The Contemporary Academic Library Resource Sharing Mission: Fragmentation or Evolution?

Kevin O’Brien

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The Contemporary Academic Library Resource Sharing Mission: Fragmentation or Evolution?

*Kevin O’Brien*
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Kevin O'Brien

Clinical Assistant Professor and Head, Access to Resources Department, UIC Library of the Health Sciences

ABSTRACT

Introduction

As with all other aspects of academic library management, the resource sharing mission is undergoing substantive change. Changes in scholarly communication practice, the publishing world, library collection development patterns, and other pressures are confronting academic interlibrary loan practitioners with requests for information that cannot be met using the traditional suite of skills and tools. The sum of these changes can be characterized as either the fragmentation of the library resource sharing mission or its evolution into a new form of service that will routinely make use of new skills and diverse sources of information outside the scope of past practices.

Among these sources are curated repositories of open access literature, institutional repositories, digital libraries containing scanned public domain literature, commercial document fulfillment companies, and social media article-sharing networking sites. The incorporation of these new sources of information into regular workflows presents interlibrary loan practitioners with current awareness, policy, training, and other challenges. This paper will survey these developments and discuss new tools and practices to address them based on experience gained in the management of an academic medical library interlibrary loan unit.

Traditional interlibrary loan service confronts change

Interlibrary loan service as it existed in the exclusively or predominantly print-based world of information was a painstaking undertaking, effective but slow and relatively expensive. The universe of published information was large, but not as large as it is today and the pace of scholarly publishing was relatively slow also. For many years, librarians relied on print union catalogs to ascertain holdings of potential lenders.
and requests for those materials were sent through the mail. Books and articles
shipped in fulfillment of those requests were in turn mailed to the borrowing in-
titution. An ARL study conducted in 1992, a date towards what can be considered
the end of this print-heavy library collection era, determined that costs were $18.62
per borrowing request and $10.93 per lending request (Jackson, 2003a). Costs mea-
sured in a subsequent study conducted a decade later had decreased somewhat, to
$17.50 per mediated borrowing request and $9.28 per lending request, reflecting in
part savings from increased electronic delivery of articles (Jackson, 2003b).

While the migration of library collections from print-based to electronic-based
greatly impacted all traditional library services, including interlibrary loan, other
developments had ramifications as well. These changes opened up new opportuni-
ties for librarians to meet the information needs of their users while simultaneously
creating substantial challenges to that process. The sum total of these changes have
contributed to an effective fragmenting of traditional interlibrary loan service.

Among the developments contributing to this new and fragmented environment
of information, scholarly communication, publishing, and library management are:
the serials crisis, a widely-acknowledged shorthand term for the increasing costs of
(primarily) STEM journal subscriptions in which research produced by university
faculty members, often supported by public research funds, is published and then
sold back at high cost to the libraries of their institutions; the resulting rise of the
open access publishing movement, with its attendant growing pains (such as high
author publishing charges and the emergence of predatory journals); the acquisition
of fewer print books by libraries; rapid increase in the volume and pace of scholarly
communication, and the emergence of new forms and practices of scholarship not
amenable to traditional interlibrary loan practices, like the videos published in the
Journal of Visualized Experiments and the supplementary data files which increas-
ingly accompany published papers.

Interlibrary loan practitioners have found themselves forced to meet these influ-
ential developments with challenging limitations to their operations. These limita-
tions, largely beyond librarian control, include: legacy interlibrary loan systems for
communicating local shelf status and accurate journal holdings; electronic resource
management systems which present difficulties in user discovery of and access to
electronic resources; journal subscriptions and big deal packages with embargo
periods making recently-published or pre-print articles inaccessible; the acquisi-
tion of fewer print books as electronic journal subscriptions consume larger and
larger library budget resources; intellectual property rights leading to impediments
to institutional sharing of electronic books; and current domestic copyright laws and
existing library practice guidelines that are not well suited to current user informa-
tion demand.

Some combination of the developments discussed above has resulted in a decline
in demand for traditional interlibrary loan service in academic medical libraries.
The number of requests submitted to DOCLINE, the National Library of Medicine’s
interlibrary loan messaging system declined 54% between 2002, the high point for
requests, and 2013 (Collins, 2014). Reasons for this decline may include a reduction
in the number of hospital libraries, traditionally heavy users of DOCLINE, but the
trends discussed above have in all likelihood contributed substantially.

**The fragmentation of traditional interlibrary loan service**

Where interlibrary loan practitioners once relied almost exclusively on the col-
clections of other libraries for request fulfillment, today’s information reality can
be described as a fragmented environment in which the many options that have
emerged are not fully integrated into past resource sharing practices. Taken together,
the many fragments present a challenge for practitioners to be knowledgeable about
and to consider as sources for request fulfillment falling outside of the scope of legacy
channels of resource sharing. These sources may be considered for both the borrow-
ing and lending side of the resource sharing process, taking into consideration U.S.
and international copyright law, terms-of-use licenses, and other relevant guide-
lines. What follows is a brief annotated survey of some of the fragments available
to both librarians and library users in today’s information environment. Inclusion
of a source in this list does not mean endorsement of its integration in resource
sharing practices, however.

- Local print and electronic collections, used to fill requests of local users
- Peer resource sharing library collections, both print and electronic, accessed
through interlibrary loan messaging systems such as OCLC WorldCat
Resource, Sharing, DOCLINE, and Rapid
- Repositories of freely-available rapid e-prints, both peer-reviewed and pre
peer-reviewed, such as arXiv, biorXiv, and SocArXiv
- Curated repositories of “Green” level open access literature containing author
manuscript versions of papers, such as Europe PMC, PMC, SCOPUS–deposit
in these repositories may be required by a legislative mandate pertaining to
publicly-funded research
- Traditional journals containing “Gold” level open access content
- Fully open access journals
- Digital libraries containing or pointing to scanned public domain literature
such as the Internet Archive and its subject-oriented subsets such as the Biodi-
versity Heritage Library and the Medical Heritage Library; HathiTrust Digital
Library; and the Digital Public Library of America
- Institutional repositories containing theses, dissertations, working papers, and
other forms of publication
- Commercial document fulfillment companies that incorporate a copyright roya-
alty in the delivery fee
- Commercial social media article-sharing and networking sites such as
Academia.edu and ResearchGate
- Informal, pirate, and other peer-to-peer sharing sites operating outside of U.S.
copyright law such as Lib Gen, Reddit Scholar, and Sci-Hub

This is a diverse range of legacy and newly-emerging sources of information.

Resource sharing practitioners may choose to direct users to one or more of them
for self-directed request fulfillment or may integrate them as a new source into the traditional mediated request fulfillment process.

**Potential remedies to fragmentation**

Although it may seem daunting, this fragmented information environment presents a number of great opportunities for the resource sharing practitioner. The open access movement in particular, represents an enormous step forward in dissemination of scholarly literature. Ways to overcome this fragmentation, however modest, do exist. Four suggestions will be discussed here.

1) **Resource sharing practitioner openness to the evolution of service.** Since the environment has changed dramatically, it is incumbent upon librarians to respond creatively and widen the scope of our past practices. Ways to augment traditional practices by efficiently incorporating new information sources as appropriate, thereby changing the existing definition of resource sharing, should be sought out.

2) **Improvement of staff and library user knowledge about the fragmented information environment.** Knowledge of the diverse fragments currently available is not evenly distributed among library staff and library users. To improve contemporary library service across the board, opportunities to increase familiarity with these sources on the part of support staff, access service and reference librarians, and library users should be pursued.

3) **Increase of staff searching skills.** Because many of these new sources effectively exist in silos, institutional repositories, for example, discovery of their contents is not easy, even with the use of common web search engines. Opportunities to improve staff knowledge of relevant databases and increasing searching skills should be developed.

4) **Development of large-scale search and discovery solutions for open access literature.** With some significant exceptions, discovery paths for the enormous amount of open access literature appearing in Gold, Green, and hybrid journals have yet to be centralized. Although common web search engines can assist in the discovery of this open access scholarly literature, a robust and structured means of searching this material would be a significant benefit to librarians and users alike.

The adoption of one or more of these suggestions will not change traditional interlibrary loan operations beyond recognition, but it will contribute to a much needed evolution of service in response to recent profound developments.

**Conclusion**

This paper discussed developments primarily impacting academic libraries, particularly those supporting STEM programs. Academic libraries supporting other programs, as well as public libraries, may have been less affected up to this point. In
general though, these developments pose challenges and opportunities for librarians working in all types of environments. The argument put forth in this paper is that the rise of sources of published information falling outside of the scope of traditional interlibrary loan practices like open access literature, institutional repositories, and other emerging sources of literature, represents either a fragmentation of the resource sharing process or the potential for its evolution into a new category of library service, one that incorporates discovery assistance into the traditional resource sharing enterprise. The positive results for library users of the latter option make it a goal resource sharing practitioners should pursue. In conclusion, the following questions may contribute to moving the resource sharing community towards that goal.

- Is decline in demand for interlibrary loan service the future for academic libraries? For example, the decline in demand described in Section 3 is contradicted in at least one study (Baich, 2015).
- How do we inform our users about these new improvements and impediments to resource sharing?
- What are some ways open access discovery can be efficiently integrated into the resource sharing user enterprise? What workflow changes are necessary to draw on emerging sources for request fulfillment?
- How can resource sharing practitioners contribute to large-scale remedies to the fragmentation discussed in this paper, such as the development of discovery tools for open access literature?
- To what extent should resource sharing practitioners champion the existing academic publishing arrangement by discouraging use of peer-to-peer sharing sites operating outside of U.S. copyright law?

ORCID

Kevin O’Brien http://orcid.org/0000-0003-3426-9860

References

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