-payments or reasonably priced personal subscription services are attractive to some users if the services clearly save their time.

The majority of college and university courses are textbook and lecture-based, and supplemental articles are frequently preselected for students and compiled in a course pack or placed on reserve at the library. So when a student is required to find articles for a research paper, he or she may not get much assistance from their advisors on thorough searching, and researchers who are entering unfamiliar territory may not know how to use online resources— or even that some of them are available.

You can not assume information literacy on the part of your users, even though they might have a good mastery of technology. Most high school and college students, have an impressive amount of experience with computers, but they may not have any experience with searching for certain types of information. You may never see them in your library, though you may be able to help them find your library, resources using online means. You can enhance your users’ information literacy skills somewhat through the way you present and organize your resources. Users could start anywhere, so your electronic journals should be there, wherever “there” is.

4.12.1 Subject Searching

We can assume that the majority of K-12 users, public library users, and lower-division undergraduates will take a subject approach to articles in electronic journals. In a common situations, they may need a few good articles on their topic for an assignment or project, or to help with a decision. Researchers will use this approach less often. One study indicates that scientists do searches for
• New topics,
• Old articles,
• Primary research, and
• Their own articles.

Your library catalog is not the place for subject searchers to begin their search for articles. They being in a general or specialized database that aggregates many articles from different sources, preferable a database that contains the full text of the articles. If you catalog your databases, and your users happen to know the exact name of the database they should use, they might be able to get to the database through your OPAC. But in general, your library’s Web site will be the appropriate gateway to your databases. You face two big challenges:

1. To guide them to the right database(s).
2. To enable them to link to the full text of articles from non-full-text databases.

The sections on Web access, linking, and federated searching below will help you meet these challenges on behalf of your users.

4.12.2 Browsing

Browsing journals is a time honored practice, demonstrated by the common presence of current-periodicals in libraries of all types. Some types of browsing behavior transfer well to electronic journals that are presented optimally (see “web access” on this chapter). Tenopir (2003) has noted that scientists browse.

• Core titles in their disciplines,
• Current issues of selected journals,
• For background information and
• For current awareness.

If browsing journals is a fundamental requirement of their academic work and if print journals are on longer available to them, faculty will adapt to the electronic environment, and some of them will prefer it in a library reading room, print issues may be missing or in use, whereas on a library’s web site, all online issues will be available for concurrent use, in some cases earlier than print issues would be available on the shelves. For browsers, looking through articles in current issues is even more fruitful and appealing when they are able to link directly to related articles that are referenced in the articles they browse.
References:


