

Notes on Operations

Criteria for Replacing Print Journals with Online Journal Resources

The Importance of Sustainable Access

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Long-term sustainability should be a primary concern of librarians deciding whether to replace print subscriptions with online journal resources. This article describes the six criteria used at St. Lawrence University to determine whether particular online resources can be regarded as acceptable substitutes for print. Three conventional criteria—completeness, timeliness, and reliability—are supplemented by three others that focus on the legal, economic, and organizational components of sustainable access. Together, these six criteria can be used to draw an important distinction between permanent subscriptions and supplementary resources. Although the replacement of print subscriptions with nonsustainable resources can sometimes reduce short-term costs, it also increases long-term risk by making sustainability of access contingent on sustainability of payments.

Just five years ago, few librarians regarded online access to journals as an acceptable substitute for print. Reviewing reports from five academic libraries, Easton found that only one institution, Drexel University, had planned a large-scale cancellation of print subscriptions in favor of online resources.¹ Moreover, Drexel's decision to cancel print was based on the unusual assertion that "archival storage . . . is not part of the mission of the Drexel Library."²

Librarians who have chosen to retain their print subscriptions often cite the problems associated with online journals: late issues, missing issues, missing components (articles, book reviews, letters), missing pages, missing tables and figures, and poor image quality.³ Systematic evaluations conducted at two research universities revealed these same problems, along with several others: missing journals (those promised in online collections but not actually provided), instability of servers and access mechanisms, discrepancies in presentation, and the

possible removal of contested or objectionable content.⁴

Published evidence suggests that many librarians' attitudes have changed in recent years, however. One informal assessment revealed that many collection development librarians now welcome the substitution of online resources for print.⁵ Likewise, a 2003 survey of college and university librarians revealed that more than 65 percent had cancelled print subscriptions in response to the increased availability of online journals.⁶ Librarians' opinions are far from unanimous, however. While Peters predicts "an orderly retreat from print," Rowse anticipates the continuation of a hybrid environment in which print and online formats will coexist.⁷ Specifically, Rowse contends that print journals will maintain their dominant status in the humanities but not in the sciences. Jaeger asserts that "the paper copy will prevail at least for the next fifty years," chiefly because so many of the countries that contribute to scientific research lag behind the

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United States in their provisions for online access.⁸

Conventional Criteria for the Assessment of Online Journal Resources

Since the replacement of print subscriptions with online journals is seldom an all-or-nothing proposition, several libraries have established criteria for the evaluation of online journal resources. This article describes the criteria developed at St. Lawrence University, an undergraduate college of two thousand students located in Canton, New York. The university subscribes to 2,080 print journals and maintains access to twenty online journal resources that provide the full or partial content of more than ten thousand serial publications.

At St. Lawrence, six criteria have been used to evaluate whether each online resource can be regarded as an acceptable substitute for the corresponding print journal(s). The six criteria address not whether a particular online resource is worth acquiring, but whether it serves as an adequate substitute for print—whether the print subscription(s) can be cancelled once online access is established. These standards are intended to supplement rather than replace the usual selection criteria for journals and online resources.⁹ The six criteria can be applied to online journals purchased individually, to online collections of journals (those that include a specified set of titles), and to online aggregations of articles (those that include content taken from a variety of journals, newspapers, and other serials). The first three criteria are straightforward:

1. **Completeness:** The online resource must provide complete page images and include the complete content of each issue: all figures, tables, book reviews, letters to the editor, and so on.

2. **Timeliness:** Each article must appear online at the same time it is available in print, if not earlier.
3. **Reliability:** Day-to-day access must be reliable—quick server response, stable URLs, and provision of backup servers.

Criteria similar to these have been adopted by the University of Alberta and the University of Oklahoma.¹⁰ Moreover, the Alberta and Oklahoma standards for completeness and reliability are more fully developed than those in use at St. Lawrence. They address such issues as hardware and software requirements, off-campus access, interlibrary loan, and legal mandates for the retention of print. In contrast, the criteria developed at Seton Hall University allow for widespread cancellation of print subscriptions based almost solely on overlap between print and online holdings.¹¹

Notably, the completeness and timeliness criteria in use at St. Lawrence, Alberta, and Oklahoma all assume that the print copy—not the online version—is authoritative. This may not always be the case. In the near future, we may have to evaluate, for instance, whether each print journal provides the complete content of its online equivalent and whether the paper copy arrives in a timely manner after the posting of the Web document.

Sustainable Access Criteria for the Assessment of Online Journal Resources

The standards of completeness, timeliness, and reliability have been widely acknowledged in the literature. The criteria in use at St. Lawrence are noteworthy, however, for their emphasis on a fourth standard: sustainability. Specifically, the St. Lawrence policy reflects a commitment to sustainable access at the institutional level—a commitment to the provision of long-

term, uninterrupted access for our library patrons. Sustainable access can be contrasted with archival preservation, which often focuses on the resource itself rather than its accessibility to a particular group of users.¹² For example, the guidelines in use at Alberta, Oklahoma, and elsewhere specify that the vendor must maintain a permanent electronic archive.¹³ Unfortunately, however, this provides permanent access only for the vendor—not for the subscribing libraries. Likewise, several authors have recognized the value of sustainable access without discussing its importance in the decision to replace print journals with online resources.¹⁴ While archival preservation can be seen as a responsibility of the library profession as a whole (or of society in general), sustainable access is the responsibility of individual libraries or consortia.

Sustainable access is central to the fourth, fifth, and sixth criteria adopted at St. Lawrence University:

4. The site license must include provisions for permanent library retention of the content purchased during the license period, along with any necessary access mechanisms (interfaces, database rights, and so forth).
5. The university must participate through a library consortium that has the resources to ensure that the content provider adheres to the legal provisions for long-term access. Alternatively, the provider may itself be a library consortium.
6. If the resource is a collection of journals, the provider must demonstrate a commitment to the long-term provision of each journal title included in the collection.

As these criteria suggest, the main barriers to sustainable access are economic and legal rather than technological.

The most important component of sustainable access is licensing—

specifically, a license agreement that provides permanent access to the content generated or purchased during the license period. With appropriate license provisions, a library that cancels its subscription after ten years will retain permanent access to the ten years' content that was purchased. In contrast, many licenses for networked resources are essentially lease agreements; they provide access only for the duration of the contract. If a lease agreement is cancelled after ten years, the library no longer has any rights to the content that was provided during the period of the agreement. Leasing is not unique to the online environment. Several business reference publishers have chosen to lease rather than sell their print publications, and many public libraries lease multiple copies of high-interest titles. Ironically, some of the same libraries willing to accept lease agreements in the online environment have rejected similar lease agreements for print resources.

Sustainable access provisions ensure that back issues remain accessible even if the current subscription is cancelled. Ideally, they also provide for continued access if the online vendor goes out of business. Licenses that comply with criterion 4 provide permanent rights to any access mechanisms necessary to view and download the content; they do not require the continued payment of fees beyond the period of the license. Few license agreements meet this standard, however. If a participating library cancels its ScienceDirect subscription, for instance, offline digital copies of the subscribed "textual content" will be supplied only if the library "defrays the costs of preparing the data set sought."¹⁵ Online access to the digital backfiles requires the payment of additional fees: "an annual maintenance fee plus an annual access fee based on the Subscriber's prior twelve (12) months' usage."¹⁶

Unfortunately, sustainable access provisions are not self-enforcing. Many

libraries have no effective recourse if a major online vendor fails to abide by the terms of a license agreement. For this reason, consortial purchasing is important. (See criterion 5.) While no small college is likely to influence the profits of a major online vendor, many consortia have the purchasing power to exert considerable market pressure on companies that fail to live up to their license agreements. Most consortia also have the resources and expertise to successfully pursue their interests if legal action is required.

The final criterion is a response to the fact that many online collections do not provide permanent access to any particular set of journals. In fact, some of the most popular online collections have been known to drop (and add) journals without advance notice. This last criterion is difficult to implement, of course, since any online collection may drop journal titles in the future. At the same time, however, online collections known to have dropped journal titles can be safely removed from the list of those that provide sustainable access.

Implementing Sustainable Access Criteria

Sustainable access criteria were introduced at St. Lawrence University only recently, in May 2003. Nonetheless, they have been understood and supported by the university community over the course of the latest serials review. The use of specific, objective standards has allowed the library staff to cancel virtually all those print subscriptions for which sustainable online access has been established. Conversely, these same principles have allowed us to maintain print subscriptions in those cases where the criteria for sustainable online access have *not* been met. At St. Lawrence, each online journal collection and aggregation has been assessed in accordance with the six criteria. Individual online

journal subscriptions have not yet been evaluated, however.

As of April 2004, only two online journal collections held by St. Lawrence—Project MUSE and BioOne—met all six criteria for the replacement of print subscriptions. Project MUSE, introduced in 1995 by Johns Hopkins University, provides the full content of nearly 250 journals in the humanities and social sciences. BioOne, sponsored in part by the Scholarly Publishing and Academic Resources Coalition (SPARC), currently offers sixty-nine bioscience journals and is scheduled to include two hundred titles when the collection is complete. Both MUSE and BioOne are selective in the journals they include, and both were created as alternatives to single-publisher collections, such as Kluwer Online, ScienceDirect, and Wiley InterScience.

Although the library subscribes to many additional online journal resources, they are regarded as supplements to our permanent journal subscriptions rather than replacements for them. That is, the six evaluative criteria have been used at St. Lawrence to distinguish between permanent subscriptions and supplementary resources.

Permanent subscriptions are those journals for which sustainable access has been established, either in print or online. At St. Lawrence, all print journals are regarded as permanent subscriptions, as are those online titles that meet the six criteria mentioned here. If a permanent online resource is discontinued for some reason (other than cancellation), the title will be restored as a print subscription. If a print subscription is discontinued for some reason (other than cancellation), sustainable online access will be established. Changes to the permanent subscription list are normally made only after consultation with the departmental faculty, often in the context of a formal serials review.

Supplementary resources are those online journal resources that do

not meet the six criteria set forth here. They include several major full-text databases, such as LexisNexis Academic and EBSCO Academic Search Elite, among others. At St. Lawrence, most faculty understand that the library cannot guarantee access to the journals included in these supplementary resources. If a particular journal is dropped from a full-text database regarded as a supplementary resource, the library has no obligation to re-establish access through other means. Changes to the supplementary resource list are made by the librarians, sometimes in consultation with the academic departments.

To some extent, the automatic designation of print journals as permanent subscriptions reflects the distinction between the ownership of physical artifacts (print) and the ownership of access rights (online). After all, the license provisions needed for sustainable access to online journal resources are not necessary in the case of permanent print subscriptions. However, it is entirely possible that new, online-only resources will be added in the permanent category, and that certain print subscriptions (limited-retention magazines, for instance) even now can be properly regarded as supplementary resources.

Conclusion

With constant or declining acquisitions budgets, many librarians have been tempted to divert funds from journal subscriptions to online resources that do not meet the criteria for sustainable access. This is a risky strategy, since librarians who give up permanent rights to content are essentially betting that they will have adequate funds to pay for online access in every subsequent year. Without sustainable access, the inability to pay in any particular year results in the loss of all content. An institution that subscribes for five years before canceling

is left with nothing in return for its five-year investment. Although many librarians have accepted leased access in an attempt to reduce short-term costs, the surrender of sustainable access rights makes less sense when library budgets are uncertain and the library's ability to continue making payments is in doubt. Moreover, many contracts specify that online content lost through a lapse in payments can never be restored in its original form. ScienceDirect provides a good example of this. If a library cancels its ScienceDirect subscription then later resubscribes, Elsevier will not provide online access to the back files from the first subscription.¹⁷

The distinction between sustainable and temporary access has been overlooked by several recent commentators. For example, McDonald contends that "libraries may save direct subscription costs of anywhere from 5 percent to 25 percent" by switching from print to online access.¹⁸ He neglects to mention that the least expensive online resources often fail to meet sustainable access criteria and that the right to use these resources is essentially being leased rather than sold. Likewise, Cox compares the costs of print and online journals without considering the distinctions between permanent and temporary access.¹⁹ An analysis of investment value would have resulted in conclusions far different from the results of his cost-per-use calculations. Finally, Peters worries that librarians may "find themselves investing in print journal collections at levels out of kilter with [their] value."²⁰ This is a legitimate concern, and the decision to replace print subscriptions with sustainable online resources is often well founded. In making these decisions, however, we should be fully aware of the distinction between investing in our collections and paying for temporary access. Sustainable access criteria are therefore important in the decision to replace print subscriptions with online journal resources.

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